7th NANOSCIENCE and NANOTECHNOLOGY CONFERENCE

June 27 - July 01, 2011
Sabancı University, Istanbul

ADVANCE PROGRAM
Anahtar Teslimi TEMİZ ODA Sistemleri

- Danışmanlık
- Fizibilite
- Projelendirme
- Uygulama
- Proje yönetimi
- Otomasyon
- Kalifikasyon
- Eğitim
- Tüm mekanik, elektrik tesisatlarla entegre çözüm
- Sarf Malzeme Temini
- Servis, bakım

- Temiz Oda panel ve asma tavan sistemleri ve aydınlatma armatürleri
- Yaş kimyasal tezgahlar
- Hijyenik klima cihazları
- Kimyasal kurutucular
- Laminer akım üniteleri
- Zemin kaplamaları
- Malzeme kapanı
- Kaba, ince, HEPA ve ULPA filtreler
- Saf su, Temiz su, Saf buhar sistemleri
- Temiz Oda sarf malzemeleri

Climatech, Freudenberg/Viledon, Leonhard, Weiss, GWE, BDK, Ritterwand, Arias, Basan, MarCor MinnTech, Ahlberg+Hennrich

Ekonomik yatırım maliyeti, düşük işletme masrafları, güvenilir, Temiz Oda şartlarına uygun ürünleri, güçlü servis ağı, uzun yıllara dayanan deneyimli kadrosu, geniş temsilcilik ve ürün yelpazesi ile projelendirme ve anahtar teslimi
Temiz Oda sistemlerinde güvenilir iş ortağıınız.
Dear Colleagues,

It is our great pleasure to welcome you to NanoTR7, the Seventh Nanoscience and Nanotechnology Conference of Turkey and to magnificent Istanbul, the only city in the world that spans over two continents. The annual conference is held at Sabancı University this year and will partially take place at Sabancı University Nanotechnology Research and Application Center (SUNUM).

The first NanoTR conference was organized at the Middle East Technical University in 2005 by Prof. Oğuz Gülseren, Prof. Raşit Turan and Prof. Atilla Aydınlı. This conference has been the pioneering event in the field of nanotechnology and nanoscience in our country, bringing scientists, researchers and students together from all disciplines under one umbrella. Over the years NanoTR has grown to be a regional conference with strong participation of people all over the world.

This year’s NanoTR features a very strong scientific program, assembled by evaluating the large number of submitted papers, considering the merits of each through detailed reviews and discussions and selecting a technical program of the highest quality. In particular, we have a great line up of distinguished plenary and invited speakers who have been acknowledged as world class experts, capable of providing deep insight into the latest developments in their field.

Following the morning plenary sessions at the Sabancı Performance Arts Center (PAC), there will be five parallel sessions at the Faculty Buildings through the week. The afternoon poster sessions will run from Tuesday to Thursday, and will be held in the foyer of SUNUM in combination to the exhibition, where several high-tech companies will showcase their newest technologies to the scientists.

We would like to express our appreciation to our generous sponsors, as without their invaluable support this conference could not be realized. Last but not least, we would to extend our warmest gratitude to our local organizing committee members, especially Dr. Meltem Sezen, Ms. Meltem Süngür, Ms. Oya Yamaç Şentürk, Ms. Kübra Çelik and Mr. Ümit Çelik. An event like this cannot happen overnight, and requires much planning and attention to detail. Without their dedicated support, their input of time - day & night, this conference could not be organized.

Next year, the NanoTR VIII conference will be hosted by Hacettepe University in Ankara. We also are looking forward to seeing all of you in Ankara in 2012.

We hope you spend pleasant time in Istanbul, and enjoy the NanoTR VII Conference.

Volkan Özgüz & Ahmet Oral
NanoTR7 Conference Chairs

We would like to give our special thanks to...
**REGISTRATION & BADGE PICKUP**
The Conference Registration Desk is located in the Performing Arts Center (PAC) foyer, and SUNUM lobby. All participants are kindly asked to go to the Registration Desks upon arrival. Registration will accommodate Pre-Registered and On-Site Registrations for Conference Attendees, Speakers, and Exhibitors. Please dial extension 9882 for Registration Help Desk.

<table>
<thead>
<tr>
<th>Registration &amp; Badge Pickup</th>
<th>Performing Arts Center (PAC)</th>
<th>SUNUM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
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<td>2 pm-8 pm</td>
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<tr>
<td>Tuesday</td>
<td>8:30 am-12:30 pm</td>
<td>1:00 pm-5 pm</td>
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<tr>
<td>Wednesday</td>
<td>8:30 am-10:30 am &amp; 5:30 pm-8 pm</td>
<td>11 am-5 pm</td>
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<td>Thursday</td>
<td>8:30 am-10:30 am</td>
<td>11 am-5 pm</td>
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<tr>
<td>Friday</td>
<td>8:30 am-2 pm</td>
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**WIRELESS/CABLE INTERNET ACCESS**
WiFi Service is provided by Sabancı University throughout the campus except for the student dormitory units. Our guests who are staying overnight at the campus are supposed to bring network cable in order to access internet service from student housing units.

**COMPUTER ROOM**
The Computer Room will be in service in SUNUM lobby area during the Conference between 8:30am-6pm.

**CANON COPY CENTER**
For your print and photocopy requests please proceed to Canon Copy Center located in the University Center. The Canon Copy Center is open between 8:30am-5:20pm during the Conference. These services requires a fee payable to Copy Center.

**AKBANK BRANCH AND ATM**
The AKBANK branch is located in University Center, and open between 8:30am-5pm during workdays. There are also 2 Automated Teller Machines (ATM) located in the campus. One in University Center, and one in student housing units area – D2 Building.

**SMOKING**
Smoking is not allowed inside of any of the university buildings, including main Cafeteria. Smoking is only allowed in the open areas outside the buildings.

**SECURITY**
Sabancı University Security staff will be on duty for 24/7. Please note that Sabancı University takes no responsibility for any loss or damage of personal property during the Conference. To report an emergency, or for immediate assistance please dial extension 5555.

**PARKING**
Free parking is available in campus. If you are planning to commute with your car during the Conference please have your car plate recorded at Registration Desk for security purposes.

**HEALTH CENTER**
On campus Health Center is located in the second floor of D2 Building in student housing units area. Outpatient clinic is open from 8:45am to 6pm on working days. Besides, a fully equipped ambulance will be in service 24/7 for emergencies.

Dial extension 6666 for Ambulance/Emergencies. Dial extension 9923 or 9925 for Health Center.

**TAXIS**
Şeker Taxi - (0262) 658 0067
(0262) 658 9248
FOOD AND DRINK
Coffee Breaks will be served in the foyer of Performing Arts Center (PAC) in the mornings, and SUNUM lobby in the afternoons. Breakfast/Lunch/Dinner are served in the main Cafeteria located in the University Center. Fixed-menu lunches are complimentary for the Conference participants at the main cafeteria only. You must present your badge to the cashier. Breakfast and Dinner requires a nominal fee payable by cash (in TL). There are several for-fee dining options on Campus such as Hangar Café (located by the lakeshore), Kopuklu Kahve, Piazza and Pigastro Café around the student housing units, FASSHane in the Faculty of Arts and Social Sciences Building. These outfits can take credit cards. There are also vending machines in SUNUM Lobby and inside of the School of Management for snacks and soda. Water dispensers are available in Faculty buildings.

OPENING COCKTAIL
The Opening Cocktail will be held on Monday, June 27, from 6pm to 8pm at the SUNUM Lobby. All participants are invited to the reception.

CONFERENCE DINNER
The Conference Dinner will be held on Wednesday, June 29, from 6pm to 10pm at the Performing Arts Center. All participants are invited to the Conference Dinner.

COMPANY EXHIBITONS AT SUNUM LOBBY
Monday 4pm – 8pm
Tuesday 9am – 6pm
Wednesday 9am – 6pm
Thursday 9am – 6pm

IMPORTANT PHONE NUMBERS
If you would like to reach following extension numbers from out of campus please dial 0216-483-XXXX

Sabanci University Operator 0216-483-9000
Security Emergencies (24/7) 5555
Ambulance (24/7) 6666
Call Center 9988
Registration Help Desk 9882
Health Center 9923 or 9925
Security Supervisor 3565

TABLE of CONTENTS
WELCOME MESSAGE 01
GENERAL INFORMATION 02
COMMITTEES 03
SPONSORS 04

SCIENTIFIC PROGRAM 06
Program Sessions and Invited Talks 06
Time Table 08
Plenary Speakers 12
Invited Speakers 13

ADVANCE PROGRAM 16
Session Series 1 16
Session Series 2 25
Session Series 3 34
Session Series 4 40
Session Series 5 46
Session Series 6 50
Industry Talks 52
Poster Series 1 54
Poster Series 2 70
Poster Series 3 86

CAMPUS PLAN 104
EXHIBITION FLOOR PLAN 106
## COMMITTEES

### Scientific Committee

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
</tr>
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<tbody>
<tr>
<td>Adil Denizli</td>
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<td>Bekir Aktaş</td>
<td>Gebze Institute of Technology</td>
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<td>Engin U. Akkaya</td>
<td>Bilkent University</td>
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<td>Hasan Mandal</td>
<td>Sabancı University</td>
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<td>Mehmet Özözcü</td>
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### Organization Committee

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<td>Salih Okur</td>
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<td>Raşit Turan</td>
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<td>Aydın Doğan</td>
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<td>Emir B. Denkbaş</td>
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<td>İsmet İ. Kaya</td>
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<td>Gürer Budak</td>
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### Local Organization Committee

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<td>Sondan Durukanoğlu</td>
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We would like to express our gratitude to our sponsors for their invaluable and ongoing supports to our Conference.

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# PROGRAM SESSIONS AND INVITED TALKS

<table>
<thead>
<tr>
<th>Plenary Session 1</th>
<th>Plenary Session 2</th>
<th>Plenary Session 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>WALT DE HEER</td>
<td>KUNIO TAKAYANAGI</td>
<td>HIROFUMI YAMADA</td>
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<tr>
<td>JOSEPH WANG</td>
<td>CHRISTOS TOKAMANIS</td>
<td>ALI KHADEMHOSSEINI</td>
</tr>
</tbody>
</table>

## Session 1
### Advanced Nanomaterials

**THEME A** Nanomaterials; Nanoparticles, Nanocrystals, Nano-porous Materials, Molecular and Supramolecular Materials

**THEME B** Nanotubes, Nanowires

**THEME C** Nanomembranes, Nanostructures with catalytic properties, Electro-chemical Materials

### Invited Talks for Session 1
- F. Y. Acar Theme A
- Y. Chujo Theme A
- S. Berber Theme A
- S. Bucak Theme B
- C. Bittencourt Theme B
- T. Yıldırım Theme B
- C. Ozkan Theme B

## Session 2
### Nanodevices and Microsystems

**THEME E** Nanoelectronics, Spintronics, Nano-Magnetics, Quantum Computing, Qubits

**THEME F** Organic and Hybrid Electronics: OLED, OTFT, OSC, DSSC

**THEME G** Nano-optics, Nano-Optoelectronics, Nano-Photonics

**THEME J** Nano Electro Mechanical Systems (NEMS), Micro Electro Mechanical Systems (MEMS)

**THEME O** Nanotechnology for Energy (fuel cell, solar cell, hydrogen storage)

### Invited Talks for Session 2
- P. Varga Theme E
- B. Küng Theme E
- K. Kadowaki Theme E
- J. Schmitz Theme E
- I. Shah Theme O

## Session 3
### Nanofabrication and Nanocharacterization

**THEME H** Nano-Fabrication, Nano-Lithography, Nano-Manipulation

**THEME I** Nanoscale Characterization, Nano-imaging, Nanoscopy, Nano-Metrology

**THEME L** Nano-Actuators, Nano-Sensors

### Invited Talks for Session 3
- H. Plank Theme H
- M. Madou Theme H
- G. Kada Theme I
- D. Borkowski Theme I

## Session 4
### Nanotechnology in Life Sciences

**THEME D** Nanobiotechnology, Nanobiosensors, Applications of Nanotechnology in Medicine

### Invited Talks for Session 4
- P. Freitas Theme D
- A. E. Gursan Theme D
- A. Silahtaroglu Theme D
- M. Ozen Theme D

## Session 5
### Special Topics in Nanotechnology

**THEME K** Nano-Fluidics

**THEME M** Nano-Robotics

**THEME N** Nano-Mechanics, Nano-Tribology, Nano-Composites

**THEME P** Nanotechnology in Textile, Agriculture and Food Science

### Invited Talks for Session 5
- J. Kotthaus Theme N
- U. Tamer Theme N
<table>
<thead>
<tr>
<th>Session 6</th>
<th>Nanotechnology and Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEME R</td>
<td>Social, economical and environmental effects, safety and ethical issues</td>
</tr>
<tr>
<td>THEME S</td>
<td>Nanotechnology Governance and National Nanotechnology Policies</td>
</tr>
<tr>
<td>THEME T</td>
<td>Nano Entrepreneurship-A Journey from Research to Implementation</td>
</tr>
</tbody>
</table>

**Invited Talks for Session 6**

<table>
<thead>
<tr>
<th>Speaker</th>
<th>Theme</th>
</tr>
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<tbody>
<tr>
<td>D. Taşkin</td>
<td>Theme R</td>
</tr>
<tr>
<td>A. Vaseashta</td>
<td>Theme S</td>
</tr>
<tr>
<td>A. C. Cefalas</td>
<td>Theme S</td>
</tr>
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**Industry Talks**

<table>
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<tr>
<th>Speaker</th>
<th>Company/Institution</th>
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<tbody>
<tr>
<td>Elisabetta Chierici</td>
<td>Tethis S.p.A, Italy</td>
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<tr>
<td>Nezih Unal</td>
<td>GenISys GmbH, Germany</td>
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<td>Ude D. Hangen</td>
<td>Hysitron Inc., USA</td>
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<tr>
<td>Michael Hornung</td>
<td>SUSS Micro Tec Lithography GmbH, Germany</td>
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<tr>
<td>Muhammet Toprak</td>
<td>KTH Royal Institute of Technology, Sweden</td>
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<tr>
<td>Tetsuo Oikawa</td>
<td>TEKSER-JEOL (Europe) SAS, France</td>
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<td>Hitesh Mamgain</td>
<td>WITec GmbH, Germany</td>
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<tr>
<td>Munir Dede</td>
<td>Nanomagnetics Instruments, Turkey</td>
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<tr>
<td>Margarethe Kampling</td>
<td>SPECS Surface Nano Analysis GmbH, Germany</td>
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<tr>
<td>Duncan Stacey</td>
<td>Renishaw plc, UK</td>
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</table>

**Poster Sessions**

**Poster Session 1**

<table>
<thead>
<tr>
<th>THEME A</th>
<th>Nanomaterials; Nanoparticles, Nanocrystals, Nano-porous Materials, Molecular and Supramolecular Materials</th>
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**Poster Session 2**

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<th>THEME A</th>
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<tbody>
<tr>
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**Poster Session 3**

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<thead>
<tr>
<th>THEME E</th>
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### Monday, June 27, 2011

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>9:00-14:00</td>
<td>Arrival and Check-in (All Day)</td>
</tr>
<tr>
<td>14:00-18:00</td>
<td>Registration Desk</td>
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<tr>
<td>18:00-20:00</td>
<td>Opening Cocktail</td>
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### Tuesday, June 28, 2011

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>9:00-10:00</td>
<td>Registration (Coffee Break Banquet will be open between 08:30 - 10:30)</td>
</tr>
<tr>
<td>10:00-10:30</td>
<td>Opening Talk</td>
</tr>
<tr>
<td>10:30-11:30</td>
<td>Plenary Session 1: WALT DE HEER</td>
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<tr>
<td>11:30-12:30</td>
<td>Plenary Session 1: JOSEP WANG</td>
</tr>
<tr>
<td>12:30-13:30</td>
<td>Lunch</td>
</tr>
</tbody>
</table>

### Session Timetable

#### Session 1 (FENS - G077)

- 13:30-14:00: S1-A1* F.Y. ACAR, S2-E1* P. VARGA, S3-H1* H. PLANK
- 14:00-14:15: S1-A2, S2-E2, S3-H2
- 14:15-14:30: S1-A3, S2-E3, S3-H3
- 14:30-14:45: S1-A4, S2-E4, S3-H4
- 14:45-15:00: S1-A5, S2-E5, S3-H5

#### Session 2 (FENS - L045)

- 13:30-14:00: S2-E1* P. VARGA
- 14:00-14:15: S2-E2, S3-H2
- 14:15-14:30: S2-E3, S3-H3
- 14:30-14:45: S2-E4, S3-H4
- 14:45-15:00: S2-E5, S3-H5

#### Session 3 (FENS - G035)

- 13:30-14:00: S3-H1* H. PLANK
- 14:00-14:15: S3-H2
- 14:15-14:30: S3-H3
- 14:30-14:45: S3-H4
- 14:45-15:00: S3-H5

#### Session 4 (FASS - G062)

- 13:30-14:00: S4-D1* P. FREITAS
- 14:00-14:15: S4-D2
- 14:15-14:30: S4-D3
- 14:30-14:45: S4-D4
- 14:45-15:00: S4-D5

#### Session 5 (FENS - G032)

- 13:30-14:00: S5-N1* J. KOTTHAUS
- 14:00-14:15: S5-N2
- 14:15-14:30: S5-N3
- 14:30-14:45: S5-N4
- 14:45-15:00: S5-N5

#### Poster Session 1

- 16:30-17:00: S1-A6* Y. CHUJO, S2-E6* B. KUNG, S3-H6* M. MADOU, S4-D6* A. E. GURSAN, S5-N6* U. TAMER
- 17:00-17:15: S1-A7, S2-E7, S3-H8
- 17:15-17:30: S1-A8, S2-E8
- 17:30-17:45: S1-A9, S2-E9
<table>
<thead>
<tr>
<th>Time</th>
<th>Session Details</th>
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<tbody>
<tr>
<td>9:00-9:15</td>
<td>Opening</td>
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<tr>
<td>9:15-9:30</td>
<td>Dr. A. Türk (TÜBİTAK)</td>
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<tr>
<td>9:45-11:00</td>
<td>“Project Idea Presentations” Part 1</td>
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<tr>
<td>11:15-12:30</td>
<td>“Project Idea Presentations” Part 2</td>
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<tr>
<td>12:30-13:30</td>
<td>Lunch</td>
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<tr>
<td>13:00-13:15</td>
<td>Registration Coffee Break; Banquet will be open between 08:30 - 10:30</td>
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<tr>
<td>9:00-9:15</td>
<td>Plenary Session 2: KUNIO TAKAYANAGI</td>
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<td>9:00-9:30</td>
<td>Plenary Session 2: CHRISTOSTOKAMANIS</td>
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<td>9:00-9:45</td>
<td>Plenary Session 2: KUNIO TAKAYANAGI</td>
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<td>9:45-10:30</td>
<td>Plenary Session 2: CHRISTOSTOKAMANIS</td>
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<td>10:30-11:00</td>
<td>Coffee Break</td>
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<tr>
<td>11:00-11:15</td>
<td>SESSION 1: FENS - G077</td>
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<tr>
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<td>19:00-20:00</td>
<td>PANEL “Sectoral Nanotechnology Strategies and Policies!”</td>
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<tr>
<td>20:00-21:00</td>
<td>“Conference Dinner (PAC)”</td>
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<tr>
<td>21:00-22:00</td>
<td>Conference Dinner (PAC)</td>
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<tr>
<td>22:00-23:00</td>
<td>Conference Dinner (PAC)</td>
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**Session Titles:**
- **SESSION 1:** FENS - G077
- **SESSION 2:** FENS - L045
- **SESSION 3:** FENS - G035
- **SESSION 4:** PASS - G062
- **SESSION 5:** FENS - G032
- **SESSION 6:** FENS - G032

**Panel:**
- “Sectoral Nanotechnology Strategies and Policies!”

**Conference Dinner:**
- (PAC) Conference Dinner (PAC)
# SCIENTIFIC PROGRAM-TIMETABLE

**Thursday, June 30, 2011**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session 1 (FENS - G077)</th>
<th>Session 2 (FENS - L045)</th>
<th>Session 3 (FENS - G035)</th>
<th>Session 4 (FASS - G062)</th>
<th>Session 2 (FENS - G032)</th>
</tr>
</thead>
</table>
| 11:00-11:15 | S1-B1*  
S. BUCAK | S2-F1 | S3-I6*  
R. D. BORKOWSKI | S4-D20 | S2-J1 |
| 11:15-11:30 | S1-B2*  
C. BITTENCOURT | S2-F2 | S3-17 | S4-D21 | S2-J2 |
| 11:30-11:45 | S1-B3 | S2-F3 | S3-18 | S4-D22 | S2-J3 |
| 11:45-12:00 | S1-B4 | S2-F4 | S3-19 | S4-D23 | S2-J4 |
| 12:00-12:15 | S1-B3 | S2-F5 | S3-10 | S4-D24 | S2-J5 |
| 12:15-12:30 | S1-B4 | S2-F6 | S3-11 | S4-D25 | S2-J6 |

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<thead>
<tr>
<th>Time</th>
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<th>Time</th>
<th>Session 1 (FENS - G077)</th>
<th>Session 2 (FENS - L045)</th>
<th>Session 3 (FENS - G035)</th>
<th>Session 4 (FASS - G062)</th>
<th>Session 2 (FENS - G032)</th>
</tr>
</thead>
</table>
| 13:30-13:45 | S1-B5*  
T. YILDIRIM | S2-F7 | S3-14 | S4-D27 | S2-J1 |
| 13:45-14:00 | S1-B6 | S2-F8 | S3-15 | S4-D28 | S2-O1 |
| 14:00-14:15 | S1-B7 | S2-F9 | S3-112 | S4-D29 | S2-O2 |
| 14:15-14:30 | S1-B9 | S2-F10 | S3-113 | S4-D30 | S2-O3 |
| 14:30-14:45 | S1-B8 | S2-F11 | S3-114 | S4-D31 | S2-O4 |
| 14:45-15:00 | S1-B10*  
C. OZKAN | S2-F12 | S3-115 | S2-O13 |       |
| 15:00-16:30 |       | S2-F13 |       |       |       |

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<thead>
<tr>
<th>Time</th>
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| 16:30-16:45 | S1-B10*  
C. OZKAN | S2-G1 | S3-L1 | S2-O5 |
| 16:45-17:00 | S2-G2 | S3-L2 | S2-O6 |
| 17:00-17:15 | S1-B11 | S2-G3 | S3-L3 | S2-O7 |
| 17:15-17:30 | S1-B12 | S2-G4 | S3-L4 | S2-O8 |
| 17:30-17:45 | S1-B21 |       |       |       |

| Time     | Student Mixer  
Campus Open Area |
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<tbody>
<tr>
<td>18:00-22:00</td>
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**PAC - PERFORMING ARTS CENTER**

**SUNUM - SABANCI UNIVERSITY NANOTECHNOLOGY RESEARCH AND APPLICATION CENTER**
PLENARY SPEAKERS

Tuesday, June 28, 2011

10:30 - 11:30
Prof. Dr. Walt de HEER
Georgia Tech. School of Physics,
Nanoscience and Nanotechnology Faculty/
Epitaxial Graphene Lab. USA

‘The Science and Technology of epitaxial graphene: new directions in graphene nano electronics’

Prof. Dr. Joseph WANG
Professor of NanoEngineering
Department of NanoEngineering,
UC San Diego, USA

‘Man-Made Nanomachines for Biomedical Applications’

Wednesday, June 29, 2011

9:00 - 9:45
Prof. Dr. Kunio TAKAYANAGI
Department of Physics,
Tokyo Institute of Technology,
Japan

‘Sub-50pm Resolution Microscopy of Nanostructures ---- toward Lithium and Hydrogen imaging ----’

Prof. Dr. Christos TOKAMANIS
Head of Unit “Nano and Converging Sciences and Technologies”, DG Research, European Commission,
Belgium

‘Developments in Nanoscience–Nanotechnologies: a European perspective and innovation strategy’

Thursday, June 30, 2011

9:00 - 9:45
Prof. Dr. Hirofumi YAMADA
Department of Electronic Science and Engineering,
Electronic Material Science and Engineering,
Kyoto University, Japan

‘Recent Progress in High-resolution Frequency Modulation Atomic Force Microscopy in Various Environments - 3D Visualization of Molecular-scale Structures at Solid-liquid Interfaces’

9:45 - 10:30
Prof. Dr. Ali KHADEMHOSSEINI
Harvard-MIT Division of Health Sciences and Technology, Wyss Institute for Biologically Inspired Engineering Department of Medicine, Brigham and Women’s Hospital, Harvard Medical School, USA

‘Microengineered hydrogels for stem cell bioengineering and tissue regeneration’

All Plenary Sessions will be held in the PAC (PERFORMING ARTS CENTER)
## INVITED SPEAKERS

**Tuesday, June 28, 2011**  
13:30 - 14:00

<table>
<thead>
<tr>
<th>Speaker</th>
<th>Institution</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Prof. Dr. Funda Yagci Acar</td>
<td>Polimer and Nanomaterials Research Group, Department of Chemistry, Koç University, Istanbul Turkey</td>
<td>‘Development of Novel Quantum dots and Magnetic- Luminescent Hybrid’</td>
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<tr>
<td>Prof. Dr. Peter Varga</td>
<td>The Vienna University of Technology (TU Vienna), Institut für Angewandte Physik, Surface Physics Research Group, Austria</td>
<td>‘Magnetic Nanostructures; Top Down and Bottom up Approach’</td>
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<th>Speaker</th>
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<tbody>
<tr>
<td>Dr. Harald Plank</td>
<td>Graz University of Technology, FELMI-ZFE, Austria</td>
<td>‘Fabrication of Functional Nanostructures via Focused Electron Beam Induced Deposition’</td>
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<tr>
<td>PAULO JORGE PEIXEIRO DE FREITAS</td>
<td>INESC Microsystems and Nanotechnologies, Portugal</td>
<td>“Spintronic Microsystems: from Lab On Chip to MEMS Applications”</td>
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<tr>
<td>Prof. Dr. JÖRG PETER KOTTHAUS</td>
<td>Professor of Physics, Center for NanoScience (CeNS) and Fakultät für Physik, Ludwig-Maximilians-Universitaet, Munich, Germany</td>
<td>‘Nanomechanical Resonators’</td>
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**Tuesday, June 28, 2011**  
16:30 - 17:00

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<th>Speaker</th>
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<tbody>
<tr>
<td>Prof. Dr. YOSHIKI CHUJO</td>
<td>Kyoto Univ., Polimerization Chemistry, Japan</td>
<td>‘Organic-Inorganic Polymer Nano-Hybrids Based on Sol-Gel Reaction’</td>
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<tr>
<td>BRUNO KÜNG</td>
<td>NANO-PHYSICS group of the laboratory for solid state physics at ETH Zürich, Switzerland</td>
<td>‘Irreversibility of Single-Electron Transfer Through a Small Conductor’</td>
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<tr>
<td>PROF. DR. MARC MADOU</td>
<td>Chancellor’s Professor, Mechanical &amp; Aerospace Engineering and Biomedical Engineering, University of California at Irvine (UCI)</td>
<td>‘Nano and Micro-Patterning of Carbon’</td>
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<tr>
<td>Prof. Dr. ARZUM ERDEM GÜRŞAN</td>
<td>Ege University, Faculty of Pharmacy, Basic Pharmaceutical Sciences, Department of Analytical Chemistry, Turkey</td>
<td>‘Nanomaterial Based Electrochemical Sensor Technologies’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Speaker</th>
<th>Institution</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assoc. Prof. UĞUR TAMER</td>
<td>Gazi University, Faculty of Pharmacy, Basic Pharmaceutical Sciences, Department of Analytical Chemistry, Turkey</td>
<td>‘Design of Composite Nanoparticles for Immunomagnetic Separation and Sers Applications’</td>
</tr>
</tbody>
</table>
Wednesday, June 29, 2011 11:00 - 11:30

Assoc. Prof. Savaş Berber
Gebze Institute of Technology
Department of Physics,
Turkey

‘The Origin of Damping in the
Atomic Force Microscopy of
Carbon Nanotube Peapods’

Prof. Dr. Kazuo Kadowaki
Professor of Institute of
Materials Science,
University of Tsukuba,
Japan

‘Tentative: High-Tc Superconducting
Terahertz Emitting Devices: from Fundamental Aspects to
Applications’

Dr. Gerald Kada
Agilent Technologies,
Nanotechnology Measurements
Division, Application Engineer/
Scientist, Linz, Austria

‘Calibrated Nanoscale Capacitance
and Dopant Profile Measurements
Using a Novel Nearfield Scanning
Microwave Microscope’

Dr. Mustafa Özen
Istanbul University
Cerrahpasa Medical School,
Turkey

‘Nanoparticle Mediated
Delivery of Micromas in Cancer
Oligonucleotide Therapy’

Wednesday, June 29, 2011 13:30 - 14:00

Prof. Dr. Jurriaan Schmitz
University of Twente,
EEMCS / Electrical Engineering,
MESA+,
Nederland

‘Constructing New Systems on
Top of a Microchip’

Prof. Dr. Ashlı Silahtaroğlu
Department of Medical Genetics,
Institute of Medical Biochemistry
and Genetics,
University of Copenhagen,
Denmark

‘An Insight into Development of
Nanotechnology Based Methods in Molecular Genetics’

Prof. Dr. A.Constantinos Cefalas
Director of Research, National
Hellenic Research Foundation,
Theoretical and Physical
Chemistry Institute,
Athens, Greece

‘The Role of Quantum
Coherence in Nanocrystallization
and its Industrial Applications’

14:00 - 14:30

Prof. Dr. Ashok Vaseashta
Director, Institute for Advanced
Sciences Convergence & Int’l
Clean Water Institute, NUARI,
Herndon, VA, USA

‘Point and Stand-off Detection
for Safety, Security, and
Sustainability’

16:30 - 17:00

Deniz Taşkin
Arçelik A.Ş. R&D Center,
Material Technologies
Department,
Turkey

“Application Areas of
Nanomaterials in Household
Appliance Industry”
<table>
<thead>
<tr>
<th>Time</th>
<th>Invited Speakers</th>
</tr>
</thead>
</table>
| 11:00 - 11:30    | Prof. Dr. Seyda Bucak  
T.C. Yeditepe University  
Chemical Engineering  
Department, Turkey  
'Self Assembly of Peptides into Nanotubes: When and How!' |
| 13:30 - 14:00    | Assoc. Prof. Taner Yıldırım  
NIST Center for Neutron Research, University of Pennsylvania, USA  
'Graphene and Graphene-Oxide based Materials for Energy Applications' |
| 11:30 - 12:00    | Prof. Dr. Rafal E. Dunin-Borkowski  
Center for Electron Nanoscopy  
Technical University of Denmark  
'In Situ Transmission Electron Microscopy of Dynamic Processes and Functional Properties in Nanoscale Materials' |
| 16:30 - 17:00    | Prof. Dr. S. Ismat Shah  
Professor of Materials Science and Engineering  
Professor of Physics and Astronomy (Joint Appointment)  
University of Delaware, USA  
'Nanotechnology and Energy Alternatives' |
| 11:30 - 12:00    | Prof. Dr. Carla Bittencourt  
University of Antwerp, Belgium  
'Interactions Between Metals and Oxygen-plasma Treated Carbon Nanotubes' |
|                  | Prof. Dr. Cengiz S. Ozkan  
Professor of Mechanical Engineering, Courtesy Professor of Electrical Engineering and Biochemistry, University of California Riverside, USA  
'Graphene Materials and Applications' |
• THEME A
Nanomaterials; Nanoparticles, Nanocrystals, Nano-Porous Materials, Molecular and Supramolecular Materials

• THEME B
Nanotubes, Nanowires

• THEME C
Nanomembranes, Nanostructures with catalytic properties, Electro-chemical Materials
### Advanced Materials

**ORAL PRESENTATIONS**

**June 28, Tuesday**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:30</td>
<td>S1-A.1*</td>
<td>Development of Novel Quantum dots and Magnetic-Luminescent Hybrid</td>
<td>Funda Yagci Acar, Koç University, Turkey</td>
</tr>
<tr>
<td>14:00</td>
<td>S1-A.2</td>
<td>Decreasing the Branch Frequency in Precision Polyethylene: The Effect of Alkyl Branch Size On Nanoscale Morphology</td>
<td>Bora Inci, University of Florida, USA, Kenneth B. Wagener, University of Florida, USA</td>
</tr>
<tr>
<td>14:15</td>
<td>S1-A.3</td>
<td>The Stability of Silicon Cage Nanostructures</td>
<td>Ali Zerentürk, Gebze Institute Of Technology, Turkey, Savaş Berber, Gebze Institute Of Technology, Turkey</td>
</tr>
<tr>
<td>14:30</td>
<td>S1-A.4</td>
<td>Superoleophobic Surfaces: Pattern Size and Geometry Effects</td>
<td>C. Elif Özen Cansoy, Gebze Institute Of Tech., Turkey, H. Yildirim Erbil, Gebze Institute Of Tech., Turkey, Orhan Akar, Middle East Technical University, Turkey</td>
</tr>
<tr>
<td>14:45</td>
<td>S1-A.5</td>
<td>Geometric Control of Graphite Micro-stains By Drop Evaporation of SDS-graphite Dispersions</td>
<td>Sevgi Cavusoglu, Gebze Institute of Technology, Turkey, Merve Dandan Doganci, Gebze Institute of Technology, Turkey, H. Yildirim Erbil, Gebze Institute of Technology, Turkey</td>
</tr>
<tr>
<td>16:30</td>
<td>S1-A.6*</td>
<td>Organic-Inorganic Polymer Nano-Hybrids Based on Sol-Gel Reaction</td>
<td>Yoshiki Chujo, Kyoto University, Japan</td>
</tr>
<tr>
<td>17:00</td>
<td>S1-A.7</td>
<td>Contact Angle Hysteresis-surface Coverage Relation by Drop-wise Condensation</td>
<td>İkrime Orkan Ucar, Gebze Institute of Tech., Turkey, H. Yildirim Erbil, Gebze Institute of Tech., Turkey</td>
</tr>
<tr>
<td>17:15</td>
<td>S1-A.8</td>
<td>Magnetic and Dielectric Properties of MnxCo1-xFe2O4 Nanoparticles Synthesized By PEG Assisted Hydrothermal Method</td>
<td>Yüksel Köseoğlu, Fatih University, Turkey, Furkan Alan, Fatih University, Turkey, Muhammed Tan, Fatih University, Turkey, Mustafa Öztürk, Gebze Institute of Technology, Turkey, Resul Yilgin, Gebze Institute of Technology, Turkey</td>
</tr>
<tr>
<td>17:30</td>
<td>S1-A.9</td>
<td>Large Area Micro Patterned Polymer Surfaces from Sulfonated Polystyrene and Polypropylene-Polyethylene Copolymer Blends</td>
<td>Nevin Atalay Gengec, Gebze Institute Of Tech., Turkey, H. Yildirim Erbil, Gebze Institute Of Technology, Turkey</td>
</tr>
</tbody>
</table>

* Invited talks
**June 29, Wednesday**  
Chair: Ali Arslan Kaya  

<table>
<thead>
<tr>
<th>Time</th>
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<th>Authors</th>
</tr>
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<tbody>
<tr>
<td>11:00</td>
<td>The origin of damping in the atomic force microscopy of carbon nanotube peapods</td>
<td>Savas Berber, Gebze Institute of Technology, Turkey</td>
</tr>
<tr>
<td>11:30</td>
<td>Vibrational Entropy Contribution To The Step Free Energies And Two Melting Temperatures For The Si(001) Surface</td>
<td>Nazmi Burak Budanur, Istanbul Technical University, Turkey, Oğuzhan Gürlü, Istanbul Technical University, Turkey</td>
</tr>
<tr>
<td>11:45</td>
<td>Effects of Vacancy Defects On Thermal Conductivity In Crystalline Silicon</td>
<td>Aylin Yildiz, Dokuz Eylül University, Turkey, Tahir Catin, Texas A&amp;M University, USA</td>
</tr>
<tr>
<td>12:00</td>
<td>Influence of Additive on Electrophoretic Deposition (EPD) Behavior of Titania Nanoparticles in Non Aqueous Suspension and Deposited Layer Quality Prepared by EPD</td>
<td>Javad Esmaeilzadeh, Material &amp; Energy Research Center, Iraq</td>
</tr>
<tr>
<td>12:15</td>
<td>The Effect of Oxidation Time on The Formation Of Zinc Oxide Thin Films</td>
<td>Mehmet Oguz Guler, Sakarya University, Turkey, Yasemin Aydin, Sakarya University, Turkey, Oğuz Cevher, Sakarya University, Turkey, Deniz Gultekin, Sakarya University, Turkey, Hatem Akbulut, Sakarya University, Turkey</td>
</tr>
</tbody>
</table>

**June 29, Wednesday**  
Chair: Özcüre Özer  

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:30</td>
<td>A Water-based Facile Synthesis of Monodisperse Pegylated Au Nanoparticles</td>
<td>Mustafa Selman Yavuz, Selcuk Univ, Turkey, Sevket Tolga Camli, Gazi Univ, Turkey, Fatih Buyukserin, TOBB University Econ. &amp; Tec., Turkey, Cafer Yavuz, KAIST, Korea, Republic Of</td>
</tr>
<tr>
<td>13:45</td>
<td>Influence of Dopant on the Morphology and Luminescence of ZnO Nanowires, Nanorods and Nanoplates</td>
<td>Yanicet Ortega, Univ. Complutense of Madrid, Spain, Ana Uribeta, University Complutense of Madrid, Spain, Paloma Fernandez, Univ. Complutense of Madrid, Spain, Javier Piqueras, Univ. Complutense of Madrid, Spain</td>
</tr>
<tr>
<td>14:00</td>
<td>Water-soluble Conjugated Polymer Nanoparticles with Enhanced Chemical and Mechanical Stability via Click Chemistry</td>
<td>Seyma Ekiz, Bilkent University, Turkey, Ozlem Gezici, Bilkent University, Turkey, Donus Tuncel, Bilkent University, Turkey</td>
</tr>
<tr>
<td>14:30</td>
<td>The Rank Polynomial Of Dendrimer</td>
<td>Mohammad Hasan Naderi, University of Qom, Iran, Gholamhossein Fath-Tabar, University of Kashan, Iran</td>
</tr>
</tbody>
</table>
14:45 S1-C.12

Hydrothermal Synthesis and Photocatalytic Activity of Tin Oxide Nano Particles

Mustafa Karatok, Ankara University, Turkey
Tuğrul Yumak, Ankara University, Turkey
Bekir Esen, Ankara University, Turkey
Ebru Dağdelen, Ankara University, Turkey
Kıvanç Aydınçak, Ankara University, Turkey
Ali Sınağ, Ankara University, Turkey

June 29, Wednesday 16:30 – 17:45
Chair: Ekrem Yılmaz FENS G077

16:30 S1-A.21

Dependence of Hardness Values of Phenol Formaldehyde Resins (PFR) to Both Pre-polymerization Temperature and P/F Ratios

Ahmet Gürses, Atatürk University, Turkey
Ferda Mindivan, Atatürk University, Turkey
Semra Karaca, Atatürk University, Turkey
Metin Açıkyıldız, Atatürk University, Turkey
Harun Mindivan, Atatürk University, Turkey

16:45 S1-A.22

A Raman and Aîm Study Of Exfoliated Graphene On SiO2 And Mica

Serhat Yanık, Fatih University, Turkey
Kurtuluş Gölçük, Fatih University, Turkey
M. Burak Yılmaz, Fatih University, Turkey

17:00 S1-A.23

The Densification Behavior of Nanocrystalline Titania

Özlem Çağlar Duvarcı, Izmir Institute of Techn., Turkey
Muhsin Çiftciöğlu, Izmir Institute of Technology, Turkey

17:15 S1-A.24

Synthesis and Surface Modification of Mesoporous Silica by Dipicolinic Acid as Complexing Reagent

Mahmood Kazemzad Asiabi, Materials and Energy Research Center, Iran
Amir Ali Yuzbashi, Materials and En. Res. Center, Iran
Saeed Balalaie, K.N.Toosi University of Tech., Iran

17:30 S1-A.25

Fabrication and Characterization of New Generation Ferrite Nanoparticles for Multi Layer Chip Inductors And Microwave Absorption Applications

Khalid Batoo, King Saud University, Saudi Arabia
Shahnawaze Ansir, King Abdul Aziz Univ., Saudi Arabia

July 1, Friday 11:00 – 11:30
Chair: Taner Yıldırım FENS G077

11:00 S1-A.26

Structural and Electrical Properties of SnO2 Thin Films Prepared via R.F. Magnetron Sputtering

Ozgur Cevher, Sakarya University, Turkey
Mehmet Oguz Guler, Sakarya University, Turkey
Deniz Gultekin, Sakarya University, Turkey
Hatem Akbulut, Sakarya University, Turkey

11:15 S1-A.27

Growth, Morphology and Environmental Dependence of Chromium Oxide Structures on Glass Substrates

Kıvanç Esat, Istanbul Technical University, Turkey
Oğuzhan Gürli, Istanbul Technical University, Turkey
## ORAL PRESENTATIONS SESSION SERIES 1

### THEME B:
**Nanotubes, Nanowires**

<table>
<thead>
<tr>
<th>June 30, Thursday</th>
<th>11:00 – 12:30</th>
<th>Chair: Oğuz Gülseren</th>
<th>FENS G077</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00 S1-B.1*</td>
<td>Self Assembly of Peptides into Nanotubes: When and How?</td>
<td>Seyda Bucak, Yeditepe University, Turkey</td>
<td></td>
</tr>
<tr>
<td>11:30 S1-B.2*</td>
<td>Interactions between Metals and Oxygen-Plasma Treated Carbon Nanotubes</td>
<td>Carla Bittencourt, University of Antwerp, Belgium</td>
<td></td>
</tr>
<tr>
<td>12:00 S1-B.3</td>
<td>Highly Ordered Arrays of Nickel Nanowires Fabricated by Using the AAO Template Combined with the Electrodeposition</td>
<td>Pembe Özer, TUBITAK MAM, Turkey, Behiye Yüksel, TUBITAK MAM, Turkey, Mustafa Aslan, TUBITAK MAM, Turkey, Yücel Birol, TUBITAK MAM, Turkey</td>
<td></td>
</tr>
<tr>
<td>12:15 S1-B.4</td>
<td>Kilometer-long, Ordered, Uniform Piezoelectric Nanotube Array</td>
<td>Mehmet Kanık, UNAM, Turkey, Mecit Yaman, UNAM, Turkey, Mehmet Bayındır, UNAM, Turkey</td>
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</tbody>
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<th>Chair: Oğuz Gülseren</th>
<th>FENS G077</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:30 S1-B.5*</td>
<td>Graphene and Graphene-Oxide based Materials for Energy Applications</td>
<td>Taner Yıldırım, NIST, USA</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>June 30, Thursday</th>
<th>16:30 – 17:45</th>
<th>Chair: Oğuz Gülseren</th>
<th>FENS G077</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:30 S1-B.10*</td>
<td>Graphene Materials and Applications</td>
<td>Cengiz Özkan, University of California Riverside, US</td>
<td></td>
</tr>
<tr>
<td>17:00 S1-B.11</td>
<td>Nanowires for Sensing and Wave-guiding</td>
<td>Can Boran Akdal, Bahcesehir University, Turkey, Ergun Simsek, Bahcesehir University, Turkey</td>
<td></td>
</tr>
</tbody>
</table>
17:15  S1-B.12

The Cycle Index of Nanotubes
Morteza Faghani, University of Kashan, Iran
Ali Reza Ashrafi, University of Kashan, Iran
Modjtaba Ghorbani, Shahid Rajaee University, Iran

17:30  S1-B.21

Uniform Photoconductive Nanowire Arrays Readily Assembled into Large Area Electronics
Erol Ozgur, Bilkent University, Turkey
Ozan Aktas, Bilkent University, Turkey
Mecit Yaman, Bilkent University, Turkey
Mehmet Bayindir, Bilkent University, Turkey

July 1, Friday  09:00 – 10:15
Chair: Taner Yıldırım  FENS G077

09:00  S1-B.13

Edge Functionalization of Zigzag Graphene Nanoribbons with Sodium
Ozan Arı, İzmir Institute Of Technology, Turkey
İbrahim Dursun, İzmir Institute Of Technology, Turkey
R. Tuğrul Senger, İzmir Institute Of Technology, Turkey

09:15  S1-B.14

Symmetry Group of Fullerenes
Mohammad Reza Ahmadi, University of Kashan, Iran
Reza Jahani-Nezhad, University of Kashan, Iran
Ali Reza Ashrafi, University of Kashan, Iran

09:30  S1-B.15

Chemometric Analysis of Carbon Nanotube Production By Floating Catalyst CVD
Furkan Soysal, Ankara University, Turkey
Mustafa Yalın, Toros Tarm, Samsun Production Plant, Turkey
Burhanettin Cicek, Ankara University, Turkey
Önder Özbelge, Middle East Technical Univ., Turkey

09:45  S1-B.16

Structure and Properties of OH And COOH Functional Group Attached Single Wall Carbon Nanotube Reinforced Alumina Ceramics
Ali Can Zaman, Yıldız technical University , Turkey
Cem B. Ustundag, Yıldız Technical University , Turkey
Ali Celik, Anadolu University , Turkey
Alpagut Kara, Anadolu University , Turkey
Figen Kaya, Yıldız Technical University , Turkey
Cengiz Kaya, Yıldız Technical University , Turkey

10:00  S1-B.17

Changing the Charge State of C60 Nanoarrays
Dogan Erbahar, Gebze Institute of Technology, Turkey
Savas Berber, Gebze Institute of Technology, Turkey
David Tomanek, Michigan State University, USA

July 1, Friday  11:30 – 12:15
Chair: Taner Yıldırım  FENS G077

11:30  S1-B.18

Structural and Electronic Properties Of GaAs Nanotubes
Semran İpek Küskü, Gebze Institute of Tech., Turkey
Savas Berber, Gebze Institute of Tech., Turkey

11:45  S1-B.19

First-principles Study of GaAs/AlAs Nanowire Heterostructures
Selma Senozan, Middle East Technical Univ., Turkey
Mehmet Tomak, Middle East Technical Univ., Turkey

12:00  S1-B.20

Polyol Synthesis of Silver Nanowires
Sahin Coskun, Middle East Technical University, Turkey
Burcu Aksoy, Middle East Technical University, Turkey
Husnu Emrah Unalan, Middle East Technical University, Turkey
THEME C:
Nanomembranes, Nanostructures with catalytic properties,
Electro-chemical Materials

July 1, Friday  09:00 – 10:30  FASS G062
Chair: Ali Arslan Kaya

09:00  S1-C.1
Controlling the Surface Dispersion of BaO Nanodomains on Catalytic Nox Storage Materials via TiO2 Anchoring Sites and Improvement of Sulfur Poisoning Tolerance
Emrah Özensoy, Bilkent University, Turkey
Göksu Seda Şentürk, Bilkent University, Turkey
Evgeny Vovk, Bilkent University, Turkey

09:15  S1-C.2
Study of Thinning Process in Order Anodic Alumina Membrane for Fabrication Nanowire Gas Sensors
Hamideh Edraki, Sama Organization (Islamic Azad University), Iran
Majid Ebrahimzadeh, Arta Nano Fan Avar Pishro Co, Iran
Mohammad Mehdi Gharahbeigi, Sama Organization (Islamic Azad University), Iran
Tooraj Ghaffary, Islamic Azad University, Iran

09:30  S1-C.3
Adsorption, Diffusion and Separation of Gas Mixtures in Nanoporous Membranes and Composites
İlknur Eruçar, Koç University, Turkey
Seda Keskin, Koç University, Turkey

09:45  S1-C.4
Iron and Nickel Doped TiO2 Thin Film Photocatalysts for Dye Degradation
Hüsnü Arda Yurtsever, İzmir Institute of Tech., Turkey
Özlem Çağlar Duvarcı, İzmir Institute of Tech., Turkey
Muhsin Çiftcioğlu, İzmir Institute of Techn., Turkey

10:00  S1-C.5
Syntesis and Characterization of Pani/ZnO Nanocomposites and Photo-catalytic Properties
Gülsah Şefika Aslım, Selcuk University, Turkey
Fahriye Sari, Selcuk University, Turkey
Handan Gülce, Selcuk University, Turkey
Ahmet Gülce, Selcuk University, Turkey
Vulkan Eskişeybek, Selcuk University, Turkey
Ahmet Avci, Selcuk University, Turkey

10:15  S1-C.6
TiO2 Nano-particle Immobilized Polymeric Material and Photocatalytic Activity
Münevver Sökmen, Karadeniz Technical Univ., Turkey
İlknur Tatlıdil, Karadeniz Technical University, Turkey
Tuğba Sivlim, Karadeniz Technical University, Turkey

July 1, Friday  11:00 – 12:15  FASS G062
Chair: Ali Arslan Kaya

11:00  S1-C.7
Synthesis of TiO2 Coated Self-cleaning Materials
Münevver Sökmen, Karadeniz Technical Univ., Turkey
İlknur Tatlıdil, Karadeniz Technical University, Turkey
Chris Breen, Karadeniz Technical University, Turkey
Emin Bacaksız, Karadeniz Technical University, Turkey
C. Kurtuluş Buruk, Karadeniz Technical Univ., Turkey

11:15  S1-C.8
Adsorption of Phthalocyanine on Rutile TiO2 (110) Surface
Necmettin Kılınç, Gebze Institute of Tech., Turkey
Zafer Ziya Öztürk, Gebze Institute of Tech., Turkey
Savaş Berber, Gebze Institute of Techn., Turkey
11:30 S1-C.9
Examples of Applications for Photocatalytic Surface By Using TiO2 Nanoparticles
Mevlüt Gürbüz, Anadolu University, Turkey
Burçak Atay, Anadolu University, Turkey
Aydın Doğan, Anadolu University, Turkey

11:45 S1-C.10
Thermal Plasma Synthesis of Mg-Ti Nanoparticles
Gülhan Çakmak, Middle East Technical Univ., Turkey
Zoltán Károly, Hungarian Acad. of Sciences, Hungary
Ilona Mohai, Hungarian Acad. of Sciences, Hungary
János Szépvölgyi, Hungarian Academy of Sciences, Hungary
Tayfur Öztürk, Middle East Technical University, Turkey

12:00 S1-C.11
New Application of Modified Multiwalled Carbon Nanotubes with Thiosemicarbazide as a Sorbent for Sensitive Simultaneous Separation and Preconcentration and Determination Trace Amounts Of Co2+, Cd2+, Zn2+ and Cu2+ in Environmental and Biological Sample
Hossein Tavallali, Payame Noor University, Iran
• THEME E
Nanoelectronics, Spintronics, Nano-Magnetics,
Quantum Computing, Qubits

• THEME F
Organic and Hybrid Electronics: OLED, OTFT, OSC, DSSC

• THEME G
Nano-optics, Nano-Optoelectronics, Nano-Photonics

• THEME J
Nano Electro Mechanical Systems (NEMS),
Micro Electro Mechanical Systems (MEMS)

• THEME O
Nanotechnology for Energy (fuel cell, solar cell, hydrogen storage)
NanoTR VII - 7th Nanoscience and Nanotechnology Conference

THEME E:
Nanoelectronics, Spintronics, Nano-Magnetics,
Quantum Computing, Qubits

June 28, Tuesday  13:30 – 15:00
Chair: Zafer Gedik  FENS L045

13:30  S2-E.1*
Magnetic Nanostructures; Top Down and Bottom up Approach
Peter Varga, The Vienna University of Tech., Austria

14:00  S2-E.2
Interlayer Exchange Coupling in Py/cr/py Multilayers
Bekir Aktaş, Gebze Institute of Technology, Turkey
Ramazan Topkaya, Gebze Institute of Tech., Turkey
Mustafa Erkovan, Gebze Institute of Techn., Turkey

14:15  S2-E.3
High Frequency Performance of Individual and Arrays of Single-walled Carbon Nanotubes
Osman Balcı, Bilkent University, Turkey
Coskun Kocabas, Bilkent, Turkey

14:30  S2-E.4
Ono Type Flash Memory Using a High-k Tunnel Oxide Layer
Deniz Koçaa, UNAM, Bilkent University, Turkey
Aykutlu Dana, UNAM, Bilkent University, Turkey

14:45  S2-E.5
Thermal Properties of Two Dimensional Quantum Dots Confined by An-harmonic Potentials
Berna Gulveren, Selcuk University, Turkey

June 28, Tuesday  16:30 – 17:45
Chair: Fikret Yıldız  FENS L045

16:30  S2-E.6*
Irreversibility of Single-Electron Transfer through a Small Conductor
Bruno Küng, ETH Zürich, Switzerland

17:00  S2-E.7
Landau-Lifshitz-Bloch Simulations of Magnetization Dynamics at Elevated Temperatures
Ufuk Kilic, Bogazici University, Turkey
Ismail Volkan Inlek, Bogazici University, Turkey
Ibrahim Cinar, Turkey
Bruce Terris, Hitachi Global Technologies, USA
Gulen Aktas, Bogazici University, Turkey
Ozhan Ozatay, Bogazici University, Turkey

17:15  S2-E.8
Spin Transport in CVD Synthesized Single Layer and Bilayer Graphene
Ahmet Avsar, National Univ. of Singapore, Singapore
Tsung-Yeh Yang, RWTH Aachen University, Germany
Su-Kang Bae, Sungkyunkwan Univ., Korea
Gernot Guntherodt, RWTH Aachen Univ., Germany
Byung Hee Hong, Sungkyunkwan Univ., Korea
Bernd Beschoten, RWTH Aachen University, Germany
Barbaros Ozyilmaz, National Univ. of Singapore,

17:30  S2-E.9
3-D Simulation Model of Switching Dynamics in Phase Change Memory
İbrahim Cinar, Bogaziçi Universitesi, Turkey
Gülşen Kösoğlu, Bogaziçi Universitesi, Turkey
Özgür Burak Aslan, Bogaziçi Universitesi, Turkey
Gulen Aktas, Bogaziçi University, Turkey
Ozhan Ozatay, Bogaziçi University, Turkey

* Invited talks
June 29, Wednesday 11:00 – 12:30  
Chair: İsmet İ. Kaya  

11:00  S2-E.10*  
*Tentative: High-Tc Superconducting Terahertz Emitting Devices: from Fundamental Aspects to Applications  
Kazuo Kadowaki, University of Tsukuba, Japan

11:30  S2-E.11  
*Electrically Induced Phase Change Memory Switching In Chalcogenide Nanowires  
Ozan Aktaş, Bilkent University, Turkey  
Erol Özgür, UNAM, Turkey  
Mecit Yaman, UNAM, Turkey  
Mehmet Bayındır, UNAM, Turkey

11:45  S2-E.12  
Physical Properties of Aromatic Hydrocarbon Added MgB2 Bulks, Wires and Tapes  
Ali Gencer, Ankara University, Turkey  
Ercan Ertekin, Ankara University, Turkey  
Özlem Çiçek, Ankara University, Turkey

12:00  S2-E.13  
Superconducting Terahertz Emitters of Intrinsic Josephson Junctions  
Yasemin Demirhan, Izmir Institute of Tech., Turkey  
Lütfi Özyüzer, Izmir Institute of Techn., Turkey

12:15  S2-E.14  
Magnetic Origins of Intra and Inter Particle Interactions in Fe3O4 Nano Particles  
Musa Mutlu Can, Hacettepe University, Turkey  
Tezer Firat, Hacettepe University, Turkey

June 29, Wednesday 13:30 – 15:00  
Chair: İnanç Adagideli  

13:30  S1-E.15*  
Constructing new systems on top of a microchip  
Jurriaan Schmitz, University of Twente, Nederland

14:00  S1-E.16  
Electron-phonon Interaction in Graphene  
Melek Keskin, İzmir Institute of Technology, Turkey  
R. Tuğrul Senger, İzmir Institute of Technology, Turkey

14:15  S1-E.17  
Atomic and Electronic Properties of Boron Clusters and Stability Analysis  
Nurten Akman, Mersin University, Turkey

14:30  S1-E.18  
Sputtered NiFe/CoFe Nanofilms for Magnetic Writer-head Applications  
Sukru Cakmaktepe, Kilis 7 Aralik University, Turkey  
Abdulkadir Yıldız, Kilis 7 Aralik University, Turkey  
Mehmet Ibrahim Coskun, Kilis 7 Aralik Univ., Turkey  
Sinan Diken, Kilis 7 Aralik University, Turkey

14:45  S2-E.19  
Edge Magnetism and Stability of Edge States in Graphene Nanoribbons  
Cem Özdoğan, Çankaya University, Turkey  
Jens Kunstmann, TU Dresden, Germany  
Alexander Quandt, University of the Witwatersrand, South Africa  
Holger Fehske, University of Greifswald, Germany
### June 30, Thursday 11:00 – 12:15

**Chair:** İsmat Shah  
**Location:** FENS L045

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
</table>
| 11:00 | S2-F.1  | The Effect Of Si Nano-particles on Commercial Light Emitting Diode (LED) Power Performances | Sabri Alkış, Bilkent University, Turkey  
Ali Kemal Okyay, Bilkent University, Turkey  
Ali Chait Kosger, Bilkent University, Turkey |
| 11:15 | S2-F.2  | Liquid Polymer Diodes with Nanoscale Electrode Separation             | Bedri Gürkan Sönmez, Boğaziçi University, Turkey  
Şenol Mutlu, Boğaziçi University, Turkey |
| 11:30 | S2-F.3  | Breakdown of Quantum Hall Effect in Graphene                          | Cenk Yanık, Sabancı University, Turkey  
Anıl Günay Demirkol, Sabancı University, Turkey  
Cem Çelebi, Sabancı University, Turkey  
İsmet İnönü Kaya, Sabancı University, Turkey |
| 11:45 | S2-F.4  | A Spatially Homogeneous Hybrid Manybody Interaction Model of Molecular Clusters | Ali Sebetci, Zirve University, Turkey  
Gregory J. O. Beran, Univ. of California, USA |
| 12:00 | S2-F.5  | OLED Applications of Some Polypyridyl Ruthenium(ii) Complexes With Swallow-tail Alkyl Chains on Ligand  
İlker Öner, Ege Univ. Solar Energy Institute, Turkey  
Çiğdem Şahin, Ege Univ. Solar Energy Institute, Turkey  
Canan Varlıkli, Ege Univ. Solar Energy Institute, Turkey |
### ORAL PRESENTATIONS SESSION SERIES 2

**June 30, Thursday**

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2-G.1</td>
<td>Coupling of Localized and Surface Plasmons on Subwavelength Silver Gratings</td>
<td>Sencer Ayas, Hasan Guner, Burak Türker, Okan Öner Ekiz, Aykutlu Dana</td>
</tr>
<tr>
<td>S2-G.2</td>
<td>Nanopillar Arrays for High-efficiency Photodetection in the Nightglow Wavelength Window</td>
<td>Levent E. Aygün, M. Cengiz Onbasli, Ali Kemal Okay</td>
</tr>
<tr>
<td>S2-G.3</td>
<td>Localization of Surface Plasmon Polaritons in Hexagonal Arrays of Moiré Cavities</td>
<td>Sinan Balci, Ertugrul Karademir, Coskun Kocabas, Atilla Aydini</td>
</tr>
<tr>
<td>S2-G.4</td>
<td>Nano-structured Near and Mid-infrared Fibers</td>
<td>Tugrul Cagri Cinkara, Mehmet Kanik, Mecit Yaman, Mehmet Bayindir</td>
</tr>
</tbody>
</table>

**July 1, Friday**

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2-G.5</td>
<td>Structural Coloring in Cylindrical Core-shell Nanowires</td>
<td>Tural Khudiyev, Erol Ozgur, Mecit Yaman, Mehmet Bayindir</td>
</tr>
<tr>
<td>S2-G.6</td>
<td>Quasi One-way Light Propagation in Chirped Photonic Crystal Waveguides</td>
<td>Hamza Kurt, Döne Erbaş</td>
</tr>
<tr>
<td>S2-G.7</td>
<td>Quasi-bessel Beam Generation by Annular Photonic Crystals</td>
<td>Mirbek Turduev, Hamza Kurt, Kadir Üstün</td>
</tr>
<tr>
<td>S2-G.8</td>
<td>Large and Dynamical Tuning of Chalcogenide Photonic Crystal by Temperature Modulation</td>
<td>Mecit Yaman, Hasan Esat Kondakci, Mehmet Bayindir</td>
</tr>
<tr>
<td>S2-G.9</td>
<td>Wavelength Division Demultiplexer on Diffraction Inhibited Photonic Crystal</td>
<td>Kadir Üstün, Hamza Kurt</td>
</tr>
</tbody>
</table>

**THEME G:**

Nano-optics, Nano-Optoelectronics, Nano-Photonics
July 1, Friday
Chair: Kürşat Şendur

11:00 – 11:30
FENS L045

11:00 S2-G.10
Comparative Study on Solid Core Photonic Crystals Fibers with Square Lattice: Mode Area and Single-mode Characteristics for Circular and Square Air Holes
Halime Demir, Erciyes University, Turkey
Sedat Özsoy, Erciyes University, Turkey

11:15 S2-G.11
A Novel Surface Mode Photonic Crystal Bio-sensor
Hamza Kurt, TOBB ETU, Turkey
Muhammed Necip Erim, TOBB ETU, Turkey
Nur Erbaş, TOBB ETU, Turkey
June 30, Thursday 11:00 – 12:30

Chair: Jorg Peter Kotthaus  FENS G032

11:00  S2-J.1
Casimir Effect in Strongly Interacting Fermion and Boson Bilayers
Murat Taş, Sabancı University, Turkey
Bilal Tanatar, Bilkent University, Turkey

11:15  S2-J.2
Operation of Micromechanical Resonator Biosensor in Liquid Media
Yasin Kılınç, Koç University, Turkey
Erhan Ermek, Koç University, Turkey
Cem Sağr koşlu, Koç University, Turkey
İbrahim Barış, Koç University, Turkey
Aref Mostafazadeh, Koç University, Turkey
İ. Halil Kavakli, Koç University, Turkey
Hakan Urey, Koç University, Turkey
B. Erdem Alaca, Koç University, Turkey

11:30  S2-J.3
Actuation of Liquid Metal Droplets Using Electrowetting-on-dielectric (ewod)
Engin Çağatay, UNAM, Turkey
Yasin Damgacı, Utah State University, USA
Bedri Çetiner, Utah State University, USA
Necmi Brykli, UNAM, Turkey

11:45  S2-J.4
Integration of Si Nanowires as High Voltage Switches and Resonators
Evren Fatih Arkan, Koç University, Turkey
Davide Sacchetto, Ecole Polytechnique Federale de Lausanne, Switzerland
İzzet Yıldız, Koç University, Turkey
Yusuf Leblebici, Ecole Polytechnique Federale de Lausanne, Switzerland
B. Erdem Alaca, Koç University, Turkey

12:00  S2-J.5
Ge/SiGe Quantum Well Structures For Uncooled Infrared Bolometers
Fatih Bilge Atar, Bilkent University, Turkey
Alper Yeşilyurt, Bilkent University, Turkey
Mehmet Cengiz Onbaşlı, MIT, USA
Oğuz Hanoğlu, Bilkent University, Turkey
Ali Kemal Okyay, Bilkent University, Turkey

12:15  S2-J.6
Wafer Test Challenges Driving Mems/nems Technologies and Development Of Nanosprings
Bahadır Tunaboylu, Istanbul Şehir University, Turkey
NanoTR VII - 7th Nanoscience and Nanotechnology Conference

THEME O:
Nanotechnology for Energy (fuel cell, solar cell, hydrogen storage)

June 30, Thursday 13:30 – 15:00
Chair: Yuda Yürüm
FENS G032

13:30  S2-O.1*
Nanoenergy and Energy Alternatives
S. Ismat Shah, University of Delaware, US

14:00  S2-O.2
New Fuel Cell Electrodes Made From Graphene Nanosheets and Their Nanocomposites
Burcu Saner, Sabancı University, Turkey
Alp Yürüm, Technion Israel Institute of Tech., Israel
Selmiye Alkan Gürsel, Sabancı University, Turkey
Yuda Yürüm, Sabancı University, Turkey

14:15  S2-O.3
Nanostructures by Glancing Angle Deposition for Energy Applications
Arif S. Alagoz, University of Arkansas at Little Rock, US
Wisam. J. Khudhayer, Univ. of Arkansas at Little Rock, US
Taha M. Demirkan, Univ. of Arkansas at Little Rock, US
Hilal Is, University of Arkansas at Little Rock, US
Mehmet F. Cansizoglu, Univ. of Arkansas at Little Rock, US
Tansel Karabacak, Univ. of Arkansas at Little Rock, US

16:30  S2-O.5
Carrier Transport and Recombinations in CdSe Quantum Dot Sensitized Solar Cells
Saim Emin, University of Nova Gorica, Slovenia
Saim Emin, National Inst. for Materials Science, Japan

16:45  S2-O.6
Novel Nano-composite Membrane Electrode Assembly for High Temperature Polymer Electrolyte Membrane Fuel Cell
Lale İsikel Şanlı, Sabancı University, Turkey
Didem Çilingir Doğan, Sabancı University, Turkey
Selmiye Alkan Gürsel, Sabancı University, Turkey

17:00  S2-O.7
Development of Photovoltaic Fiber Structure with Different Polymer-based Nanomaterials
Ali Demir, Istanbul Technical University, Turkey
Ayse Bedeoglu, Dokuz Eylul University, Turkey
Kubra Tutuncu, Istanbul Technical University, Turkey
Ismail Borazan, Istanbul Technical University, Turkey
Derya Ozdemir, Korteks A.Ş., Turkey

17:15  S2-O.8
New Generation Zeolite-like Nanomaterials for Gas Storage
Erhan Atıcı, Koç University, Turkey
Seda Keskin, Koç University, Turkey
### ORAL PRESENTATIONS SESSION SERIES 2

#### July 1, Friday 09:00 – 10:00  
FENS G032

**Chair: Fevzi Ç. Cebeci**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Speakers</th>
</tr>
</thead>
</table>
| 9:00  | S2-O.9  | Insertion of Lithium into Vertically-aligned Carbon Nanotubes during Growth | Kuldeep Singh Rana, Bilkent University, Turkey  
Gökçe Kucukayan, Bilkent University, Turkey  
Erman Bengü, Bilkent University, Turkey |
| 9:15  | S2-O.10 | New N-type Materials for Organic Solar Cells | Burak Gultekin, Ege University, Turkey  
Banu Aydin, Ege University, Turkey  
Ceylan Zafer, Ege University, Turkey  
Sıddık Icli, Ege University, Turkey |
| 9:30  | S2-O.11 | Improved Efficiency of Thin-film Solar Cells via Surface Plasmon Enhancement of Metal Nanoparticles and Nanorods | Enes Battal, Bilkent University, Turkey  
Taha Alper Yogurt, Bilkent University, Turkey  
Levent Erdal Aygun, Bilkent University, Turkey  
Ali Kemal Okyay, UNAM-Bilkent University, Turkey |
| 9:45  | S2-O.12 | Investigation on Silicon-nanosponge Structures Prepared by Magnetron Sputtering for Photovoltaic Applications | Serim Ilday, Middle East Technical University, Turkey  
Nader Asgharpour Mogaddam, Center for Solar Energy Research and Application (GÜNAM), Turkey  
Rasit Turan, Center for Solar Energy Research and Application (GÜNAM), Turkey |

#### July 1, Friday 11:00 – 12:00  
FENS G032

**Chair: Fevzi Ç. Cebeci**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Speakers</th>
</tr>
</thead>
</table>
| 11:00 | S2-O.14 | Silicon Nanowire - PEDAT:PSS Heterojunction Solar Cells | Barış Ozdemir, METU, Turkey  
Mustafa Kulakci, METU, Turkey  
Rasit Turan, METU, Turkey  
Husnu Emrah Unalan, METU, Turkey |
| 11:15 | S2-O.15 | Bulk Nanostructured Thermoelectric Bismuth Telluride | Muhammet Toprak, Royal Institute of Tech., Sweden  
Mohsin Saleemi, Royal Institute of Technology, Sweden |
| 11:30 | S2-O.16 | Fabrication and Characterization of Si Nanocrystals in SiC Multilayer Film for Third Generation Photovoltaics | Arife Gencer İmer, Yüzüncü Yıl University, Turkey  
Rasit Turan, Middle East Technical University, Turkey |
| 11:45 | S2-O.17 | Influence of Nanosized Pt Loading into LbL Modified Composite Membranes on Fuel Cell Performance At Different Operation Conditions | Tolga Gümüşoğlu, Istanbul University, Turkey  
Hüseyin Deliğöz, Istanbul University, Turkey  
Serpil Yılmaztürk, Istanbul University, Turkey |
KNOW HOW?

Uzun yılların verdiği tecrübe, baştan sona her aşamada sağlanan teknik destek ve dünyanın öncü markalarının temsilcilikleriyle Memis, sektöründe fark yaratıyor.
Siz de Türkiye’nin birçok lider kuruluşu gibi, Memis ayrıcalıklarıyla tanışmak için lütfen bizle iletişime geçin.
ORAL PRESENTATIONS

SESSION SERIES 3

• THEME H
  Nano-Actuators, Nano-Sensors

• THEME I
  Nanoscale Characterization, Nano-imaging,
  Nanoscopy, Nano-Metrology

• THEME L
  Nano-Fabrication, Nano-Lithography,
  Nano-Manipulation
**NanoTR VII - 7th Nanoscience and Nanotechnology Conference**

**Nanofabrication and Nanocharacterization ORAL PRESENTATIONS**

**June 28, Tuesday**  
13:30 – 15:00  
Chair: Meltem Sezen  
**FENS G035**

**13:30**  
S3-H.1*  
*Invited talks*

*Fabrication of functional nanostructures via focused electron beam induced deposition*  
**Harald Plank**, Graz University of Technology, Austria

**14:00**  
S3-H.2

*Self-assembly of Amphiphilic Peptides into One-dimensional Objects*  
**Özge Engin**, Koc University, Turkey  
**Beytullah Özgür**, Koc University, Turkey  
**Mehmet Sayar**, Koc University, Turkey

**14:15**  
S3-H.3

*Large Area Fabrication of Graphene Nanoribbons*  
**Emre Ozan Polat**, Bilkent University, Turkey  
**Coskun Kocabas**, Bilkent University, Turkey

**14:30**  
S3-H.4

*Biomimetic Control of Magnetite Shape and Morphology Using Polymaminoacids*  
**Cem Levent Allan**, Yeditepe University, Turkey  
**Nico Sommerdijk**, Eindhoven University of Technology, Netherlands  
**Seyda Bucak**, Yeditepe University, Turkey

**14:45**  
S3-H.5

*New Approach for the Synthesis of Fe3O4 Based Nanocluster Structures for Magnetic Fluid Formation*  
**Serhat Küçükdermencı**, Ege Üniversitesi, Turkey  
**Leman Karadeniz**, Ege Üniversitesi, Turkey  
**Ömer Mermer**, Ege Üniversitesi, Turkey  
**İbrahim Avgın**, Ege Üniversitesi, Turkey

**June 28, Tuesday**  
16:30 – 17:30  
Chair: Harald Plank  
**FENS G035**

**16:30**  
S3-H.6*  
*Invited talks*

*Nano and Micro-Patterning of Carbon*  
**Marc Madou**, Univ. of California at Irvine (UCI), USA

**17:00**  
S3-H.8

*Femtosecond Laser Crystallization of Amorphous Ge*  
**Omer Salihoglu**, Bilkent University, Turkey  
**Ulas Kurum**, Ankara Universitesi, Turkey  
**Gul Yaglioglu**, Ankara Universitesi, Turkey  
**Ayhan Elmali**, Ankara Universitesi, Turkey  
**Atilla Aydinli**, Bilkent University, Turkey

**17:15**  
S3-H.9

*Plasmonic Enhancement inside Sub-wavelength Holes in Metals*  
**Ergun Simsek**, Bahcesehir University, Turkey  
**Selcuk Akturk**, Istanbul Technical University, Turkey
June 29, Wednesday 13:30 – 15:00 FENS G035
Chair: Marc Madou

13:30 S3-H.10
**MOCVD Of High in Content Thick InGaN Layers**
Ocal Tuna, AIXTRON SE, Germany
Christoph Giesen, AIXTRON SE, Germany
Michael Heuken, AIXTRON SE, Germany
Andrei Vescan, RWTH Aachen University, Germany
Holger Kalisch, RWTH Aachen University, Germany
Hannes Behmenburg, RWTH Aachen University, Germany

13:45 S3-H.11
**Winning Against Contact-line Pinning**
Mustafa Culha, Yeditepe University, Turkey
Kemal Keseroglu, Yeditepe University, Turkey
Ali Yasin Sonay, Yeditepe University, Turkey
Secan Keskin, Yeditepe University, Turkey
Saban Kalay, Yeditepe University, Turkey

14:00 S3-H.12
**Extending the Realm of Suns to DNA Nanoarrays and Peptide Features**
Ozge Akbulut, Massachusetts Institute of Tech., USA
Anna Laromaine, Massachusetts Institute of Tech., USA
Francesco Stellacci, MIT, USA

14:15 S3-H.13
**Synthesis of Fe3O4 Nanocrystals via Simple Coprecipitation Method**
Masaoud Salavati-Niasari

14:30 S3-H.14
**Synthesis Of LaMnO3 By Flame Spray Pyrolysis**
Nesrin MACHIN, Kocaeli University, Turkey
Özgür Duygulu, TUBITAK Marmara Research Center, Turkey

14:45 S3-H.15
**Synthesis of Mechanically Stable Conjugate Polymer Nanoparticles**
Vusala Ibrahimova, Bilkent University, Turkey

July 1, Friday 11:00 – 11:45 FENS G035
Chair: Oğuzhan Gürlü

11:00 S3-H.16
**Fabrication of Hydrogen Silsesquioxane (HSQ) Ordered Nanorod Arrays for Sub Wavelength Antireflective Coatings**
Hakan Deniz, UNAM, Turkey
Tural Khudiyev, UNAM, Turkey
Fatih Buyukserin, TOBB ETU, Turkey
Mehmet Bayindir, UNAM, Turkey

11:15 S3-H.17
**Synthesis Of ZnxCd1-xs Alloy Nanocrystals and Their Composition Tunable Spectroscopic Properties**
Leyla Eral Doğan, IYTE, Turkey
Serdar Özçelik, IYTE, Turkey

11:30 S3-H.18
**Sub-nanometer-scale-controlled-growth Of III-nitride Thin Films Using Plasma-enhanced Atomic Layer Deposition**
Çağla Özgit, UNAM, Bilkent University, Turkey
İnci Dönmez, Bilkent University, Turkey
Mustafa Alevli, UNAM, Bilkent University, Turkey
Necmi Brykli, Bilkent University, Turkey
THEME I:
Nanoscale Characterization, Nano-imaging, Nanoscopy, Nano-Metrology

June 29, Wednesday 11:00 – 12:30  FENS G035
Chair: Servet Turan

11:00  S3-I.1*
Calibrated Nanoscale Capacitance and Dopant Profile Measurements Using a Novel Nearfield Scanning Microwave Microscope
Gerald Kada, Agilent, Austria.

11:30  S3-I.2
Effect of Substrate Temperature on Nanoscale Cadmium Oxide Thin Films Deposited by Spray Pyrolysis Technique
Zahra Halaj, University of Guilan, Iran
Seyed Mohammad Rozati, University of Guilan, Iran

11:45  S3-I.3
Nano-scale Surface, Structural and Optical Characterization of AlN Layers Grown By Self-limiting Atomic Layer Deposition
Mustafa Alevli, Bilkent University, Turkey
Çağla Özgit, Bilkent University, Turkey
İnci Dönmez, Bilkent University, Turkey
 Necmi Biyikli, Bilkent University UNAM, Turkey

12:00  S3-I.11
Quantitative Atomic 3-D Imaging Of Single/Double Sheet Graphene Structure
Emrah Yuceelen, FEI Electron Optics, the Netherlands

12:15  S3-I.16
Top-Down Fabrication and Characterization of Silicon Nanowire Devices and Arrays
Yusuf Leblebici, EPFL-LSM, 1015 Lausanne, Switzerland

June 30, Thursday 11:00 – 12:30  FENS G035
Chair: Mehmet Polat

11:00  S3-I.6*
In Situ Transmission Electron Microscopy of Dynamic Processes And Functional Properties in Nanoscale Materials
Rafal E. Dunin-Borkowski, Technical Univ. of Denmark

11:30  S3-I.7
Design of Mili-kelvin Magnetic Force Microscope (mK-MFM, ~320mK) for He3 Systems
Özgür Karcı, NanoManyetik Bilimsel Cihazlar Ltd, Hacettepe University, Turkey
Rui Rui Du, Rice University, USA
Ahmet Oral, Sabanci University, Turkey

11:45  S3-I.8
The Observation of Clustering At Nanoscales: The Birth of a Nanocrystal
Yunus Eren Kalay, Middle East Technical Univ., Turkey
Tuba Demirtas, Middle East Technical University, Turkey
Matthew Kramer, Ames Laboratory of US DOE, USA

12:00  S3-I.9
Nanoscale Cadmium Oxide Thin Films Deposited by Spray Pyrolysis Technique
Zahra Halaj, University of Guilan, Iran
Seyed Mohammad Rozati, University of Guilan, Iran

12:15  S3-I.10
Quantitative Method for Obtaining Surface Potentials from EFM Measurements
Melike Arslan, Ankara University, Turkey
Svetlana Klimova, Saratov State University, Russian
Ivan Mal'Yar, Saratov State University, Russian
Sergey Venig, Saratov State University, Russian
Ilker Dincer, Ankara University, Turkey
Yalcin Elerman, Ankara University, Turkey
June 30, Thursday 13:30 – 15:00

Chair: Meltem Sezen  FENS G035

13:30  S3-I.4

*Design of High Sensitivity Fiber Interferometer for Low Temperature Scanning Force Microscope*

Özgür Karcı, NanoManyetik Bilimsel Cihazlar Ltd, Hacettepe University, Turkey
Ahmet Oral, Sabancı University, Turkey

13:45  S3-I.5

*A Microfluidic Sensor Based on Surface Plasmon Microinterferometer*

Ozlem Yavas, Bilkent University, Turkey
Coskun Kocabas, Bilkent University, Turkey

14:00  S3-I.12

*NOx Uptake and Storage Properties of BaOx/Pt(111) Model Catalyst: Influence of Ba Coverage, Surface Morphology and Stoichiometry*

Emrah Özensoy, Bilkent University, Turkey
Evgeny Vovk, Bilkent University, Turkey
Emre Emmez, Bilkent University, Turkey

14:15  S3-I.13

*Time-resolved Confocal Detection Setup for Single Molecule Experiments*

M. Yavuz Yüce, Koç University, Turkey
Alper Kiraz, Koç University, Turkey

14:30  S3-I.14

*Growth of Nanoscale Structure of Pure TiN Oxide Thin Films Deposited By CVD Technique*

Seyed Mohammad Rozati, University of Guilan, Iran
Masodeh Maleki, University of Guilan, Iran

14:45  S3-I.15

*Use of Atomic Force Microscopy for Determination of Surface Potential on Oxide in Aqueous Solution*

Gülnihal Ozek Yelken, İzmir Yüksek Tek. Enst., Turkey
Mehmet Polat, İzmir Yüksek Teknoloji Enstitüsü, Turkey
<table>
<thead>
<tr>
<th>June 30, Thursday</th>
<th>16:30 – 17:30</th>
<th>July 1, Friday</th>
<th>11:45 – 12:00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair: Cem Çelebi</td>
<td><strong>FENS G035</strong></td>
<td>Chair: Oğuzhan Gürlü</td>
<td><strong>FENS G035</strong></td>
</tr>
</tbody>
</table>

16:30 S3-L.1
*Surface Plasmon Polariton Assisted Inter-order Scattering in Biharmonic Metallic Gratings for Sensing and Imaging*

- Hasan Güner, UNAM, Turkey
- Burak Türker, UNAM, Turkey
- Sencer Ayas, UNAM, Turkey
- Okan Öner Ekiz, UNAM, Turkey
- Aykutlu Dâna, UNAM, Turkey

16:45 S3-L.2
*The Mathematical Description of Sensor Properties of Nanocoatings Obtained by Electropolymerization of Heterocyclic Compounds*

- Volodymyr Tkach, Chernivtsi National Univ., Ukraine
- Nechyporuk Vasyl, Chernivtsi National Univ., Ukraine
- Yagodynets’ Petro

17:00 S3-L.3
*Graphene Functionalized Surface Plasmon Resonance Sensors*

- Omer Saligoglu, Bilkent University, Turkey
- Coskun Kocabas, Bilkent University, Turkey

17:15 S3-L.4
*Fluorescent Organically Modified Silica Aerogel Thin Films for TNT Sensing*

- Adem Yildirim, Bilkent Üniversitesi, Turkey
- Hülya Budunoğlu, Bilkent Üniversitesi, Turkey
- Hakan Deniz, Bilkent Üniversitesi, Turkey
- Mustafa Ö. Guler, Bilkent Üniversitesi, Turkey
- Mehmet Bayindir, Bilkent Üniversitesi, Turkey

**THEME L:**
Nano-Actuators, Nano-Sensors
ORAL PRESENTATIONS

• THEME D
Nanobiotechnology, Nanobiosensors, Applications of Nanotechnology in Medicine
## THE THEME D:
Nanobiotechnology, Nanobiosensors, Applications of Nanotechnology in Medicine

### June 28, Tuesday 13:30 – 15:00
**Chair:** Gürer Budak  
**FASS G062**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Presenters</th>
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<tbody>
<tr>
<td>13:30</td>
<td>S4-D.1*</td>
<td><em>Spintronic Microsystems: from Lab On Chip to MEMS applications</em></td>
<td>Paulo Jorge Peixeiro de Freitas, INESC Microsystems and Nanotechnologies, Portugal</td>
</tr>
<tr>
<td>14:00</td>
<td>S4-D.2</td>
<td><strong>Nanoparticle Gradients for Investigation of Cell-surface Interactions</strong></td>
<td>Mattias Berglin, Gothenburg University/Interface Biophysics, Sweden</td>
</tr>
<tr>
<td>14:15</td>
<td>S4-D.3</td>
<td><strong>Hierarchically Patterned Surfaces for Cell Guidance</strong></td>
<td>Cenk Aktas, Leibniz- Institut für Neue Materialien, Germany</td>
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<td><strong>Marina Martinez Miró</strong>, Leibniz- Institut für Neue Materialien, Germany</td>
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<td><strong>Cagri Kaan Akkan</strong>, Leibniz- Institut für Neue Materialien, Germany</td>
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<td><strong>Juseok Lee</strong>, Leibniz- Institut für Neue Materialien, Germany</td>
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<td><strong>Hashim Abdul-Khaliq</strong>, Universitätsklinikum des Saarlandes, Germany</td>
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<td><strong>Lukas K. Schwarz</strong>, University of Applied Sciences Kaiserslautern, Germany</td>
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<td><strong>Karl Herbert Schäfer</strong>, University of Applied Sciences Kaiserslautern, Germany</td>
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<td><strong>Michael Veith</strong>, Leibniz- Institut für Neue Materialien, Germany</td>
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### June 28, Tuesday 16:30 – 17:45
**Chair:** Gürer Budak  
**FASS G062**

<table>
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<tr>
<th>Time</th>
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<th>Title</th>
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<tbody>
<tr>
<td>16:30</td>
<td>S4-D.6*</td>
<td><strong>Nanomaterial Based Electrochemical Sensor Technologies</strong></td>
<td>Arzum Erdem Gürsan, Ege University, Faculty Of Pharmacy, Turkey</td>
</tr>
<tr>
<td>17:00</td>
<td>S4-D.7</td>
<td><strong>Nanotechnology in The Diagnosis and Therapy of Cancer</strong></td>
<td>Bulent Aydogan, The University of Chicago, USA</td>
</tr>
<tr>
<td>17:15</td>
<td>S4-D.8</td>
<td><strong>Extracellular Matrix Mimetic Peptide Nanofibers for Regenerative Medicine</strong></td>
<td>Tekinay Ayse Begum, Bilkent University-UNAM, Turkey</td>
</tr>
</tbody>
</table>
NanoTR VII - 7th Nanoscience and Nanotechnology Conference

ORAL PRESENTATION SESSION SERIES 4

June 29, Wednesday 11:00 – 12:30
Chair: Emir Baki Denkbaş  FASS G062

11:00  S4-D.10*
Nanoparticle Mediated Delivery of Micrornas in Cancer Oligonucleotide Therapy
Mustafa Özen, Istanbul University Cerrahpasa Medical School, Turkey

11:30  S4-D.11
Artificial Olfaction Using Nanostructured Hollow Core Fibers
Mecit Yaman, Bilkent University, Turkey
Adem Yıldırım, Bilkent University, Turkey
Mert Vural, Bilkent University, Turkey
Mehmet Bayindir, Bilkent University, Turkey

11:45  S4-D.12
Self-assembled Arrays of Dendrimer-gold Nanoparticle Hybrids for Functional Cell Studies
Mattias Berglin, Cell and Molecular Biology/Interace Biophysics, Sweden

Self-assembled Peptidic Nanostructures for Cell Materials Interactions
Mustafa Özgür Güler, Bilkent University, Turkey

June 29, Wednesday 13:30 – 15:00
Chair: Mehmet Özsöz  FASS G062

13:30  S4-D.15*
An insight into development of Nanotechnology based Methods in Molecular Genetics
Aslı Silahtaroğlu, University of Copenhagen, Denmark

14:00  S4-D.16
Bio-inspired Nanostructures Based on Oblique Angle Deposition and Self-assembly of Peptides
Gokhan Demirel, Gazi University, Turkey
Melik C. Demirel, The Pennsylvania State Univ., USA

14:15  S4-D.17
Selective Oxidation and Reduction Reactions with Cofactor Regeneration Mediated by Galactitol - Lactate - and Formate Dehydrogenases Immobilized on Magnetic Nanoparticles
Farah Naz Talpur, University of Sindh, Pakistan
Ayhan S Demir, Middle East Technical Univ., Turkey
S. Betul Sopaci, Middle East Technical Univ., Turkey
Gert –W Kohring, Saarland University, Germany
Ayhan Celik, Gebze Institute of Technology, Turkey

14:30  S4-D.18
Ion Beam Modified Polymeric Surfaces and Diamond Like Carbon (DLC) Thin Film Coatings for Nerve Tissue Regeneration and Large Patterned Neural Cell Arrays
Emel Sokullu Urkac, Ege University, Turkey
Ahmet Oztarhan, Ege University, Turkey
Funda Tihminlioğlu, I.Y.T.E., Turkey
Ismet Delioloğlu Gurhan, Ege University, Turkey
Sultan Gulce Iz, Ege University, Turkey
Mehmet Zileli, Ege University, Turkey
Ian G. Brown, Lawrence Berkeley National Lab., USA
**NanoTR VII - 7th Nanoscience and Nanotechnology Conference**

**June 30, Thursday**

**14:45 S4-D.19**

*Cell Attachment Tests of Dental Implants with Zr+O by MEVVA Ion Implantation*

Ali Erdem Turanlı, Ege University, Turkey
Emel Sokullu Urkac, Ege University, Turkey
Taner Dagi, Ege University, Turkey

**11:45 S4-D.23**

*Label-free and Ultrasensitive Microcavity Biosensors with High Selectivity*

Erol Ozgur, Bilken University, Turkey
Ozan Akta, Bilken University, Turkey
Mehmet Bayindir, Bilken University, Turkey

**11:00 S4-D.20**

*Hydroxyapatite Nanorods as a Controlled Drug Release of Ibuprofen*

Mualla Öner, Yıldız Technical University, Turkey
Umut Uysal, Yıldız Technical University, Turkey
Erman Yetiz, Yıldız Technical University, Turkey
Esin Ay, Yıldız Technical University, Turkey

**11:15 S4-D.21**

*The Effect of Molecular Weight of PEI on The Transfection Efficiency of Hydrophobic PEI-based Cationic Nanoliposomes*

Bizhan Malaekeh-Nikouei, Mashhad University of Medical Sciences, Iran
Mohammad Ramezani, Mashhad University of Medical Sciences, Iran
Leila Arabi, Mashhad University of Medical Sciences, Iran
Mohammad Malaekeh-Nikouei, Mashhad University of Medical Sciences, Iran

**11:30 S4-D.22**

*Ag-TiO2 Nano-powders By Hydrothermal Synthesis and Their Antimicrobial Properties*

Cansu Noberi, Yildiz Technical University, Turkey
Ali Can Zaman, Yildiz Technical University, Turkey
Cem Bulent Ustundag, Yildiz Technical Univ., Turkey
Figen Kaya, Yildiz Technical University, Turkey
Cengiz Kaya, Yildiz Technical University, Turkey
Emrah Sefik Abamor, Yildiz Technical Univ., Turkey
Melahat Bagrova, Yildiz Technical University, Turkey
Adil Allahverdiyev, Yildiz Technical University, Turkey

**12:30 S4-D.24**

*Asymmetric Cellulose Acetate Membranes Containing Silver Nanoparticles for Wound Healing*

Filiz Yaşar Mahlıçlı, İzmir Yüksek Teknoloji Enst., Turkey
Sadice Alsoy Altınkaya, İzmir Yüksek Tekn. Enst., Turkey

**June 30, Thursday**

**11:00 – 12:30**

Chair: Cem Fadıl Bozkurt **FASS G062**

**11:00 S4-D.20**

*Hydroxyapatite Nanorods as a Controlled Drug Release of Ibuprofen*

Mualla Öner, Yıldız Technical University, Turkey
Umut Uysal, Yıldız Technical University, Turkey
Erman Yetiz, Yıldız Technical University, Turkey
Esin Ay, Yıldız Technical University, Turkey

**11:15 S4-D.21**

*The Effect of Molecular Weight of PEI on The Transfection Efficiency of Hydrophobic PEI-based Cationic Nanoliposomes*

Bizhan Malaekeh-Nikouei, Mashhad University of Medical Sciences, Iran
Mohammad Ramezani, Mashhad University of Medical Sciences, Iran
Leila Arabi, Mashhad University of Medical Sciences, Iran
Mohammad Malaekeh-Nikouei, Mashhad University of Medical Sciences, Iran

**11:30 S4-D.22**

*Ag-TiO2 Nano-powders By Hydrothermal Synthesis and Their Antimicrobial Properties*

Cansu Noberi, Yildiz Technical University, Turkey
Ali Can Zaman, Yildiz Technical University, Turkey
Cem Bulent Ustundag, Yildiz Technical Univ., Turkey
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Emrah Sefik Abamor, Yildiz Technical Univ., Turkey
Melahat Bagrova, Yildiz Technical University, Turkey
Adil Allahverdiyev, Yildiz Technical University, Turkey
14:00 S4-D.29

**Nanogap Capacitive Sensors for Highly Sensitive Biosensing Applications**

Oguz Hanoglu, Bilkent University, Turkey

Ali Kemal Okyay, Bilkent University, Turkey

14:15 S4-D.30

**Diffusion Pathways of Quantum Dots in Live Cells**

Gülçin Ünal, Izmir Institute of Technology, Turkey

Caner Ünlü, Izmir Institute of Technology, Turkey

Serdar Özçelik, Izmir Institute of Technology, Turkey

14:30 S4-D.31

**Self-association of a Helical Polypeptide and Its Pegylated Forms**

Ayben Top, Izmir Institute of Technology, Turkey

Sheng Zhong, University of Delaware, United States

Congqi Yan, University of Delaware, United States

Christopher Roberts, Univ. of Delaware, United States

Darrin Pochan, University of Delaware, United States

Kristi Kiick, University of Delaware, United States
NANOTEKNOLOJİ ÇÖZÜM ORTAĞINIZ

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Kayışdağ, İnönü Mah. Kartal Cad. 55/3
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Tel: 0216 573 64 70
Fax: 0216 573 64 75
E-mail: info@teksercorp.com
• THEME K
Nano-Fluidics

• THEME M
Nano-Robotics

• THEME N
Nano-Mechanics, Nano-Tribology, Nano-Composites

• THEME P
Nanotechnology in Textile, Agriculture and Food Science
### ORAL PRESENTATIONS

#### June 28, Tuesday
13:30 – 15:00
Chair: Yusuf Z. Menceloğlu
FENS G032

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Presenters</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:30</td>
<td>S5-N.1*</td>
<td>Nanomechanical Resonators</td>
<td>Jörg Peter Kotthaus, Ludwig-Maximilians-Univ., Germany</td>
</tr>
<tr>
<td>14:00</td>
<td>S5-N.2</td>
<td>Nanomechanical Characterization of Thin Coating Using Indentation, Scratch and Tribological Testing</td>
<td>Fanny Ecarla, CSM Instruments, Switzerland; Gregory Favaro, CSM Instruments, Switzerland</td>
</tr>
<tr>
<td>14:15</td>
<td>S5-N.3</td>
<td>The Nanomechanics of Collagen Type II Investigated by the AFM and MD Simulation</td>
<td>Swabir Slayi, Fatih University, Turkey; Levent Sari, Fatih University, Turkey; Kurtulus Golcuk, Fatih University, Turkey</td>
</tr>
<tr>
<td>14:30</td>
<td>S5-N.4</td>
<td>Effect of Current Density on the Production of MWCNT Reinforced Zinc Matrix MMCs</td>
<td>Ramazan Karsiloğlu, Sakarya University, Turkey; Mehmet Uysal, Sakarya University, Turkey; Onur Goktepe, Sakarya University, Turkey; Ahmet Alp, Sakarya University, Turkey; Hatem Akbulut, Sakarya University, Turkey</td>
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<tr>
<td>14:45</td>
<td>S5-N.5</td>
<td>Antireflective and Antifogging Organically Modified Silica Thin Films</td>
<td>Hülya Budunoğlu, Bilkent University, Turkey; Adem Yıldırım, Bilkent University, Turkey; Bihter Dağlar, Bilkent University, Turkey; Mehmet Bayındır, Bilkent University, Turkey</td>
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#### June 28, Tuesday
16:30 – 17:45
Chair: Yusuf Z. Menceloğlu
FENS G032

<table>
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<tr>
<th>Time</th>
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<th>Title</th>
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<tbody>
<tr>
<td>16:30</td>
<td>S5-N.6*</td>
<td>Design of composite nanoparticles for immunomagnetic separation and SERS applications</td>
<td>Uğur Tamer, Gazi University, Turkey</td>
</tr>
<tr>
<td>17:00</td>
<td>S5-N.7</td>
<td>Floroacrylate Liquid Marbles Floating on Water for Long Duration and the Calculation of Effective Liquid Marbles Surface Tension</td>
<td>Ugur Cengiz, Gebze Institute of Technonology, Turkey; H. Yıldırım Erbil, Gebze Institute of Technonology, Turkey</td>
</tr>
<tr>
<td>17:15</td>
<td>S5-N.8</td>
<td>Effect of Van Der Waals Interaction Strength and Nanocluster Size on the Dynamical and Mechanical Properties of 1,4-cis-polybutadiene Melts</td>
<td>İbrahim İnanç, Sabancı University, Turkey; Ali Rana Atılgan, Sabancı University, Turkey; Canan Atılgan, Sabancı University, Turkey</td>
</tr>
<tr>
<td>17:30</td>
<td>S5-N.9</td>
<td>The Rheological Behavior of Non-aqueous Titania Suspensions</td>
<td>Öykü Çelen, Izmir Institute of Technology, Turkey; Özlem Çağlar Duvarci, Izmir Institute of Tech., Turkey; Muhsin Çiftcioğlu, Izmir Institute of Technology, Turkey</td>
</tr>
</tbody>
</table>

* Invited talks
July 1, Friday 10:00 – 10:30
Chair: Uğur Tamer  FENS G035

10:00  S5-N.10
Flame Retardant Properties of Mineral Nanopowders Reinforced Composites
Hüsnügül Yılmaz Atay, Dokuz Eylul University, Turkey
Erdal Celik, Dokuz Eylul University, Turkey

10:15  S5-N.11
Nanomechanical Mapping: Why And How?
Aykutlu Dana, Bilkent University, Turkey
Necip Aslan, Istanbul Technical University, Turkey
Selim Dagdas, Bilkent University, Turkey
Ayse Tekinay, Bilkent University, Turkey
Mustafa Guler, Bilkent University, Turkey

June 29, Wednesday 11:00 – 11:15
Chair: Mustafa Çulha  FENS G032

11:00  S5-K.1
Magnetic Nanoparticle Based Nanofluid Actuation with Dynamic Magnetic Fields
Ali Koşar, Sabanci Univ, Turkey
Evrim Kurtoğlu, Sabanci Univ, Turkey
Alp Bilgin, Sabanci Univ., Turkey
Hadi Çağdaş Erk, Sabanci Univ, Turkey
Muhsincan Şeşen, Sabanci Univ, Turkey
Havva Funda Yağcı Acar, Koç Univ., Turkey

THEME K:
Nano-Fluidics
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Speakers</th>
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<tbody>
<tr>
<td>11:30</td>
<td>S5-P.2</td>
<td>Synthesis of Carbon Nano Spheres from Waste Biomass, Glucose and Lactose with Hydrothermal Carbonization</td>
<td>Kıvanç Aydıncak, Ankara University, Turkey</td>
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<td>Ali Sınağ, Ankara University, Turkey</td>
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<td>Tuğrul Yumak, Ankara University, Turkey</td>
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<td>Bekir Esen, Ankara University, Turkey</td>
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<td>Mustafa Karatok, Ankara University, Turkey</td>
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<td>11:45</td>
<td>S5-P.3</td>
<td>Synthesis of Graphene on Gold</td>
<td>Erçağ Pinçe, Bilkent University, Turkey</td>
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<td>Emre Ozan Polat, Bilkent University, Turkey</td>
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<td>Osman Balcr, Bilkent University, Turkey</td>
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<td>Ömer Salıhoğlu, Bilkent University, Turkey</td>
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<td>Coşkun Koçabaş, Bilkent University, Turkey</td>
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<td>Tuğba Öznuluer, Atatürk University, Turkey</td>
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<td>12:00</td>
<td>S5-P.4</td>
<td>Thickness Dependence of Resistance in Nanometer Thick Ag Deposited Fibers by Cylindrical Inverted Magnetron Sputtering</td>
<td>Zeynep Meric, İzmir Institute of Technology, Turkey</td>
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<tr>
<td>12:15</td>
<td>S5-P.5</td>
<td>Antibacterial Coating of Fabrics</td>
<td>Ali Kirecci, Gaziantep University, Turkey</td>
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<td>Burcu Ademoglu, Gaziantep University, Turkey</td>
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<td>Halil İbrahim Icoğlu, Gaziantep University, Turkey</td>
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<td>9:00</td>
<td>S5-P.6</td>
<td>Synthesis and Characterization of Calcium Phosphate Coated Silk/nylon-6/ Nanofiber Membranes</td>
<td>Eda Yalçın, Aksaray University, Turkey</td>
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<td>Murat Demirbilek, Hacettepe University, Turkey</td>
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<td>Zeynep Karahaliloğlu, Hacettepe University, Turkey</td>
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<td>Cem Bayram, Hacettepe University, Turkey</td>
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<td>Mesut Şam, Hacettepe University, Turkey</td>
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<td>Necdet Sağlam, Hacettepe University, Turkey</td>
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<td>Emir Baki Denkbaş, Hacettepe University, Turkey</td>
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<td>9:15</td>
<td>S5-P.7</td>
<td>An Investigation of Needleless Electrospinning Methods</td>
<td>Funda Cengiz Callioglu, Süleyman Demirel Univ., Turkey</td>
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<td>Oldrıch Jırsak, Technical Univ. of Lib., Czech Republic</td>
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<td>Mehmet Dayık, Süleyman Demirel University, Turkey</td>
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<td>9:30</td>
<td>S5-P.8</td>
<td>Effect of Concentration on P6 (Polyamide 6) Nanofibers</td>
<td>Umran Ozkoc, Gaziantep University, Turkey</td>
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<td>Ali Kirecci, Gaziantep University, Turkey</td>
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<td>Halil İbrahim Icoğlu, Gaziantep University, Turkey</td>
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<td>9:45</td>
<td>S5-P.9</td>
<td>The Formation of Stable Sodium Caseinate-gum Arabic Complex for Nanoencapsulation and Delivery of Epa/dha Fatty Acids in Fruit Juice</td>
<td>Hulya Ilyasoğlu, Ege University, Turkey</td>
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<td>Sedef Nehir El, Ege University, Turkey</td>
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• THEME R
Social, economical and environmental effects, safety and ethical issues

• THEME S
Nanotechnology Governance and National Nanotechnology Policies

• THEME T
Nano Entrepreneurship-A Journey from Research to Implementation
### THEME S:
Nanotechnology Governance and National Nanotechnology Policies

#### June 29, Wednesday
13:30 – 15:00
**Chair: Hasan Mandal**

<table>
<thead>
<tr>
<th>Time</th>
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</tr>
</thead>
<tbody>
<tr>
<td>13:30</td>
<td>S6-S.1*</td>
<td><em>The Role of Quantum Coherence in Nanocrystallization and Its Industrial Applications</em></td>
<td>Alkiviadis-Constantinos Cefalas, National Hellenic Research Foundation, Theoretical and Physical Chemistry Institute, Greece</td>
</tr>
<tr>
<td>14:00</td>
<td>S6-S.2*</td>
<td><em>Point and Stand-off Detection for Safety, Security, and Sustainability</em></td>
<td>Ashok Vaseashta, Institute for Advanced Sciences Convergence &amp; Int’l Clean Water Institute, NUARI, Herndon, USA</td>
</tr>
</tbody>
</table>

#### June 29, Wednesday
16:30 – 18:00

<table>
<thead>
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<tbody>
<tr>
<td>16:30</td>
<td>S6-R1*</td>
<td><em>Application Areas of Nanomaterials in Household Appliance Industry</em></td>
<td>Deniz Taşkan, Arçelik A.Ş. R&amp;D Center, Turkey</td>
</tr>
<tr>
<td>17:00</td>
<td>S6-R2</td>
<td><em>Environmental Application of Chitosan-TiO2 Nanocomposite in Removal of Methylene Blue and Nickel From Waste Water</em></td>
<td>Mohammadreza Khanmohammadi, IKIU, Iran, Hamideh Elmizadeh, IKIU, Iran</td>
</tr>
</tbody>
</table>

* Invited talks

### THEME R:
Social, economical and environmental effects, safety and ethical issues

#### June 29, Wednesday
16:30 – 18:00
**Chair: Hasan Mandal**

<table>
<thead>
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</thead>
<tbody>
<tr>
<td>17:15</td>
<td>S6-R3</td>
<td><em>Nanoparticles in the Subsurface Environment: Aggregation, Deposition and Pore Stratifying Phenomena</em></td>
<td>Burcu Uyusur, TUBITAK, Turkey, Özgür Doğan, TUBITAK, Turkey</td>
</tr>
<tr>
<td>17:30</td>
<td>S6-R4</td>
<td><em>Nanotechnology in Water Resources</em></td>
<td>Levent Yiğmaz, Technical University Of Istanbul, Turkey</td>
</tr>
<tr>
<td>17:45</td>
<td>S6-R5</td>
<td><em>Barriers to Nano-Technology Readiness for Young Researchers</em></td>
<td>Sonmez Arslan, GYTE &amp; Batman University, Turkey, Ramazan Kaynak, GYTE, Turkey, Nursev Bilgin, GYTE &amp; Batman University, Turkey, Ali Bilgin, GYTE, Turkey</td>
</tr>
</tbody>
</table>

* Invited talks
INDUSTRY TALKS

- Elisabetta Chierici  Tethis S.p.A, Italy
- Nezih Unal  GenISys GmbH, Germany
- Ude D. Hangen  Hysitron Inc., USA
- Michael Hornung  SUSS Micro Tec Lithography GmbH, Germany
- Muhammet Toprak  KTH Royal Institute of Technology, Sweden
- Tetsuo Oikawa  TEKSER-JEOL (Europe) SAS, France
- Hitesh Mamgain Mamgain  WITec GmbH, Germany
- Munir Dede  Nanomagnetics Instruments, Turkey
- Margarethe Kampling  SPECS Surface Nano Analysis GmbH, Germany
- Duncan Stacey  Renishaw plc, UK
June 29, Wednesday 16:30 – 18:00
FENS L045

16:30  IT.1

**Bench-top scale system for Flame Spray Pyrolysis**

Elisabetta Chierici, Tethis S.p.A. via Russoli 3, Italy
Massimo Gatelli, Tethis S.p.A. via Russoli 3, Italy
Simone Vinati, Tethis S.p.A. via Russoli 3, Italy
Karsten Wegner, Particle Technology Laboratory, Institute of Process Engineering, ETH Zurich

16:45  IT.2

**Electron Beam Lithography Proximity Effect and Correction Technologies**

Nezih Ünal, GenlSys GmbH, Germany

17:00  IT.3

**In-situ Nanoscale Mechanical Testing in the TEM and SEM**

Ude D. Hangen, Hysitron Inc., Minneapolis, USA
Jaroslav Lukes, Hysitron Inc., Minneapolis, USA

17:15  IT.4

**Sub-10 nm resolution with substrate conformal nano imprint lithography (SCIL) using soft stamps**

Michael Hornung, SUSS MicroTec Lithography GmbH, Germany
Ran Ji, SUSS MicroTec Lithography GmbH, Germany
Mark Tober, SUSS MicroTec Lithography GmbH, Germany
Marc Verschuuren, Philips Research, Eindhoven, The Netherlands

17:30  IT.5

**Next Generation Nano-engineered Thermoelectric Converters - from concept to industrial validation**

Muhammad Toprak, NEXTEC, KTH Royal Institute of Technology, Sweden

18:00  IT.6

**Aberration Corrected Transmission Electron Microscopy**

Tetsuo Oikawa, TEKSER-JEOL (Europe) SAS, France

June 29, Wednesday 16:30 – 18:00
FENS G035

16:30  IT.6

**Aberration Corrected Transmission Electron Microscopy**

Tetsuo Oikawa, TEKSER-JEOL (Europe) SAS, France

16:45  IT.7

**Transforming the Future of Heat Management**

Muhammad Toprak, NANOHEX, KTH Royal Institute of Technology, Sweden

17:00  IT.8

**3D Confocal Raman Imaging of Transparent and Opaque Samples**

Hitesh Mamgain, WITec GmbH, 89081 Ulm, Germany
U. Schmidt, WITec GmbH, 89081 Ulm, Germany
J. Toporski, WITec GmbH, 89081 Ulm, Germany
E. Bailo, WITec GmbH, 89081 Ulm, Germany

17:15  IT.9

**High resolution Scanning Probe Microscopy**

Munir Dede, Nanomagnetics Instruments, Turkey

17:30  IT.10

**Dare a closer look to Nanotechnology - In situ surface analysis under extreme conditions and with ultimate lateral resolution**

Margaret Kampling, SPECS Surface Nano Analysis GmbH, Germany
Andreas Thissen, SPECS Surface Nano Analysis GmbH, Germany

17:45  IT.11

**To Be Announced**

TEKSER-JEOL
• THEME A
Nanomaterials; Nanoparticles, Nanocrystals, Nano-porous Materials,
Molecular and Supramolecular Materials

• THEME D
Nanobiotechnology, Nanobiosensors,
Applications of Nanotechnology in Medicine
**P1.A. 1**  
*Study Of Nano-sized Molybdenum (VI) Oxide From A Dioxo-molybdenum(VI) Schiff Base Compound*

Iran Sheikhshoaie, Shahid Bahonar University of Kerman, Iran

**P1.A. 2**  
*The Synthesis of Temperature And pH-Sensitive Nanogels For Hydrophobic Drug Delivery*

Gökçen Birlik Demirel, Gazi University, Turkey  
Regine von Klitzing, Technical University of Berlin, Germany

**P1.A. 3**  
*Comparison Of Optical Properties For SnO2, SnO2: F and SnO2:Sb Films Deposited On Glass Substrates*

Güven Turgut, Ataturk University, Turkey  
Demet Tatar, Ataturk University, Turkey  
Adem Koçyiğit, Igdır University, Turkey  
Ahmet Battal, Mus Alparslan University, Turkey  
Bahattin Düzgün, Ataturk University, Turkey

**P1.A. 4**  
*Synthesis and Characterization LiCoO2 and LiNi1-xCoxO2 For Lithium Ion Batteries*

Mehmet Yilmaz, Atatürk University, Turkey  
Güven Turgut, Atatürk University, Turkey  
Serdar Aydin, Atatürk University, Turkey  
Mustafa Tolga Yurtcan, Atatürk University, Turkey  
Erdar Sönmez, Atatürk University, Turkey  
Ahmet Mavi, Atatürk University, Turkey  
Mehmet Ertuğrul, Atatürk University, Turkey

**P1.A. 5**  
*Estrada Index Of (3,6) And (4,6)-Fullerenes*

Gholamhossein Fathatabar Firouzjaei, University, Iran

**P1.A. 6**  
*Synthesis, Characterization and Application of MgO/ZnO Nanocomposite Supported/unsupported On Activated Carbon for Photocatalytic Degradation of Methylene Blue*

Mohammad Ali Karimi, Payame Noor University, Iran  
Alireza Mohadesi, Payame Noor University, Iran  
Hossein Tavallali, Payame Noor University, Iran  
Sayed Zia Mohammadi, Payame Noor University, Iran  
Abdolhamid Hatefi-Mehrjardi, Payame Noor University, Iran  
Asghar Askarpour Kabir, Payame Noor University, Iran  
Mahdiyeh Zaydabadi, Payame Noor University, Iran

**P1.A. 7**  
*Effect of Powder Loading On the Rheological Behavior of Mg-nano Al2O3 Feed Stocks*

Sareh Mohammad Taheri, MERC, Iran  
Majid Alimadadi, MERC, Iran  
Masoud Alizadeh, MERC, Iran  
Rahim Yazdani Rad, MERC, Iran  
Ebrahim Ghasemi, ICST, Iran

**P1.A. 8**  
*The Spectral Moments Of (3,6)-fullerens*

Seyed Abbas Seyed Mirzaei, Azad Univ. Of Qom, Iran  
Gholamhossein Fathatabar Firouzjaei, University Of Kashan, Iran

**P1.A. 9**  
*Szeged and Edge Szeged Polynomial of Some Dendrimers*

Mohammad Ali Salahshoor, Azad University, Iran  
Gholamhossein Fathatabar Firouzjaei, University of Kashan, Iran
POSTER PRESENTATIONS

P1.A. 10

Electrocatalytic Oxidation And Determination Of Epinephrine In The Presence Of Uric Acid And Folic Acid At Multiwalled Carbon Nanotubes / Molybdenum(vi) Complex Modified Carbon Paste Electrode

Hadi Beitollahi, High Technology and Environmental Sciences, Iran
Iran Sheikshoaie, Shahid Bahonar University of Kerman, Iran

P1.A. 11

Structural Properties of Monolayer Boron Carbide Nanoribbons under Strain

Yusuf Şimşek, Gazi University, Turkey
Şakir Erkoç, Middle East Technical University, Turkey

P1.A. 12

Magnetic and Dielectric Properties of Mn0.2Co0.8Fe2O4 Nanoparticles Synthesized By Hydrothermal Method

Furkan Alan, Fatih University, Turkey
Yüksel Koseoğlu, Fatih University, Turkey
Muhammed Tan, Fatih University, Turkey
Resul Yiğin, Gebze Institute of Technology, Turkey

P1.A. 13

pH Responsive Chitosan Nanoparticles For Cancer Treatments

R. Seda Triğlı Aydın, Gazi University, Turkey
Mehlika Pulat, Gazi University, Turkey

P1.A. 14

Production of Cu0.94Ni0.06O Spherical Nanostructured Particles via Ultrasonic Spray Pyrolysis Method

Kamil Burak Dermenci, Istanbul Technical Univ., Turkey
Burçak Ebin, Istanbul Technical University, Turkey
Sebahattin Gürmen, Istanbul Technical Univ., Turkey

P1.A. 15

Production of Fe/MgO Nanoparticles with Ultrasonic Spray Pyrolysis (USP) Technique

Çiğdem Toparlı, Istanbul Technical University, Turkey
Burçak Ebin, Istanbul Technical University, Turkey
Sebahattin Gürmen, Istanbul Technical University, Turkey

P1.A. 16

Alcohol Based Sol-gel Synthesis of Nanostructured Hydroxyapatite Powder In The Presence Of Sb-12

Feray Bakan, Atatürk University, Turkey

P1.A. 17

Growth Of (ZnO)x(ZnSe)y Thin Films By Spray Pyrolysis And Investigations On Their Structural And Optical Properties

Demet Tatar, Atatürk University, Turkey
Feray Bakan, Atatürk University, Turkey
Tuba Öznülıer, Atatürk University, Turkey
Erdal Sönmez, Atatürk University, Turkey

P1.A. 18

Molecular-dynamics Simulations of Silicene Nanoribbons under Strain

Alper İnce, METU Micro and Nanotechnology Department, Turkey
Şakir Erkoç, METU Micro and Nanotechnology Department, Turkey

P1.A. 19

Real-Time Kinetics of Inn Nanodot Growth

Burcu Toydemir, Gebze Institute of Technology, Turkey
Leyla Colakerol, Gebze Institute of Technology, Turkey
Karl Ludwig, Boston University, USA

P1.A. 20

Magnetic Characterization of Plasma Arc Evaporated Fe Nanoparticles

Onur Tozkoparan, Ankara University, Turkey
Oguz Yildirim, Ankara University, Turkey
Ercument Yuzuak, Ankara University, Turkey
Denis Terin, Saratov State University, Russian
Sergey Venig, Saratov State University, Russian
Eyup Duman, Ankara University, Russian
Ilker Dincer, Ankara University, Turkey
Yalcın Elerman, Ankara University, Turkey
P1.A. 21

**Magnetic Characterization of Plasma Arc Evaporated Ni Nanoparticles**

Oguz Yildirim, Ankara University, Turkey

Onur Tazkoparan, Ankara University, Turkey

Ercument Yuzuk, Ankara University, Turkey

Sergey Venig, Saratov State University, Russian Federation

Eyup Duman, Ankara University, Turkey

Ilker Dincer, Ankara University, Turkey

Yalcin Elerman, Ankara University, Turkey

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P1.A. 22

**Structural Properties of Zinc Oxide Thin Films Grown On Glasses By Simplified Spray Technique**

Serdar Aydın, Ataturk University, Turkey

Güven Turgut, Ataturk University, Turkey

Refik Dilber, Ataturk University, Turkey

Kadir Özaltn, Süleyman Demirel University, Turkey

Taner Akta, Süleyman Demirel University, Turkey

Mehmet Yilmaz, Ataturk University, Turkey

Mehmet Ertuçrul, Ataturk University, Turkey

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P1.A. 23

**Structural and Spectroscopic Properties of Sol-gel Derived Neodymium Doped Yttrium Silicate**

Murat Erdem, Marmara University, Turkey

Cumali Tav, Marmara University, Turkey

Gönül Özen, Istanbul Technical University, Turkey

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P1.A. 24

**Production of Titanium Dioxide Nano Sol via Ball Milling**

Başak Aysin, Middle East Technical University, Turkey

Esra Çoraççi, Middle East Technical University, Turkey

Jongee Park, Atılım University, Turkey

Abdullah Öztürk, Middle East Technical University, Turkey

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P1.A. 25

**Synthesis and Characterization of Cu-doped ZnO Nanostructures by Sol-gel Method**

Ramazan Öğuzhan Apaydın, ITU, Turkey

Burçak Ebin, ITU, Turkey

Sebahattin Gürmen, ITU, Turkey

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P1.A. 26

**Spin Coated Thin Film CdSe/Zns Quantum Dots for Solar Cell Applications**

F. Melda Patan Alper, Yeditepe University, Turkey

Rabia Ince, Yeditepe University, Turkey

Hikmet Yukselici, Yıldız Technical University, Turkey

Ahmet T. Ince, Yeditepe University, Turkey

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P1.A. 27

**Computing New Topological Indices of Nanostars**

Hossein Rasuli, Islamic Azad University, Iran

Gholamhossein Fathtabar Firouzjaei, University of Kashan, Iran

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P1.A. 28

**Influence of Deposition Time on Tin Oxide Thin Films by APCVD**

Fatih Doğan, Sakarya University, Turkey

Mahmut Özccar, Sakarya University, Turkey

Hatem Akbulut, Sakarya University, Turkey

Mehmet Oğuz Güler, Sakarya University, Turkey

Ramazan Karslioğlu, Sakarya University, Turkey

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P1.A. 29

**Nano-silver Containing Antibacterial Hybrid Coatings**

Burcu Oktay, Marmara University, Turkey

Nilhan Kayaman Apohan, Marmara University, Turkey

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P1.A. 30

**Fabrication and Characterization of PVA/4-Vinyl Phenyl Boronic Acid Hybrid Nanofiber**

Emre Baştürk, marmara university, Turkey

M.Vezir Kahraman, marmara university, Turkey

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P1.A. 31

**Synthesis and Characterization of Colloidal Gold Nanoparticles**

Gamze TAN, Hacettepe University, Turkey

Mehmet Ali ONUR, Hacettepe University, Turkey
P1.A. 32
Effect of Synthesis Conditions on the Performance Of Nickel Oxide Nanoparticles
Mohammad Reza Kalaie, Materials and Energy Research Center, Iran
Amir Ali Youzbashi, Materials and Energy Res. Center, Iran
Ali Meshkot, Materials and Energy Res. Center, Iran
Kamran Ahmadi, Materials and Energy Res. Center, Iran

P1.A. 33
Synthesis and Characterization of Fe3O4/HA/Ag Nanoparticles
Gozde Mediha Kamer, Istanbul Technical Univ., Turkey
Ayca Ozdemir, Istanbul Technical University, Turkey
Birsen Ozturk, Istanbul Technical University, Turkey

P1.A. 34
Nanosize Hausmannite (Mn3O4): Low Temperature Synthesis, Structural and Morphological Characterization
Emrah Bulut, Sakarya University, Turkey
Ahmet Örnek, Sakarya University, Turkey
Mahmut Özacar, Sakarya University, Turkey

P1.A. 35
Photoluminescence Characteristics Of a-SiCx:H Films Deposited By Plasma Enhanced Chemical Vapour Deposition
Ibrahim Gunes, Çanakkale Onsekiz Mart Univ., Turkey
Kivanc Sel, Çanakkale Onsekiz Mart University, Turkey
Baris Akaoglu, Ankara University, Turkey

P1.A. 36
Encapsulations of Benzotriazole Corrosion Inhibitors in Holloysite Nanotubes By Self Assembled Polyelectrolytes And Al3+ Ions
S.M.A. Hosseini, Shahid Bahonar Un. of Kerman, Iran
E. Jamalizadeh, Shahid Bahonar Un. of Kerman, Iran
A. Khajoi, Shahid Bahonar University of Kerman, Iran

P1.A. 37
Investigation of Some Metal Ions As Stoppers for the Benzotriazole Contained In the Holloysite Nanotubes
A. Khajoi, Shahid Bahonar University of Kerman, Iran
E. Jamalizadeh, Shahid Bahonar Univ. of Kerman, Iran
S.M.A. Hossini, Shahid Bahonar Univ. of Kerman, Iran

P1.A. 38
Synthesis of Vanadium Dioxide Nanoparticles and Preparation of Thin Films
Orkun Durmuş, Istanbul Technical University, Turkey
Fatma Tepehan, Istanbul Technical University, Turkey

P1.A. 39
Mussel-inspired Polymer Coating For Catalytic Reduction of Aromatic Nitro Compounds
Dilara Ekiz, Gazi University, Turkey
Gökhan Demirel, Gazi University, Turkey

P1.A. 40
Reversible Electrical Reduction and Oxidation of Graphene Oxide
Okan Öner Ekiz, UNAM, Turkey
Mustafa Ürel, UNAM, Turkey
Hasan Güner, UNAM, Turkey
Aykutlu Dana, UNAM, Turkey

P1.A. 41
Self-organized Nanocavities On The Pt/Ge(001) Surface
Avijit Kumar, Univ. of Twente, Netherlands
Harold J. W. Zandvliet, Univ. of Twente, Netherlands
Bene Poelsema, Univ. of Twente, Netherlands

P1.A. 42
Comparison Of Chemical And Electrochemical Reduction Methods For Preparation Of Pt Nanoparticles On Poly(vinylferrocenium)
Mutlu Şönmez Çelebi, Ordu University, Turkey
Kadir Pekmez, Hacettepe University, Turkey
P1.A. 43

*Use of Taguchi Method to Prediction and Determination Various Factors In Nano-porous Material Growth*
Mojtaba Purbafrani, Amirkabir Univ. of Tech., Iran
Mahdi Mohajeri, Nanotechnology Center, Iran

P1.A. 44

*Synthesis and Characterization of Lead Sulfide Nanoparticles*
Hassan Karami, Payame Noor University, Iran
Mina Ghasemi, Payame Noor University, Iran

P1.A. 45

*Pulsed Current Electrosynthesis of Palladium Nanoparticles*
Hassan Karami, Payame Noor University, Iran
Akram Khani-Chamani, Payame Noor University, Iran

P1.A. 46

*Thermal Analysis of Silica/pmma Nanocomposites*
Ecem Yarar, Yeditepe University, Turkey
Merve Seyhan, Yeditepe University, Turkey
Deniz Rende, Rensselaer Polytechnic Institute, USA
Nihat Baysal, Rensselaer Polytechnic Institute, USA
Seyda Bucak, Yeditepe University, Turkey
Rahmi Ozisik, Rensselaer Polytechnic Institute, USA

P1.A. 47

*Rheological Behaviour of Nano Alumina-Zircon Feedstocks Used for CIM*
Somaye Ghaffari, Materials and Energy Res. Center, Iran
Masoud Ghaffari, Materials and Energy Res. Center, Iran
Keivan Asadian, Materials and Energy Res. Center, Iran
Touraj Ebadzade, Materials and Energy Res. Center, Iran

P1.A. 48

*Removal of Rhodamine-b Dye from Waste Water by Using Magnetic Polysulfone Microcapsules Containing Tributyl Phosphate*
Betul Ertekin, Nevsehir University, Turkey
Hilal Incebay, Nevsehir University, Turkey
Ugur Kabadayı, Nevsehir University, Turkey
Selma Beytar, Nevsehir University, Turkey

P1.A. 49

*Cibacron Blue F3ga Incorporated Poly (2-Hydroxyethyl Methacrylate) Nanobeads For Alpha-amylase Adsorption*
Yeşim Özcan, Ege University, Turkey
Emir Özlçalşkan, Ege University, Turkey
Sinan Akgöl, Ege University, Turkey
Adil Denizli, Hacettepe University, Turkey

P1.A. 50

*Ni0.5Zn0.5Cr0.5Fe1.5O4 Nanoparticles Synthesized By PEG-assisted Hydrothermal Method*
Muhammed Tan, Fatih University, Turkey
Yüksel Köseoğlu, Fatih University, Turkey
Furkan Alan, Fatih University, Turkey
Mustafa Öztürk, Gebze Institute of Technology, Turkey
Resul Yılgın, Gebze Institute of Technology, Turkey

P1.A. 51

*Properties of TiO2 Thin Film Deposited By Chemical Spray Pyrolysis Technique*
Halil Ibrahim Yeter, Erzincan University, Turkey
Ali Ercan Ekinç, Erzincan University, Turkey
Sibel Morkoç Karadeniz, Erzincan University, Turkey
Demet Tatar, Atatürk University, Turkey
Mehmet Ertuğrul, Atatürk University, Turkey

P1.A. 52

*Properties of WO3 Thin Film Deposited At 400 °C By Chemical Spray Pyrolysis Technique*
Sibel Morkoç Karadeniz, Erzincan University, Turkey
Ali Ercan Ekinç, Erzincan University, Turkey
Demet Tatar, Atatürk University, Turkey
Mehmet Ertuğrul, Atatürk University, Turkey

P1.A. 53

*Characterization and Immobilization of Bovine Serum Albumin on Tannic Acid Modified Magnetite Nanoparticles*
Keziban Atacan, Sakarya University, Turkey
Semra Yılmazer Keskin, Sakarya University, Turkey
Emrah Bulut, Sakarya University, Turkey
P1.A. 54

*Growth and Characterization of ZnO Thin Films Doped With Vanadium*

**Emrah Sarica**, Canakkale Onsekiz Mart Univ., Turkey  
**Barbaros Demirselcuk**, Canakkale Onsekiz Mart University, Turkey  
**Vildan Bilgin**, Canakkale Onsekiz Mart Univ., Turkey

P1.A. 55

*Computational Investigation of Poisson Ratio In Graphene And Cubic Diamond, A Brief Comparison*

**Berkcan Gökçe**, Middle East Technical University, Turkey  
**Hande Toffoli**, Middle East Technical University, Turkey  
**Oğuz Gülseren**, Bilkent University, Turkey

P1.A. 56

*Self-assembly Of Peptide Nanostructures By Atomic Layer Deposition*

**Çağla Özgıt**, UNAM, Bilkent University, Turkey  
**Handan Acar**, UNAM, Bilkent University, Turkey  
**İnci Dönmez**, UNAM, Bilkent University, Turkey  
**Mustafa Ö. Güler**, UNAM, Bilkent University, Turkey  
**Necmi Bıyıklı**, UNAM, Bilkent University, Turkey

P1.A. 57

*Optical Properties of Self-assembled MPS Capped ZnS Quantum Dots Thin Films*

**Kenan Koç**, Yıldız Technical University, Turkey  
**Fatma Tepehan**, Istanbul Technical University, Turkey  
**Galip Tepehan**, Kadir Has University, Turkey

P1.A. 58

*The Vertex Padmakar-ivan Index Of Dendrimer*

**Mojtaba Bahramian Hoonejani**, University of Kashan, Iran

P1.A. 59

*Electrical and Surface Properties Of Zn1-xfexo Thin Films*

**Seren Turkyilmaz**, Canakkale Onsekiz Mart Un., Turkey  
**Fatma Ozutok**, Canakkale Onsekiz Mart Un., Turkey  
**Vildan Bilgin**, Canakkale Onsekiz Mart Un., Turkey

P1.A. 60

*Growing Of ZnO Thin Films on Different Substrate Materials*

**Kenan Çiçek**, Ardahan University, Turkey  
**Tevhit Karacalı**, Atatürk University, Turkey

P1.A. 61

*Electrical and Optical Characterization of Zinc Sulphide Thin Films*

**Vildan Bilgin**, Canakkale Onsekiz Mart Univ., Turkey  
**Kivanc Sel**, Canakkale Onsekiz Mart Univ., Turkey  
**Utku Ozenir**, Canakkale Onsekiz Mart Univ., Turkey  
**İlyas Erdem**, Canakkale Onsekiz Mart Univ., Turkey  
**Erhan Tiryaki**, Canakkale Onsekiz Mart Univ., Turkey

P1.A. 62

*The Melting Behaviour of Pt-Au Core-shell Nanoparticles with Different Structures*

**Serkan Kaya**, Pamukkale University, Turkey  
**Sevgi Özdemir Kart**, Pamukkale University, Turkey

P1.A. 63

*Suprofen Incorporated UV Responsive Liposomes*

**Birsen Demirbag**, BIOMATEN, METU, Turkey  
**Vasif Hasirci**, BIOMATEN, METU, Turkey

P1.A. 64

*Synthesis of Zno Nanorods Depending On Hmta and Nitrate Concentrations*

**Doğan Ulusoy**, Gebze Institute of Technology, Turkey  
**Sadullah Öztürk**, Gebze Institute of Technology, Turkey  
**Necmettin Kılınç**, Gebze Institute of Technology, Turkey  
**Zafer Ziya Öztürk**, Gebze Institute of Techn., Turkey

P1.A. 65

*Magnetic Properties of Mn0.4Ni0.6Fe2O4 Nanoparticles Synthesized By PEG Assisted Hydrothermal Method*

**Mehmet Bay**, Bahcesehir University, Turkey  
**Yuksel Koseoglu**, Fatih University, Turkey  
**Muhammed Tan**, Fatih University, Turkey
P1.A. 66

The Reduction of Gold and Silver Nanoparticles on the Surface of Electrochemical Modified Polymer

Remziye Güzel, University, Turkey
Haslet Ekşi, University, Turkey
Ali Osman Solak, University, Kyrgyzstan
Zafer Üstündağ, University, Turkey

P1.A. 67

Polyethylenimine - Starch Nanospheres for Cancer Gene Therapy

Berke Bilgenur Kandemir, METU, Turkey
Bülent Özpolat, University of Texas, USA
Gamze Torun Köse, Yeditepe University, Turkey
Vasif Hasirci, Middle East Technical University, Turkey

P1.A. 68

Room Temperature Synthesis of Nanoporous Organically Modified Silica Thin Films on Flexible Substrates

Adem Yıldırım, Bilkent Üniversitesi, Turkey
Hülya Budunoğlu, Bilkent Üniversitesi, Turkey
Mecit Yaman, Bilkent Üniversitesi, Turkey
Mustafa O. Güler, Bilkent Üniversitesi, Turkey
Mehmet Bayındır, Bilkent Üniversitesi, Turkey

P1.A. 69

Fluorinated Mesoporous Silica Nanoparticles for Liquid Marble Formation and Superhydrophobic Surfaces

Bihter Dağlar, Bilkent University, Turkey
Adem Yıldırım, Bilkent University, Turkey
Hülya Budunoğlu, Bilkent University, Turkey
Hakan Deniz, Bilkent University, Turkey
Mehmet Bayındır, Bilkent University, Turkey

P1.A. 70

Synthesis of Lead Free Piezo Electric Potassium-sodium Bismuth Titanate

Eda Akbulut, Ataturk University, Turkey
Mehmet Ertuğrul, Ataturk University, Turkey
Ayşe Sultan Özarslan, Ataturk University, Turkey

P1.A. 71

Magnetic Fe3O4-chitosan Nanoparticles for Drug Delivery

Deniz Akin, Afyon Kocatepe University, Turkey
Arzu Yakar, Afyon Kocatepe University, Turkey

P1.A. 72

The Effect of Laser Field on Low Dimensional Semiconductor Heterostructures

Figen K.Boz, Trakya University, Turkey
**THEME D:**
Nanobiotechnology, Nanobiosensors, Applications of Nanotechnology in Medicine

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**June 28, Tuesday 15:00 – 16:30**

**SUNUM**

**P1.D. 1**

*Preparation Chitosan Nanoparticles as a Drug Delivery System*

**Eshrat Gharaei-Fathabad**, University, New Zealand  
**Raida Al-Kassas**, University, New Zealand

**P1.D. 2**

*Protein Conjugated Iron Oxide Nanoparticles for Magnetic Resonance Imaging*

**Selim Sülek**, Unam, Turkey  
**Mustafa Özgür Güler**, Unam, Turkey

**P1.D. 3**

*Preparation of Au @ Ag, Ag@Au Core-shell Bimetalic Nanoparticles for Determination of E.coli*

**Haslet Ekşi**, Ankara University, Turkey  
**Remziye Güzel**, Ankara University, Ankara, Turkey  
**Ali Osman Solak**, Kyrgyz-Turk Manas Un., Kyrgyzstan  
**Ismail Hakki Boyaci**, Hacettepe Un., Ankara, Turkey

**P1.D. 4**

*Multi-wall Carbon Nanotubes as A Sensor and Ferrocene as Mediator for Voltammetric Determination of Acetylcysteine*

**Mohsen Keyvanfard**, Islamic Azad University, Iran  
**Khadijeh Alizad**, Islamic Azad University, Iran  
**Hasan Karimi-Maleh**, Islamic Azad University, Iran

**P1.D. 5**

*Electrochemical Determination of Carbaryl Pesticide Based On Inhibition of Acetylcholinesterase Enzyme Immobilized On Self Assembled Monolayer on Gold Electrode*

**Abdolhamid Hatefi-Mehrjerdi**, Payame Noor Un., Iran  
**Mohammad Ali Karimi**, Payame Noor University, Iran  
**Hamed Ghasemi**, Payame Noor University, Iran

**P1.D. 6**

*Evaluation of Current Viability Assays For Toxicity Assessment of Gold and Silver Nanoparticles*

**Mine Altunbek**, Yeditepe University, Turkey  
**Mustafa Çulha**, Yeditepe University, Turkey

**P1.D. 7**

*Investigation of Cellular Morphology on Nanopatterned Chitosan Membranes via Electrospinning*

**Murat Şimşek**, Hacettepe University, Turkey  
**Merve Çapkın**, Hacettepe University, Turkey  
**Ayşe Karakeçili**, Ankara University, Turkey  
**Menemşe Gümüşderelioğlu**, Hacettepe University, Turkey

**P1.D. 8**

*Self Assembly of Carbon Nanotubes Using Dna Tiles*

**Ali Yasin Sonay**, Yeditepe University, Turkey  
**Sevcan Ayaksız**, Yeditepe University, Turkey  
**Seda Demir**, Yeditepe University, Turkey  
**Mustafa Çulha**, Yeditepe University, Turkey

**P1.D. 9**

*Size-controlled Synthesis and Characterization of Nickel Ferrite Nanoparticles Suitable for Magnetic Fluid Hyperthermia*

**Ebru Şişman**, Hacettepe University, Turkey  
**Tezer Fırat**, Hacettepe University, Turkey

**P1.D. 10**

*Liposomal Delivery Of Poly I:C On Sensitive And 1000dox Resistant Cancer Cell Lines*

**Rouhollah Khodadust**  
**Murat Erdem**  
**Ufuk Gunduz**
P1.D. 11
Preparation of a Gold Nanoparticle Based Controlled Release Nanocarrier
Esen Efeoğlu, Yeditepe University, Turkey
Ali Yasin Sonay, Yeditepe University, Turkey
Zehra Yılmaz, Yeditepe University, Turkey
İpek Çeliksöz, Yeditepe University, Turkey
Mustafa Çulha, Yeditepe University, Turkey

P1.D. 12
Identifying Molecular Composition Of Exosomes Using Raman Spectroscopy
Ahmet Burak Çağlayan, Yeditepe University, Turkey
Ali Yasin Sonay, Yeditepe University, Turkey
Sami Ağuş, Yeditepe University, Turkey
Mustafa Çulha, Yeditepe University, Turkey

P1.D. 13
Histidine Determination by Functionalized Silver Nanoparticles In The Presence Of Cu2+
Can Serkan Keskin, Sakarya University, Turkey
Abdil Özdemir, Sakarya University, Turkey

P1.D. 14
Manipulation of Silver Nanoparticles and Proteins In A Droplet Under Tension For Sers
Sercan Keskin, Yeditepe Üniversitesi, Turkey
Mine Altunbek, Yeditepe Üniversitesi, Turkey
Mustafa Çulha, Yeditepe Üniversitesi, Turkey

P1.D. 15
Electrical Properties of Chitosan Thin Film on Glass Substrate and Potential Application Of Humidity Sensor
Çiğdem Serdengeçti, Ege University, Turkey
Fevzi Sümer, Ege University, Turkey
Hande Sözbilen, Ege University, Turkey
Ömer Mermer, Ege University, Turkey
Yoldaş Seki, Ege University, Turkey

P1.D. 16
Preparation of A Pyrrole Branched-chitosan-gold Bionanocomposite For The Construction Of Glucose Biosensor
Mehmet ŞENEL, Fatih University, Turkey
İbrahim Bozgeyik, Fatih University, Turkey
Mustafa Fatih Abasıyanık, Fatih University, Turkey
Cevdet Nergiz, Fatih University, Turkey

P1.D. 17
Influence of Charge Reduction and Partial Hydrophobization on Gene Delivery Efficiency of High Molecular Weight Polyethylenimine Nanoparticles
Reza Kazemi Oskuee, Mashhad University, Iran
Mohammad Ramezani, Mashhad University, Iran
Ali Dehshahri, Shiraz University, Iran
Wyne Shier, University Of Minnesota-Twin Cities, USA

P1.D. 18
Preparation and Characterization of Testosterone Specific Molecular Imprinted Polymeric Nanoparticles
Emir Özçalışkan, Ege University, Turkey
Müşerref Caka, Ege University, Turkey
Sinan Akgöl, Ege University, Turkey

P1.D. 19
Chitosan Based Nanoparticles for Cardiovascular System Therapies
Doğa Kavaz, Hacettepe University, Turkey
Damla Türkay, Hacettepe University, Turkey
Murat Demirbilek, Hacettepe University, Turkey
Mehmet Ali Onur, Hacettepe University, Turkey
Hürkan Kurşaklioğlu, Gülhane Military Medical Academy, Turkey
Emir Baki Denkbaş, Hacettepe University, Turkey

P1.D. 20
Folic Acid Attached-phBV Nanoparticles for Targeted Cancer Therapy
Esma Alp, Hacettepe University, Turkey
Tamer Çırak, Aksaray/Hacettepe University, Turkey
Emir Baki Denkbaş, Hacettepe University, Turkey
Eylem Güven, Hacettepe University, Turkey
P1.D. 21  
In Vitro Cytotoxicity of Metal Oxide Nanoparticles on Mesenchymal Stem Cells  
Şükran Şeker, Ankara University, Turkey  
Tuğrul Yumak, Ankara University, Turkey  
Ali Smag, Ankara University, Turkey  
Murat Elçin, Ankara University, Turkey

P1.D. 22  
Immobilization of Lysozyme onto Tannin Functionalized Magnetite Nanoparticles  
Keziban Atacan, Sakarya Üniversitesi, Turkey  
Semra Yılmazer Keskin, Sakarya Üniversitesi, Turkey  
Emrah Bulut, Sakarya Üniversitesi, Turkey  
Mahmut Özacar, Sakarya Üniversitesi, Turkey

P1.D. 23  
Reversible Immobilization Of Urease Onto Reactive Red 120-Ni(ii) Attached Poly(hema) Nanoparticles  
Ceren Türkcan, Ege University, Turkey  
R. Hilal Şenay, Ege University, Turkey  
Sinan Akgöl, Ege University, Turkey

P1.D. 24  
Synthesis of Chitosan-iron Oxide Nanoparticles for Targeted Drug Delivery and Their Characterization  
Gözde Ünsoy, METU, Turkey  
Ufuk Gündüz, METU, Turkey  
Güngör Gündüz, METU, Turkey

P1.D. 25  
Fabrication of Electrospun and Ion Implanted Chitosan/pdlg Composites for Biomedical Applications  
Secil Kurtalan, Ege University, Turkey  
Emel Sokullu Urkaç, Ege University, Turkey  
Erdem Turanlı, Ege University, Turkey  
Ahmet Öztarhan, Ege University, Turkey

P1.D. 26  
Micropatterning of Bovine Serum Albumin on Polyelectrolyte-coated Glass Substrates  
Mustafa Ozmen, Selcuk University, Turkey  
Mustafa Ersoz, Selcuk University, Turkey

P1.D. 27  
Genotoxicity of Lecithin/chitosan Nanoparticles In Human Lymphocytes Assessed By The Alkaline Comet Assay  
Recep Yeşilöz, Hacettepe University, Turkey  
Gökçe Taner, Gazi University, Turkey  
Taner Şenyiğit, Ege University, Turkey

P1.D. 28  
Antibacterial and Surface Characterizations of Hybrid Ion Implanted PTFE Samples For Vascular Graft Applications  
Senem Öngel, Ege University, Turkey  
Emel Sokullu Urkaç, Ege University, Turkey  
Ahmet Öztarhan, Ege University, Turkey

P1.D. 29  
An In Vitro Study on Influence of Biomocaromolecules on Carbon Nanotube Cytotoxicity  
Sinan Sabuncu, Yeditepe Üniversitesi, Turkey  
Mine Altunbek, Yeditepe Üniversitesi, Turkey  
Mustafa Çulha, Yeditepe Üniversitesi, Turkey

P1.D. 30  
Isoelectric Point Of Deoxyribonucleic Acid from Calf Thymus  
Senem YETGİN, Izmir Institute of Technology, Turkey  
Devrim BALKÖSE, Izmir Institute of Technology, Turkey

P1.D. 31  
Preparation of PLGA Coated Magnetite Nanoparticles for Anti-cancer Drug Delivery  
Gülistan Tansik, METU, Turkey  
Arzu Yakar, Afyon Kocatepe University, Turkey  
Ufuk Gündüz, METU, Turkey

P1.D. 32  
Adhesive Peptide Nanofibers for Metal Implant Biofunctionalization  
Samet Kocabey, UNAM/NBT, Turkey  
Turan Selman Erkal, UNAM/BML, Turkey  
Hakan Ceylan, UNAM/NBT, Turkey  
Ayse Begum Tekinay, UNAM, Turkey  
Mustafa Ozgur Guler, UNAM, Turkey
P1.D. 33

**Bactericidal and Osseointegrative Modifications of Anodized Titanium**

Nazlı Çalışkan, Hacettepe University, Turkey  
Cem Bayram, Hacettepe University, Turkey  
Kristina Riehemann, Hacettepe University, Turkey  
Zeynep Karahaliloglu, Hacettepe University, Turkey  
Emir Baki Denkbas, Hacettepe University, Turkey

P1.D. 34

**Strontium Incorporated Titania Nanotubes for Hard Tissue Applications**

Gökçe Bozokalfa, Hacettepe University, Turkey  
Cem Bayram, Hacettepe University, Turkey  
Eda Yalçın, Hacettepe University, Turkey  
Murat Demirbilek, Hacettepe University, Turkey  
Emir Baki Denkbas, Hacettepe University, Turkey

P1.D. 35

**Cytotoxicity and Genotoxicity Studies of Various Silver Nanoparticles on Multiple Cell Types In Vitro On The Basis Of Wound Healing**

Fatma Melis Uslu, Yeditepe University, Turkey  
Mustafa Çulha, Yeditepe University, Turkey

P1.D. 36

**The Dental Resin-based Luting Cement Enriched With Nanotitania Particles**

Gökçe Bozokalfa, Hacettepe University, Turkey  
Tayfun Vural, Hacettepe University, Turkey  
İldem Ceylan, Hacettepe University, Turkey  
Berrin Dayangac, Hacettepe University, Turkey  
Emir Baki Denkbas, Hacettepe University, Turkey

P1.D. 37

**Synthesis and In Vitro Application of Pegylated Magnetic Nanoparticles for Anti-cancer Drug Delivery**

Tugba Keskin, Middle East Technical University, Turkey  
Arzu Yakar, Middle East Technical University, Turkey  
Ufuk Gunduz, Middle East Technical University, Turkey

P1.D. 38

**Analysis of Structural Features of Human Tooth Using Raman Spectroscopy and Surface-enhanced Raman Scattering**

Ertuğ Avci, Yeditepe University, Turkey  
Mustafa Çulha, Yeditepe University, Turkey

P1.D. 39

**Growth Inhibition Of SK-MEL-30 Human Melanoma Cells By Antisense C-myc Oligonucleotides Delivered By Poly(n-isopropylacrylamide)/ Poly(ethyleneimine) Copolymer**

Sevil Dincer, Yildiz Technical University, Turkey  
Ela Kirsac Ozkay, Hacettepe University, Turkey  
Ayse Kevser Piskin, Hacettepe University, Turkey

P1.D. 40

**The Effect of Liposome Phospholipid Content on the Formation of Tethered Bilayer Lipid Membranes**

Basak Turken, ITU, Turkey  
Fatih Inci, ITU, Turkey  
Fatma Nese Kok, ITU, Turkey

P1.D. 41

**Preparation Of Poly(glycidylmethacrylate)-grafted Superparamagnetic Iron Oxide Nanoparticles And Its Biosensor Application**

Emre Çevik, Fatih University, Turkey  
Mehmet Şenel, Fatih University, Turkey  
Abdülbahad Baykal, Fatih University, Turkey  
Mustafa Fatih Abasıyanık, Fatih University, Turkey

P1.D. 42

**Tin Oxide Nanoparticles Modified Graphite Sensors For Dna Analysis**

Mihrican Mutlu Erdem, Adnan Menderes Univ., Turkey  
Arzum Erdem, Ege University, Turkey  
Ayfer Caliskan, Ege University, Turkey  
Ali Sınag, Ankara University, Turkey  
Tugrul Yumak, Ankara University, Turkey
P1.D. 43
One-pot And Efficient Synthesis Of Triazolo[1,2-a]indazole-triones Via Reaction Of Aryl Aldehydes With Urazole And Dimedone Catalyzed By Silica Nanoparticles Prepared Of Rice Husk
Hooshang Hamidian, Payame Noor Un. (PNU), Iran
Samieh Fozooni, Shahid Bahonar University, Iran
Asadollah Hassankhani, High Technology and Environmental, Iran
Seyd Zia Mohammadi, Payame Noor Un. (PNU), Iran

P1.D. 44
Development of Mass Sensitive Biosensors via Electrospun Nanofibers
Didem Rodoplu, Hacettepe University, Turkey
Mehmet Mutlu, Hacettepe University, Turkey

P1.D. 45
The Application of Multiwalled Carbon Nanotube Modified Screen-printed Electrodes for Electrochemical Monitoring Of DNA Hybridization
Hakan Karadeniz, Ege Un. Fac. of Pharmacy, Turkey
K. Arzum Erdem, Ege Un. Fac. of Pharmacy, Turkey

P1.D. 46
Production of Bioglass Added Ceramic Beads by Using Metal Ion Doped Calcium Phosphate Based Nanoparticles for Biomaterial Applications
Ayşegül Akyürekli, Anadolu University, Turkey
Hatice Sila Apaydin, Anadolu University, Turkey
Mevlüt Gürbüz, Anadolu University, Turkey

P1.D. 47
Formation of Bioactive Surfaces by Using Bioglass and Calcium Phosphate Based Nano Powders
Hatice Sila Apaydin, Anadolu University, Turkey
Ayşegül Akyürekli, Anadolu University, Turkey
Mevlüt Gürbüz, Anadolu University, Turkey

P1.D. 48
Estrone Spesific Molecularly Imprinted Polymeric Nanospheres: Synthesis, Characterization and Applications in Electrochemical Sensor
Raziye Hilal Senay, Ege University, Turkey
Ceren Turkcan, Ege University, Turkey
Pembe Ece Canavar, Ege University, Turkey
Gulsah Congur, Ege University, Turkey
Sinan Akgol, Ege University, Turkey
Arzum Erdem, Ege University, Turkey

P1.D. 49
Synthesis of Gold Nanorod-loaded Thermoresponsive Copolymer for Laser Triggered Drug Release
Milad Ghadami Yazdi, Royal Institute of Tech., Sweden
Fei Ye, Royal Institute of Technology, Sweden
Muhammet Toprak, Royal Institute of Tech., Sweden
Mamoun Muhammet, Royal Institute of Tech., Sweden

P1.D. 50
Miniature Ingestible Antenna for Medical Applications
Fatma Zengin, Gebze Institute of Technology, Turkey
Eren Akkaya, Tübitak UEKAE, Turkey
S. Eren San, Gebze Institute of Technology, Turkey
Bahattin Türretken, Tübitak UEKAE, Turkey

P1.D. 51
Characterization of Organically Coated Gold-magnetite (Au-Fe3O4) Hybridnanoparticles as Potential Superparamagnetic Contrast Agents for MRI
Evrim Umut, Hacettepe Universitesi, Turkey
Francesco Pineider, Università degli Studi di Firenze, Italy
Claudio Sangregorio, Università degli Studi di Firenze, Italy
Maurizio Corti, Università degli Studi di Pavia, Italy
Fügén Tabak, Hacettepe Universities, Turkey
Alessandro Lascialfari, Università degli Studi di Pavia, Italy
P1.D. 52

*The Role of Liposomes in Cancer Therapy*

Gamze Güney, Anadolu University, Turkey  
H. Mehtap Kutlu, Anadolu University, Turkey  
Gökhan Dikmen, Anadolu University, Turkey

P1.D. 53

*Preparation, Characterization and Controlled Release Properties of Ibuprofen Loaded Hpmc Microparticles*

Şeyda Sevgül Akmehmet, Yıldız Technical Un., Turkey  
Sennur Deniz, Yıldız Technical University, Turkey

P1.D. 54

*The Detection of Staphylococcal Enterotoxin B (SEB) Based on Thiolated Antibodies by Atomic Force Microscopy (afm)*

Deniz Ertürkan, Middle East Technical Univ., Turkey  
Haluk Külah, Middle East Technical University, Turkey  
Canan Özgen, Middle East Technical University, Turkey  
Alpaslan Alp, Hacettepe University, Turkey  
Gülsen Hasçelik, Hacettepe University, Turkey

P1.D. 55

*Antioxidant Ultradeformable Liposomes Based On Blueberry Extracts*

Jorge A M Montanari, National Un. of Quilmes, Argentina  
Emilse Padin, National Un. of Quilmes, Argentina  
Emanuel Mensi, National Un. of Quilmes, Argentina  
Maria E. Vera, National Un. of Quilmes, Argentina  
Maria J. Morilla, National Un. of Quilmes, Argentina  
Eder L. Romero, National Un. of Quilmes, Argentina

P1.D. 56

*Fast Biosynthesis of Silver And Gold Nanoparticles by Microwave Irradiation*

Hasan Ümit Öztürk, Tubitak, Turkey  
Güldem Utkan, Turkey  
Aziz Akın Denizci, Turkey  
Dilek Kazan, Marmara University Faculty, Turkey

P1.D. 57

*Iron Oxide Nanoparticles Supported Melamine Sulfonic Acid As Heterogeneous Nano Acidic Catalyst In The Three Component One-pot Synthesis Of 3,4-Dihydropyrimidiones*

Ali Reza Kiasat, Shahid Chamran University, Iran  
Nargess Abdollahi Abdollahi, Shahid Chamran University, Iran

P1.D. 58

*Biomedical Use of Nano-micro Bubbles Produced By Hydrodynamic Cavitation*

Zeynep Itah, Sabanci University, Turkey  
Muhsin Sen, Sabancı University, Turkey  
Ozlem Oral, Sabancı University, Turkey

P1.D. 59

*Peptide Scaffolds for Neural Differentiation*

Busra Mammadov, UNAM - Bilkent University, Turkey  
Ayse Begum Tekinay, UNAM - Bilkent University, Turkey  
Mustafa Ozgur Guler, UNAM - Bilkent University, Turkey

P1.D. 60

*GAG-mimetic Peptide Nanofiber Scaffolds For Tissue Engineering Applications*

Rashad Mammadov, UNAM, Turkey  
Zeliha Soran, UNAM, Turkey  
Seher Üstün, UNAM, Turkey  
Ayşe Begüm Tekinay, UNAM, Turkey  
Mustafa Özgür Güler, UNAM, Turkey

P1.D. 61

*Phase Behavior and Morphology of Phospholipid Langmuir-blodgett Monolayers*

Derya Kose, Izmir Institute of Technology, Turkey  
Deniz Binici, Izmir Institute of Technology, Turkey  
Salih Okur, Izmir Institute of Technology, Turkey  
Ekrem Ozdemir, Izmir Institute of Technology, Turkey  
Sevgi Kilic Ozdemir, Izmir Institute of Tech., Turkey
P1.D. 62
Optimization Of Poly(ethylene Glycol) Density For Preparation Of Blood-compatible Material
Yaprak Ozbakir, Izmir Institute of Technology, Turkey
Melis Beceren, Izmir Institute of Technology, Turkey
Salih Okur, Izmir Institute of Technology, Turkey
Ekrem Ozdemir, Izmir Institute of Technology, Turkey
Sevgi Kilic Ozdemir, Izmir Institute of Tech., Turkey

P1.D. 63
A Novel Water – Based Solvent System for Electrospun Gelatin Nanofibers
Ece Yapaslan Ince, Izmir Yüksek Teknoloji Ens., Turkey
Aylin Ogun, Dokuz Eylul Universities, Turkey

P1.D. 64
DNA Hypermethylation Analysis Based On Electrochemical DNA Biosensor in Real Samples
Seda Nur Topkaya, Ege University, Turkey
Dilsat Ozkan Arikoysal, Ege University, Turkey
Buket Kosova, Ege University, Turkey
Mehmet Sengun Ozsoz, Ege University, Turkey

P1.D. 65
Comparison of Modeling Techniques Used For Small Additives And Ligands In Polymeric-And Biomolecules
Tuqba Arzu Ozal, Kadir Has University, Turkey

P1.D. 66
Autophagy-regulating Mir-b As A Novel Nanoparticle Deliverable Drug
Gozde Korkmaz, Sabanci University, Turkey
Carlos le Sage, The Netherlands Cancer Institute, Netherlands
Reuven Agami, The Netherlands Cancer Institute, Netherlands
Devrim Gozuacik, Sabanci University, Turkey

P1.D. 67
Metallothionein for Biosensor Applications
Erhan BAL, Sabanci University, Turkey
Mert AYDIN, Sabanci University, Turkey
Zehra SAYERS, Sabanci University, Turkey

P1.D. 68
Studying the effect of cyclodextrin on enhancing the solubility of silver sulphadiazine
Aisha Higazy, National Research Center, Egypt
Samar Sharaf, National Research Center, Egypt
Gena EL-Feky, National Research Center, Egypt
Amira El Shafei, National Research Center, Egypt

P1.D. 69
Formulation and Evaluation of Repaglinide in Nanosized Drug Delivery Systems
Sherif Abu-Elyazid, October University, Egypt
Gina El-Feky, National Research Center, Egypt
Fathy Abd Allah, El Asher University, Egypt

P1.D. 70
Characterization of Chitosan Based Hybrid Nanofiber Scaffolds for Tissue Engineering
Elfide Yilmaz, Ege University, Turkey
Melis Olcum, Ege University, Turkey
Ersin Oguz Koaylu, Ege University, Turkey
Aylin Sendemir Urkmez, Ege University, Turkey
• THEME A
Nanomaterials; Nanoparticles, Nanocrystals, Nano-porous Materials, Molecular and Supramolecular Materials

• THEME B
Nanotubes, Nanowires

• THEME C
Nanomembranes, Nanostructures with catalytic properties, Electro-chemical materials
THEME A:
Nanomaterials; Nanoparticles, Nanocrystals, Nano-porous Materials, Molecular and Supramolecular Materials

June 29, Wednesday 15:00 – 16:30
SUNUM

P2.A. 1
The Transmission Coefficient in One-dimensional Semiconductor Nanostructures
Saban Aktas, Trakya Üniversitesi, Turkey

P2.A. 2
Omega, Sadhana and []- Polynomial of Isomers C80 Fullerenes
Ali Iranmanesh, Tarbiat Modares University, Iran
Maryam Rafieipour, Tarbiat Modares University, Iran

P2.A. 3
Calculation of Flory-huggins Interaction Parameters and Interaction Energies between Hard and Soft Segments In Segmented Copolymers By Dft And Md Methods
Erol Yıldırım, Istanbul Technical University, Turkey
Mine Yurtsever, Istanbul Technical University, Turkey

P2.A. 4
Synthesis and Characterization Of Nano Nickel Borate
Erzurul Olgun, Atatürk University, Turkey
Eda Keleş, Atatürk University, Turkey
Ayshe Bayrakçeken, Atatürk University, Turkey
A.Kadir Özer, Atatürk University, Turkey

P2.A. 5
Surfactant Assisted Synthesis and Characterization Of Silica Nanoparticles
Eda Keleş, Atatürk University, Turkey
Ayshe Bayrakçeken, Atatürk University, Turkey
A.Kadir Özer, Atatürk University, Turkey

P2.A. 6
Production and Characterization of Zn1-xCoxO Films
Ferhunde Atay, Eskişehir Osmangazi Üniversitesi, Turkey
Olcay Gencyilmaz, Eskişehir Osmangazi Ü., Turkey
İdris Akyüz, Eskişehir Osmangazi Ün., Turkey

P2.A. 7
Deposition of Ito Thin Films by Thermoionic Vacuum Arc (TVA) Technique
Saliha Elmas, Eskişehir Osmangazi Üniversitesi, Turkey
Naci Ekm, Eskişehir Osmangazi Üniversitesi, Turkey
Suat Pat, Eskişehir Osmangazi Üniversitesi, Turkey

P2.A. 8
Deposition of Sno2 Thin Film by Silar Method
Turan Taşköprü, Anadolu Üniversitesi, Turkey
Hilal Rüzgar, Anadolu Üniversitesi, Turkey
Muhsin Zor, Anadolu Üniversitesi, Turkey
Metin Kul, Anadolu Üniversitesi, Turkey
Ahmet Şenol Aybek, Anadolu Üniversitesi, Turkey
Evren Turan, Anadolu Üniversitesi, Turkey

P2.A. 9
Some Physical Properties of Deposited Zno Thin Films By RF Sputter At Various Concentrations
Murat Nebi, Eskişehir Osmangazi Üniversitesi, Turkey
Naci Ekm, Eskişehir Osmangazi Üniversitesi, Turkey
Suat Pat, Eskişehir Osmangazi Üniversitesi, Turkey

P2.A. 10
SiO2-ZrO2 Multilayer Ar Coatings Of Lenses By Thermionic Vacuum Arc (TVA) Technique
Sinan Temel, Eskişehir Osmangazi Üniversitesi, Turkey
Naci Ekm, Eskişehir Osmangazi Üniversitesi, Turkey
Suat Pat, Eskişehir Osmangazi Üniversitesi, Turkey
P2.A. 11
Fabrication of Mullite-zirconia Nanocomposite Parts
By Injection Molding

Somaye Ghaffari, Materials and Energy Res. Center, Iran
Masoud Alizade, Materials and Energy Res. Center, Iran
Keivan Asadian, Materials and Energy Research Center, Iran
Touraj Ebadzade, Materials and Energy Res. Center, Iran

P2.A. 12
Interpolymer Complexes of Polyallylamine And Poly(methacrylic Acid) Nanogels In Aqueous Solutions

Amir Sepehrianazar, Islamic Azad University, Iran
Aynur Manzak, Sakarya University, Turkey
Mahnaz Gaderi, Islamic Azad University, Iran

P2.A. 13
Synthesis, Structure of Pre-intercalated Polyallylamine-clay, and It’s Nanocomposites by Interlamellar Copolymerization

Amir Sepehrianazar, Islamic Azad University, Iran
Aynur Manzak, Sakarya University, Turkey
Davood Ahmadiye Ahari, Islamic Azad University, Iran

P2.A. 14
Synthesis and Characterization of Modified Mmt by Pvsac and It’s Nanocomposite by Interlamellar Copolymerization

Amir Sepehrianazar, Islamic Azad University, Iran
Aynur Manzak, Sakarya University, Turkey
Rooshenek Rehimzadeh, Islamic Azad University, Iran

P2.A. 15
Structural and Optical Characterization of SnO2 Films Deposited By Spray Pyrolysis Method

Evren Turan, Anadolu University, Turkey
Seckin Akin, Anadolu University, Turkey
Metin Kul, Anadolu University, Turkey
Ahmet Şenol Aybek, Anadolu University, Turkey
Muhsin Zor, Anadolu University, Turkey
Savaş Sönmezoglu, Karamanoğlu Mehmetbey University, Turkey

P2.A. 16
Deposition of Srtio3: Fe Nanopowders on Ceramic Surfaces by Electrospray

Burçak Atay, Anadolu Üniversitesi, Turkey
Mevlüt Gürbüz, Anadolu Üniversitesi, Turkey
Aydın Doğan, Anadolu Üniversitesi, Turkey

P2.A. 17
Electron and Hole Energy Levels in InxGa1-xAs/GaAs Self Assembled Quantum Dots

Hanene Abassi, Faculty of Sciences of Bizerte, Tunisia
Karim Sellami, Faculty of Sciences of Bizerte, Tunisia
Makram Yahyaoui, Faculty of Sciences of Bizerte, Tunisia
Imen Saïdi, Faculty of Sciences of Bizerte, Tunisia
Christophe Testelin, Institut des Nanosciences de Paris, France
Kaïs Boujdaria, Faculté des Sciences de Bizerte, Tunisia

P2.A. 18
Detection of Glyphosate by Surface-enhanced Raman Spectroscopy Using Gold Nanorods

Hilal Torul, Gazi University, Turkey
Uğur Tamer, Gazi University, Turkey

P2.A. 19
Application of Surface Plasmon Resonance of Silver Nanoparticles for Trace Amount of Determination Of Cobalt (ii)

Malihatolsadat Mozaheb, Payame Noor University, Iran
Fatemeh Banifatemeh, Payame Noor University, Iran
Mohamadali Karimi, Payame Noor University, Iran

P2.A. 20
Thermal Annealing Effects on the Morphology and Electrical Properties of Zno Thin Films

Barbaros Demirselcuk, Çanakkale OnSekiz Mart University, Turkey
Vildan Bilgin, Çanakkale OnSekiz Mart Univ., Turkey
Emrah Sarica, Çanakkale OnSekiz Mart Univ., Turkey
P2.A. 21
A Novel Method for the Selective Opening of the Barrier Layer in Porous Anodic Alumina
Beril Akinci, Istanbul Technical University, Turkey
İşhan Paşaoğlu, Istanbul Technical University, Turkey
Mustafa Ürgen, Istanbul Technical University, Turkey

P2.A. 22
Effect of Surface Modifier on the Characteristics Of Hydrothermally Synthesized Nano Tin Oxide Particles
Bekir Esen, Ankara University, Turkey
Tuğrul Yumak, Ankara University, Turkey
Ali Sınağ, Ankara University, Turkey
Ebru Dağdelen, Ankara University, Turkey
Kıvanç Aydınca, Ankara University, Turkey
Yusuf Osman Donar, Ankara University, Turkey

P2.A. 23
Syntheses Of Methanol (2-methoxy-6-[(2-oxidopropyl)iminomethyl]methyl methacrylate) Nanoparticles
Mahdeyeh Sheikhshoaie, Student, Iran
Tayebeh Shamspour, University, Iran

P2.A. 24
Effect of Crystallinity and Particle Morphology on The Magnetic Anisotropy Of Submicron Barium Hexaferrite Powders
Sedat Alkoy, Gebze Institute of Technology, Turkey
Sinan Dursun, Gebze Institute of Technology, Turkey
Ramazan Topkaya, Gebze Institute of Techn., Turkey
Numan Akdoğan, Gebze Institute of Technology, Turkey

P2.A. 25
Lead-free Potassium Sodium Niobate Thin Films Prepared By Sol-gel Method
Ebru Menşur Alkoy, Maltepe University, Turkey
Yaşar Saydam, Gebze Institute of Technology, Turkey
Koray Öztürk, Gebze Institute of Technology, Turkey

P2.A. 26
Nanofibers Of Poly(anthranilic Acid)/polyacrylonitrile Composite
Timuçin Balkan, Istanbul Technical University, Turkey
Diğdem Giray, Istanbul Technical University, Turkey
A. Sezai Sarac, Istanbul Technical University, Turkey

P2.A. 27
Nano Sized Nickel Borate Preparation and Characterization
Merve Türk, İzmir Institute of Technology, Turkey
Bariş Gümüş, İzmir Institute of Technology, Turkey
Devrim Balköse, İzmir Institute of Technology, Turkey

P2.A. 28
Zno Nanostructures Obtained By Cbd Method: Effects of Reaction Temperature
Süleyman Kahraman, Mustafa Kemal University, Turkey
Fatih Bayansal, Mustafa Kemal University, Turkey
Hüsnü Salih Güder, Mustafa Kemal University, Turkey

P2.A. 29
Growth and Electrical Characterizations of Homogenous CuO Nano-structures
Fatih Bayansal, Mustafa Kemal University, Turkey
H. Ali Çetinkara, Mustafa Kemal University, Turkey

P2.A. 30
Analytical Chemistry
Raheleh Jokar, University, Iran
Hasan Karami, University, Iran
Mohammad Ali Karimi, University, Iran

P2.A. 31
Production and Size Reduction of Gold Nanoparticles Using Ultrafast Femtoseconds Laser
Erhan Akman, Kocaeli University, Turkey
Belgin Genc Oztoprak, Kocaeli University, Turkey
Murat Güneş, Kocaeli University, Turkey
Elif Kacar, Kocaeli University, Turkey
Arif Demir, Kocaeli University, Turkey
Sintering Of Small Titania Nanoparticles: A Molecular Dynamics Study
Serap Senturk Dalgic, Trakya University, Turkey
Cem CANAN, Trakya University, Turkey
Oguz GULSEREN, Bilkent University, Turkey

The Rheology of Al-sic Nanocomposites
Arezoo Ghanbari, MERC Iran
Masood Alizadeh, MERC Iran
Rahim Yazdani Rad, MERC Iran
Ebrahim Ghasemi, MERC Iran

Alternative and Affordable Graphitic Substrates for Surface Studies
P. Gülçin Uygur, Aktif Deterjan ve Kimya, Turkey
Dilek Yıldız, Istanbul Technical University, Turkey
Merve Altay, Istanbul Technical University, Turkey
Rıfat Yılmaz, Istanbul Technical University, Turkey
Oğuzhan Gürlü, Istanbul Technical University, Turkey

Effects of the Various Solvents for Quantum Dots on Hopg and Gold Surfaces
Ayça Dalboy, Istanbul Technical University, Turkey
Merve Altay, Istanbul Technical University, Turkey
Rıfat Yılmaz, Istanbul Technical University, Turkey
Oğuzhan Gürlü, Istanbul Technical University, Turkey

Morphological and Electronic Properties of Super Periodic Structures Due To Graphene Layers on Hopg Surfaces
Dilek Yıldız, Istanbul Technical University, Turkey
Oğuzhan Gürlü, Istanbul Technical University, Turkey

Separation of Gold in Water Samples by Using Multiwalled Carbon Nanotubes
Ali Ghazizadeh, Payamnoor University, Iran
Daryosh Azfali, International Center for Science, Iran

The Morphology and Size Control of Zinc Oxide Nanorods Crystallized From Aqueous Solutions
Bora Akın, Yıldız Technical University, Turkey
Mualla Öner, Yıldız Technical University, Turkey

Preparation of Antimicrobial Surfaces with Nanoporous Zeolites
Zeynep Ustaoğlu, Yeditepe University, Istanbul
Nurcan Baç, Yeditepe University, Istanbul
Selami Demirci, Yeditepe University, Istanbul

Effect of Silver Nanoparticles on MCF-7 Breast Cancer Cells In Vitro
Hakan Çiftçi, Kırıkkale University, Turkey
Mustafa Türk, Kırıkkale University, Turkey
Uğur Tamer, Gazi University, Turkey
Yusuf Menemen, Kırıkkale University, Turkey
Mehmet Doğan Aşık, Hacettepe University, Turkey

Thz Time Domain Spectroscopy Investigation of the Dynamics of Metal Nanoparticle Suspensions in Micro-channels
Can Koral, METU, Turkey
Hüseyin Avni Vural, UNAM - Bilkent University, Turkey
Bülend Ortaç, UNAM - Bilkent University, Turkey
Tuba Okutucu, METU, Turkey
Hakan Altan, METU, Turkey

Synthesis and Characterization of Surface-enhanced Raman Scattering Tags With Ag and Au Core–Ag Shell Nanostructures
Ceren Uzun, METU, Turkey
Yeliz Akpınar, METU, Turkey
Murat Kaya, METU, Turkey
Mürvet Volkan, METU, Turkey
P2.A. 43  
**Immobilization Of Gold Nanorod Particles Onto Poly(3-octylthiophene) By Hydrophobic Forces**  
Hakan Çiftçi, Kırıkkale University, Turkey  
Uğur Tamer, Gazi University, Turkey

P2.A. 44  
**Synthesis of Silica Nanoparticles with Custom-made Morphology for Controlled Drug Delivery**  
Saniye Saygılı, İzmir Institute of Technology, Turkey  
Çağrı Siretli, İzmir Institute of Technology, Turkey  
Hurriyet Polat, İzmir Institute of Technology, Turkey  
Mehmet Polat, İzmir Institute of Technology, Turkey

P2.A. 45  
**Potential of Nanoparticle Delivery of a New Microrna (mir-x) Based Drugs**  
Kumsal Ayse Tekirdag, Sabancı University, Turkey  
Gözde Korkmaz, Sabancı Üniversitesi, Turkey  
Devrim Goazuacık, Sabancı Üniversitesi, Turkey

P2.A. 46  
**Synthesis and Surface Modification of Silica Nanoparticles**  
İmran Özdemir, Yıldız Teknik Üniversitesi, Turkey  
Sennur Deniz, Yıldız Teknik Üniversitesi, Turkey

P2.A. 47  
**Production of Calcite from Aggregated Nano Clusters**  
Ekrem Özdemir, İzmir Institute of Technology, Turkey  
Murat Molva, İzmir Institute of Technology, Turkey  
Yelda Meyva, İzmir Institute of Technology, Turkey  
Özkan Fidan, İzmir Institute of Technology, Turkey  
Sevgi Kılıç Özdemir, İzmir Institute of Tech., Turkey

P2.A. 48  
**Synthesis of Nanoparticles via Spark Discharge Method**  
Burak Aktekin, Middle East Technical University, Turkey  
Fatih Piskin, Middle East Technical University, Turkey  
Tayfur Ozturk, Middle East Technical University, Turkey

P2.A. 49  
**Film Formation from PS-TiO2 Composites: A Fluorescence Study**  
Selin Sunay, İstanbul Technical University, Turkey  
Şaziye Uğur, İstanbul Technical University, Turkey  
Önder Pekcan, Kadir Has University, Turkey

P2.A. 50  
**Exitonic Light Emission from Core-multishell Semiconductor Quantum Dots**  
Cihan Bacaksız, İzmir Institute of Technology, Turkey  
R. Tuğrul Senger, İzmir Institute of Technology, Turkey

P2.A. 51  
**Synthesis of Zno Nanofilms by Sol-gel Method**  
Şeyma Dombaycioğlu, Sakarya University, Turkey  
Hilal Köse, Sakarya University, Turkey  
Ali Osman Aydin, Sakarya University, Turkey  
Hatem Akbulut, Sakarya University, Turkey

P2.A. 52  
**A Note on Balaban Index**  
Modjtaba Ghorbani, University, Iran

P2.A. 53  
**Effect Of Acid and Water on Sol-gel Preparation of Antireflective Amorphous SiO2 Coatings**  
Ömer Kesmez, Akdeniz University, Turkey  
Esin Burunkaya, Akdeniz University, Turkey  
Zerin Yeşil, Akdeniz University, Turkey  
Nadir Kiraz, Akdeniz University, Turkey  
H. Erdem Çamurlu, Akdeniz University, Turkey  
Meltem Asiltürk, Akdeniz University, Turkey  
Ertuğrul Arpaç, Akdeniz University, Turkey

P2.A. 54  
**Photocatalytic Properties of Sn-doped Nano-TiO2 / Glymo Films**  
Esin Burunkaya, Akdeniz University, Turkey  
Zerin Yeşil, Akdeniz University, Turkey  
Ömer Kesmez, Akdeniz University, Turkey  
Nadir Kiraz, Akdeniz University, Turkey  
Hasan Erdem Çamurlu, Akdeniz University, Turkey  
Ertuğrul Arpaç, Akdeniz University, Turkey
P2.A. 55
Sn4+ or Ce3+ Doped TiO2 Photocatalytic Nanofilms on Antireflective Nano-sio2 Coated Glass
Zerin Yeşil, Akdeniz University, Turkey
Ömer Kesmez, Akdeniz University, Turkey
Esin Burunkaya, Akdeniz University, Turkey
Nadir Kiraz, Akdeniz University, Turkey
Hasan Erdem Çamurlu, Akdeniz University, Turkey
Mehmet Oğuz Güler, Akdeniz University, Turkey
Ertuğrul Arpaç, Akdeniz University, Turkey

P2.A. 56
Synthesis of Water-soluble Zns Nanocrystals by A Simple and Green Method
Lotfi Shiri, University of Ilam, Iran
Alireza Goudarzi, University of Golestan, Iran
Ali Daneshfar, University of Ilam, Iran
Reza Sahraei, University of Ilam, Iran

P2.A. 57
Melamine Supported On Magnetic Iron Oxide Nanopaticles (Ms-mionps) As New Composite for Adsorption of Cations from Aqueous Solutions
Roya Mirzajani, Shahid Chamran University, Iran
Shokoofeh Ahmadi, Shahid Chamran University, Iran

P2.A. 58
Synthesis of SnO2 Nanofilms with Tea as Chelating Agent
Hilal Köse, Sakarya University, Turkey
Şeyma Dombaycioğlu, Sakarya University, Turkey
Ali Osman Aydin, Sakarya University, Turkey
Hatem Akbulut, Sakarya University, Turkey

P2.A. 59
Development Of Ag-np/zno-np Added Polypropylene Matrix Composites via Injection Molding
H.Kübra Yumakgil, ITU, Turkey
S. Seda Yakar, ITU, Turkey
A.Umut Söyler, ITU, Turkey
Burçak Ebin, ITU, Turkey
Sebahattin Gürmən, ITU, Turkey
Burak Özkal, ITU, Turkey

P2.A. 60
Effect of Aging Time and Molar Ratio Of Solution On Zno Thin Film Coatings Prepared By Sol-gel Dip-coating Method
Deniz Gültekin, Sakarya University, Turkey
Özgür Cevher, Turkey
Mehmet Oğuz Güler, Turkey
Hatem Akbulut, Turkey

P2.A. 61
Electrografting Of Poly(n-vinylcarbazole) And Poly(n-vinylcarbazole-co-styrenesulfonic Acid Sodium Salt): Cyclovoltammertic And Morphological Study
Timuçin Balkan, Istanbul Technical University, Turkey
Derya Çetecioğlu, Istanbul Technical University, Turkey
A. Sezai Saraç, Istanbul Technical University, Turkey

P2.A. 62
The Synthesis And Characterization Of Ti(IV) With Glycine Complex: Its Photophysical Properties And Stability Constants By Potentiometric Method
Ikbal Koyuncu, Yildiz Technical University, Turkey
Mevlude Canlica, Yildiz Technical University, Turkey
Deniz Arslan, Yildiz Technical University, Turkey

P2.A. 63
Investigation of Absorption Coefficient and Band Gaps for Synthesis of Cdse Nanocrystals
M.R. Karim, ITU, Turkey
H. Hakan Gürel, ITU, Turkey
Özden Akıncı, ITU, Turkey
Hilmi Ünlü, ITU, Turkey

P2.A. 64
Behrooz Azizi, Urmia University, Iran
Morteza Bahram, Urmia University, Iran
Khalil Farhadi, Urmia University, Iran
P2.A. 65
Nano Scale Surface Modification of Pmma Films for Biomedical Applications
Ozge Ozgen, Middle East Technical University, Turkey
Eda Ayse Aksoy, Middle East Technical University, Turkey
Vasif Hasirci, Middle East Technical University, Turkey
Nesrin Hasirci, Middle East Technical University, Turkey

P2.A. 66
First Geometric–arithmetic Index Of Some Nanostar Dendrimers
Ali Madanshekaf, Semnan University, Iran
Marjan Moradi, Semnan University, Iran

P2.A. 67
Alpo4-5 Nanozeolites: Fabrication, Characterization and Adsorption Properties
Ali Hassanvand, University of Kashan, Iran
Morteza Asghari, University of Kashan, Iran

P2.A. 68
Synthesis And Preparation Of Glucosamine Functionalized Nanoporous Monodisperse Poly(hpmacl- Edma) For Hydrophilic Interaction Chromatography
Saliha Dinç, Selçuk University, Turkey
Saba Samatya, Hacettepe University, Turkey
Ali Tuncel, Hacettepe University, Turkey

P2.A. 69
Templated Precipitation and Growth of Calcium Phosphate Nanocrystals on Self-assembling Ionic Block Copolymers
Yusuf Yusufoglu, Arcelik A.S., Turkey
Mufit Akinc, Iowa State University, USA
Surya Mallapragada, Iowa State University, USA
Klaus Schmidt-Rohr, Iowa State University, USA

P2.A. 70
Removal of Heavy Metals Cadmium Ions from Aqueous Solutions By Using Size-tunable Silica Nanoparticles
Serdar Özcçelik
Gülay Karaoğlan

P2.A. 71
Synthesis, Characterization and Photoluminescence Properties Of Nanostructured Zinc Oxide Particles Synthesized By Pyrosol Method
Otilia Ruxandra Vasile, University Politehnica From Bucharest, Romania
Ecaterina Andronescu, University Politehnica From Bucharest, Romania
Cristina Ghitulica, University Politehnica From Bucharest, Romania
Ovidiu Oprea, University Politehnica From Bucharest, Romania

P2.A. 72
Study On Nanostructured Zirconia And Zirconia Nanocomposites Obtained By Classic And Spark Plasma Sintering
Bogdan Stefan Vasile, University Politehnica From Bucharest, Romania
Ecaterina Andronescu, University Politehnica From Bucharest, Romania
Cristina Ghitulica, University Politehnica From Bucharest, Romania
Otilia Ruxandra Vasile, University Politehnica From Bucharest, Romania

P2.A. 73
Comparison of Thermal Stability with Dynamic Mechanical Properties and Crystallization Behavior in Poly (ethylene-oxide)/clay Nanocomposites by Artificial Neural Networks
Mehmet Yazici, Ondokuz Mayis University, Turkey
Murat Kapusuz, Ondokuz Mayis University, Turkey
Hakan Ozcan, Ondokuz Mayis University, Turkey
Engin Burgaz, Ondokuz Mayis University, Turkey

P2.A. 74
Growth of Block Copolymers from Nanoparticle Surfaces and Development of Hybrid Nanoparticles
Hande Öztürk, Koç University, Turkey
Havva Funda Yağcı Acar, Koç University, Turkey
P2.A. 75

Preparation and Characterization of Montmorillonite-silane (mmt/si) Nanocomposite

Semra Karaca
Ahmet Gürses
Kader Yıkılmaz
Somaiyeh Jafarpour
Mehtap Ejder Korucu
Metin Açıkyıldız
THEME B:
Nanotubes, Nanowires

June 29, Wednesday 15:00 – 16:30
SUNUM

P2.B. 1
2-amino-5-mercapto-1,3,4-thiadiazole Functionalized Carbon Nanotubes As New Nanosized Solid-phase Adsorbents For Preconcentration And Determination Of Silver(i) Ions
Alireza Mohadesi, Payame Noor University, Iran
Hadi Beitollahi, International Center for Sciences, Iran
Mohammad Ali Karimi, Payame Noor University, Iran

P2.B. 2
P-aminophenol–multiwall Carbon Nanotubes Electrode As A Sensor For Simultaneous Determination Of Methyldopa And Uric Acid
Mohsen Keyvanfard, Islamic Azad University, Iran
Khadijeh Alizad, Islamic Azad University, Iran
Maryam Tahmasebi, Islamic Azad University, Iran

P2.B. 3
Pulse Electropolymerization of Polyaniline Nanofibers And Application As Drug Trap Agent
Hassan Karami, Payame Noor University, Iran
Mohammad Ghale Asadi, AUTM, Iran
Masoomeh Mansoori, AUTM, Iran

P2.B. 4
Voltammetric Determination of Levodopa and Folic Acid in Some Real Samples Using Modified Carbon Nanotube Paste Electrode
Alireza Mohadesi, Payame Noor University (PNU), Iran
Hadi Beitollahi, International Center for Sciences, Iran
Mohammad Ali Karimi, Payame Noor University (PNU), Iran

P2.B. 5
Selective Voltammetric Determination Of Norepinephrine In The Presence Of Acetaminophen And Folic Acid At A Modified Carbon Paste Electrode Incorporating Carbon Nanotubes And A Novel Molybdenum(vi) Complex
Hadi Beitollahi, International Center for Sciences, Iran
Iran Sheikhshoaeie, Shahid Bahonar University, Iran

P2.B. 6
Stable Carbon Nanostructures Other Than Hexagon Geometry
Burcu Tuzun, METU, Turkey
Sakir Erkoc, METU, Turkey

P2.B. 7
Structural Properties of Si Nanorods under Strain: Molecular Dynamics Simulations
Burak Ozdamar, METU, Turkey
Sakir Erkoc, METU, Turkey

P2.B. 8
Influence of Nonspecific Interaction and Covalent Attachment of Oligonucleotides and Dna To The Electronic Properties Of Swcnts
Sevcan Ayaksiz, Yeditepe University, Turkey
Seda Demir, Yeditepe University, Turkey
Mustafa Çulha, Yeditepe University, Turkey

P2.B. 9
Structural Properties of Zno Nanoribbons under Strain: Molecular Dynamics Simulations
Mehmet Emin Kilic, ODTU, Turkey
Sakir Erkoc, ODTU, Turkey
P2.B. 10  
**Structural Properties of Fe2O3 Nanorods under Strain: Molecular Dynamics Simulations**  
Sholeh Alaei, METU, Turkey  
Sakir Erkoc, METU, Turkey

P2.B. 11  
**Stable Critical Point in Cylindrical Ising Nanowire System**  
Asgar Fatimi, University of Aleppo, Syrian Arab Republic

P2.B. 12  
**Synthesis and Characterization of Silver Doped Zinc Oxide Nanowires through Hydrothermal Method**  
Ayşegül AFAL, Middle East Technical University, Turkey  
Hüsnü Emrah ÜNALAN, Middle East Technical University, Turkey

P2.B. 13  
**A Nanotube Self-assembly Of A6k in Aqueous Solution at Varying pH**  
Elcin Yenigul, Yeditepe University, Turkey  
Seyda Bucak, Yeditepe University, Turkey

P2.B. 14  
**Synthesis of Photocatalytic Titanium Dioxide Nanotubes on Electrospun Polymer Fibers By Hot Filament Chemical Vapor Deposition**  
Mustafa Karaman, Selçuk University, Turkey  
Demet Ozyurt, Selçuk University, Turkey  
Nihat Çabuk, Selçuk University, Turkey  
Fatma Sarıpek, Selçuk University, Turkey  
Özcan Köysüren, Selçuk University, Turkey

P2.B. 15  
**Cu Nanowire Formation by Electrodeposition in Modified Nanoporous Anodic Alumina Templates**  
Hossein Ghaforyan, Payame Noor University, Iran  
Majid Ebrahimzadeh, Arta Nano Fan Avar Pishro Company, Iran  
Mehdi Soodmand, Payame Noor University, Iran  
Fatemeh Akbari Baseri, Arta Nano Fan Avar Pishro Company, Iran

P2.B. 16  
**Gas Sensing Properties of Ru-doped TiO2 Nanofibers**  
Mehtap Özdemir Köklü, Gediz University, Turkey  
Fevzi Sümer, Ege University, Turkey  
Omer Mermer, Ege University, Turkey  
Umit Cocen, Dokuz Eylül University, Turkey  
Salih Okur, İzmir Institute of Technology, Turkey  
Erdal Celik, Dokuz Eylül University, Turkey

P2.B. 17  
**Effect of Gas Phase on Carbon Nanotube Production**  
Burça Salgara, Ankara University, Turkey  
Savaş Yağlıkçı, Ankara University, Turkey  
Hülya Madakbaş, Farma-Gen Consultant & Corporation, Turkey  
Burhanettin Çiçek, Ankara University, Turkey

P2.B. 18  
**Adsorption Kinetics and Thermodynamics of Malachite Green from Aqueous Solutions onto Halloysite Nanotubes**  
Gholamreza Kiani, University of Tabriz, Iran

P2.B. 19  
**Elastic Properties of a Swollen PAAm-MWNT Composite at Various Temperatures**  
Gülşen Akın Evingür, Istanbul Technical Un., Turkey  
Önder Pekcan, Kadir Has Un., Turkey

P2.B. 20  
**Fabrication of Nitrogen Doped TiO2 Nanotubes Prepared By an Anodization Process**  
Necmettin Kılınc, Gebze Institute of Technology, Turkey  
Şeyma Onay, Gebze Institute of Technology, Turkey  
Erdem Şenlik, Gebze Institute of Technology, Turkey  
Zafer Ziya Öztürk, Gebze Institute of Technology, Turkey

P2.B. 21  
**Chemical Synthesis Of Ultra-long Cd(OH)2 Nanowires At Room Temperature**  
Ali Daneshfar, University of Ilam, Iran  
Asma Mihandoost, University of Arak, Iran  
Reza Sahraei, University of Ilam, Iran
P2.B. 22
Carbon Doping Of Anodic TiO2 Nanotubes by Thermal Treatment in Acetylene
Müge Işık, Gebze Institute of Technology, Turkey
Necmettin Kılınç, Gebze Institute of Technology, Turkey
Erdem Şennik, Gebze Institute of Technology, Turkey
Zafer Yiya Öztürk, Gebze Institute of Techn., Turkey

P2.B. 23
Surface Functionalization of Carbonnanotubes By Hot Filament Chemical Vapor Deposition Method
Mustafa Karaman, Selcuk University, Turkey
Demet Özyurt, Selcuk University, Turkey
Nihat Çabuk, Selcuk University, Turkey
Özcan Köysüren, Selcuk University, Turkey

P2.B. 24
Schottky Barriers in Cnt-graphene Composite Systems
Ceren Sibel Sayın, Middle East Technical Un., Turkey
Hande Toffoli, Middle East Technical Un., Turkey

P2.B. 25
Grafting Of A Copper (ii) Schiff Base Complex on Functionalized Multi-wall Carbon Nanotubes (mwnts) As Heterogeneous Catalysis
Masaoud Salavati-Niasari, University of Kashan, Iran

P2.B. 26
Application of Modified Multiwalled Carbon Nonotubes for Separation of Cadmium and Lead Prior Determination in Greenhouse Soil in Jiroft Area (Iran)
Daryoush Afzali, International Center for Sciences, Iran

P2.B. 27
Fabrication of Functional Composite Silica Nano Test Tubes
Fatih Buyukserin, TOBB University, Turkey

P2.B. 28
Carbon Nanotubes (CNT)
Gökhan Dikmen, Anadolu University, Turkey
Gamze Güney, Anadolu University, Turkey

P2.B. 29
Computing Reverse Wiener and Wiener Indices Of HAC5C7 [p, q] Nanotube
Yaser Alizade Sani, Tarbiat Modares University, Iran
Ali Iranmanesh, Tarbiat Modares University, Iran

P2.B. 30
Application Of Modified Carbon Nanotubes As A Sorbent For Separation/preconcentration Of Trace Amounts Of Lead (ii) And Its Determination By Flame Atomic Absorption Spectrometry
Mohammad Ali Karimi, Payame Noor Univ. (PNU), Iran
Abdolhamid Hatefi-Mehrjardi, Payame Noor University, Iran
Sayed Zia Mohammadi, Payame Noor University, Iran
Javad Yarahmadi, Payame Noor University, Iran

P2.B. 31
Hydrogen Storage in Metal Decorated Carbon Nanotubes
Aynur Şenyer, Istanbul Technical University, Turkey
Adem Tekin Tekin, Istanbul Technical University, Turkey
Nilgün Yavuz, Istanbul Technical University, Turkey

P2.B. 32
Sn-deposited Multi-walled Carbon Nanotubes by Electrodeposition
Mehmet Uysal
Ramazan Karslioglu
Yunus Emre Hirçin
Ahmet Alp
Hatem Akbulut

P2.B. 33
Effect Of Citrate Salt Concentration On The Synthesis Of Pt/MWNTs For Nitrobenzene Hydrogenation
Zeinab Talaei, Tarbiat Modares University, Iran
Alireza Mahjoub, Tarbiat Modares University, Iran
Mohammad Mehdi Eskandari, Research Institute of Petroleum Industry , Iran
POSTER PRESENTATIONS

P2.B. 34

DNA-Templated Inorganic Nanostructures
Hasan Mohamed, Newcastle Un., United Kingdom
Scott Watson, Newcastle University, United Kingdom
Benjamin Horrocks, Newcastle Un., United Kingdom
Andrew Houlton, Newcastle U., United Kingdom

P2.B. 35

A Parametric Study on the Zinc Oxide Nanowire
Growth by Chemical Vapor Deposition Method
Burcu Aksoy
Husnu Emrah Unalan
C. P2.C. 1
An Electrochemical Sensor for Electrocatalytic Determination of NO Based on Safranin-terminated Self-assembled Monolayer at the Surface of Gold Electrode
Ashraf Salmanipour, Shahid Bahonar University of Kerman, Iran
Mohammad Ali Taher, Shahid Bahonar University of Kerman, Iran

P2.C. 2
Sol-gel Derived CuO@SiO2 Nanocatalysts Toward CO and NO Oxidation Reactions
Seyed Hossein Tohidi, Nuclear Science and Technology Institute, Iran
Abdol Javad Novinrooz, Nuclear Science and Technology Institute, Iran
Garnik Grigoryan, Yerevan State University, Armenia

P2.C. 3
Study of Nano Nickel Particles Supported On Alumina by Polyol Method: The Effects of Support Surface Area
Mehmet Ali Faruk Öksüzömer, Istanbul Un., Turkey
Ezgi Bayrakdar, Istanbul University, Turkey
Tuba Gürkaynak Altıncık, Istanbul University, Turkey

P2.C. 4
Microwave Assisted Hydrothermal Synthesis of Spinel Structured Cathode Active Nanoparticles for Li-ion Batteries
Emrah Bulut, Sakarya University, Turkey
Ahmet Örnek, Sakarya University, Turkey
Mahmut Özacar, Sakarya University, Turkey

P2.C. 5
Preparation of CdO/polyaniline Nanocomposites and Photo-catalytic Properties
Eda Tomurcuk, Selcuk University, Turkey
Fahriye Sari, Selcuk University, Turkey
Handan Gülce, Selcuk University, Turkey
Ahmet Gülce, Selcuk University, Turkey
Volkan Eskizeybek, Selcuk University, Turkey
Ahmet Avci, Selcuk University, Turkey

P2.C. 6
Preparation of CdO-ZnO/polyaniline Nanocomposites And Photo-catalytic Properties
Oğuzhan Özcan, Selcuk University, Turkey
Fahriye Sari, Selcuk University, Turkey
Handan Gülce, Selcuk University, Turkey
Ahmet Gülce, Selcuk University, Turkey
Volkan Eskizeybek, Selcuk University, Turkey
Ahmet Avci, Selcuk University, Turkey

P2.C. 7
Nanostructured Polyaniline Films on Self Assembled Monolayer Modified Electrodes for Direct Electrochemistry of Hemoglobin
Gülçin Bolat, Hacettepe University, Turkey
Filiz Kuralay, University of California, San Diego, USA
Serdar Abacı, Hacettepe University, Turkey

P2.C. 8
Characterization of DNA Immobilized Redox Polymer on Pt Electrode and Its Release Behavior
Filiz Kuralay, University of California, San Diego, USA
Arzum Erdem, Ege University, Turkey
Serdar Abacı, Hacettepe University, Turkey
P2.C. 9

Wiener and Szeged Indices of Non-commuting Graph Of Quaternion Group
Azizollah Azad, Arak University, Iran

P2.C. 10

ZnO and ZnS Microrods Coated On Glass and Photocatalytic Activity
İlknur Tatlıdil, Karadeniz Technical University, Turkey
İsmail Polat, Karadeniz Technical University, Turkey
Emin Bacaksız, Karadeniz Technical University, Turkey
Münevver Sökmen, Karadeniz Technical University, Turkey

P2.C. 11

Preparation and Antibacterial Properties of Silver and Cobalt Loaded Nano TiO2 Particles
 Hüma Yılmaz, Karadeniz Technical University, Turkey
 Seña Atal, Karadeniz Technical University, Turkey
 Melek Koç, Karadeniz Technical University, Turkey
 Vildan Serdaroğlu, Karadeniz Technical University, Turkey
 İlknur Tatlıdil, Karadeniz Technical University, Turkey
 C. Kurtuluş Buruk, Karadeniz Technical University, Turkey
 Münevver Sökmen, Karadeniz Technical University, Turkey

P2.C. 12

Preparation and Characterization of B, N and B/n Co-doped TiO2 Thin Films and Its Catalytic Activity under Visible Light Irradiation
Sayed Shibly, Shahjalal University, Bangladesh
Md. Nizam Uddin, Bilkent University, Turkey
Saiful Islam, Shahjalal University, Bangladesh
M. Mazumder, Shahjalal University, Bangladesh
M. Islam, Shahjalal University, Bangladesh
Mohammed Uddin, Shahjalal University, Bangladesh
Erman Bengu, Bilkent University, Turkey

P2.C. 13

ZnO Nanotube as Green and Efficient Catalyst In The Protection Of Carbonyl Groups As Phenyl Hydrazone
Haji Shalbaf, Islamic Azad University, Iran
Najmeh Zahedi Zahed, Islamic Azad University, Iran

P2.C. 14

Fabrication of Cu-CeF3-Cu Nano-scale Mim Structures and Study Of Their Electrical Properties
Hossein Ghaforyan, Payame Noor University, Iran
Majid Ebrahimzadeh, Arta Nano Fan Avar Pishro Co., Iran
Mehdi Soodmand, Payame Noor University, Iran
• THEME E: Nanoelectronics, Spintronics, Nano-SMagnetics, Quantum Computing, Qubits
• THEME F: Organic and Hybrid Electronics: OLED, OTFT, OSC, DSSC
• THEME G: Nano-optics, Nano-Optoelectronics, Nano-Photonics
• THEME H: Nano-Fabrication, Nano-Lithography, Nano-Manipulation
  • THEME I: Nanoscale Characterization, Nano-imaging, Nanoscopy, Nano-Metrology
• THEME J: Nano Electro Mechanical Systems (NEMS), Micro Electro Mechanical Systems (MEMS)
  • THEME K: Nano-Fluidics
• THEME L: Nano-Actuators, Nano-Sensors
• THEME M: Nano-Robotics
• THEME N: Nano-Mechanics, Nano-Tribology, Nano-Composites
• THEME O: Nanotechnology for Energy (fuel cell, solar cell, hydrogen storage)
• THEME P: Nanotechnology in Textile, Agriculture and Food Science
  • THEME R: Social, economical and environmental effects, safety and ethical issues
• THEME S: Nanotechnology Governance and National Nanotechnology Policies
• THEME T: Nano Entrepreneurship-A Journey from Research to Implementation
P3.E. 1  
Effects of Bias Voltage on the Miniband Structure of Nanomaterials with Topological Disorder  
Radouan Djelti, Mostaganem University, Algeria

P3.E. 2  
Conductance of Long Range Correlated Disordered Graphene Superlattice  
Ayoub Esmailpour, Shahid Rajaee University, Iran  
Hamed Meshkein, Shahid Rajaee University, Iran

P3.E. 3  
Thickness Dependent Magnetic Properties of Fe/coo Bilayers  
Mustafa Öztürk, Gebze Institute of Technology, Turkey  
Erdem Demirci, Gebze Institute of Technology, Turkey  
Ramazan Topkaya, Gebze Institute of Tech., Turkey  
Mohamed Obaida, Ruhr-Universitaet Bochum, Germany  
Kurt Westerholt, Ruhr-Universitaet Bochum, Germany  
Sinan Kazan, Gebze Institute of Technology, Turkey  
Numan Akdoğan, Gebze Institute of Technology, Turkey

P3.E. 4  
Spin-orbit Interaction in A Semiconductor Qd  
Mahshid Zand Mashayekhi, Tabriz University, Iran  
Sanaz Shoar Gaffari, Tabriz University, Iran  
Nazli Rasooli Sarabi, Tabriz University, Iran  
Ali Rostami, Tabriz University, Iran  
Karim Abbassian, Tabriz University, Iran

P3.E. 5  
The Exchange Interaction Controlling In Coupled Qds by External Electric Field  
Sanaz Shoar Gaffari, Tabriz University, Iran  
Mahshid Zand Mashayekhi, Tabriz University, Iran  
Nazli Rasooli Sarabi, Tabriz University, Iran  
Ali Rostami, Tabriz University, Iran  
Karim Abbassian, Tabriz University, Iran

P3.E. 6  
Thickness and Temperature Dependence of Exchange Bias in Co/CoO Bilayers  
Erdem Demirci, Gebze Institute of Technology, Turkey  
Mustafa Öztürk, Gebze Institute of Technology, Turkey  
Ramazan Topkaya, Gebze Institute of Tech., Turkey  
Mohamed Obaida, Gebze Institute of Technology, Turkey  
Kurt Westerholt, Ruhr-Universitaet Bochum, Germany  
Sinan Kazan, Gebze Institute of Technology, Turkey  
Numan Akdoğan, Gebze Institute of Technology, Turkey

P3.E. 7  
The Role of Electrolyte Temperature on Grain Size and Surface Morphology of Nicu Films Electrodeposited On Ito Glass Substrates  
Umut Sarac, Osmangazi Üniversitesi, Turkey  
M. Celalettin Baykul, Osmangazi Üniversitesi, Turkey  
Mustafa Arıkel, Osmangazi Üniversitesi, Turkey

P3.E. 8  
Size and Magnetic Field Effects on Inmnas/GaAs Diluted Magnetic Quantum Dots  
Rim Neffati, Faculty of Sciences of Bizerte, Tunisia  
Karim Sellami, Faculty of Sciences of Bizerte, Tunisia  
Makram Yahyaoui, Faculty of Sciences of Bizerte, Tunisia  
Imen Saïdi, Faculty of Sciences of Bizerte, Tunisia  
Christophe Testelin, Inst. des Nanosciences de Paris, France  
Kais Boujdaria, Faculté des Sciences de Bizerte, Tunisia
P3.E. 9
**Influence Of Epitaxial Strain On Magnetic Anisotropy In Ferromagnetic (Ga0.93Mn0.07)(As0.93P0.07)/GaAs Films**

Makrem Yahyaoui, Faculty of Sciences of Bizerte, Tunisia
Christophe Testelin, Institut des Nanosciences de Paris, Tunisia
Christophe Testelin, Inst. des Nanosciences de Paris, France
Kais Boujdaria, Faculty of Sciences of Bizerte, Tunisia

P3.E. 10
**Production of Multilayered Cu/Au/CoFe Magnetic Thin Film with Low Coercivity**

Sukru Cakmaktepe, Kilis 7 Aralik University, Turkey
Sinan Diken, Kilis 7 Aralik University, Turkey
Mehmet Ibrahim Coskun, Kilis 7 Aralik Un., Turkey
Abdulkadir Yildiz, Kilis 7 Aralik University, Turkey

P3.E. 11
**Effects on Two Dimensional Electron Gas of InGan Back-barrier For Ultrathin Barrier AlN/GaN High Electron Mobility Transistors**

Gökhan Atmaca, Gazi Un. Physics Department, Turkey
Kenan Elibol, Gazi Un. Physics Department, Turkey
Pınar Taşlı, Gazi University Physics Department, Turkey
Sefer Bora Lişesivdin, Gazi Univ. Physics Dept, Turkey

P3.E. 12
**Synthesis and Characterization of CoFe2O4 and Mn0.2CoO.8Fe2O4 Nps by Polyol Method**

Özlem Akman, Sakarya University, Turkey
Ramazan Topkaya, Gebze Institute of Tech., Turkey
Esved E. Tanriverdi, Fatih University, Turkey
Abdulhadi Baykal, Fatih University, Turkey
Sinan Kazan, Gebze Institute of Technology, Turkey

P3.E. 13
**Atomic Layer Deposition for High Quality Thin Film Transistors**

Feyza Bozkurt, Bilkent University, Turkey
Ali Kemal Okyay, Bilkent University, Turkey

P3.E. 14
**Multiwalled Carbon Nanotube Doped Ardel / N-cds Mis Structure**

Furkan Kuruoglu, Yildiz Technical University, Turkey
Muzaffer Mogulkoc, Yildiz Technical University, Turkey
Murat Caliskan, Yildiz Technical University, Turkey
Dolunay Sakar, Yildiz Technical University, Turkey
Merih Serin, Yildiz Technical University, Turkey

P3.E. 15
**Computational Study of Super Cell Al-doped Single-Walled Carbon Nanotubes As Co Sensor**

Masood Hamadanian, University of Kashan, Iran
Bahram Khoshnevisan, University of Kashan, Iran
Froough Kalantari Fotooh, University of Kashan, Iran

P3.E. 16
**Magnetic Characterization of BaFe10O19**

Özlem Akman, Sakarya University, Turkey
Hüseyin Kavas, Gebze Institute of Technology, Turkey
Ahmet Teber, Gebze Institute of Technology, Turkey
Abdulhadi Baykal, Fatih University, Turkey
Bekir Aktaş, Gebze Institute of Technology, Turkey

P3.E. 17
**Silica Coating Of Monodisperse Hydrophobic Magnetite Nanoparticles through Reverse Microemulsion Technique**

Zeynep Ergül, ODTÜ, Turkey
Tuğba Nur Aslan, ODTÜ, Turkey
Gülsem Aygar, ODTÜ, Turkey
Mürvet Volkan, ODTÜ, Turkey

P3.E. 18
**The Strain Effect on the Magnetic Properties of Pr0.3Ca0.7MnO3 Thin Films**

Abdullah Koçbay, Gebze Institute of Technology, Turkey
Anuj Chopra, Max Planck Institute, Germany
Marin Alexe, Max Planck Institute, Germany
Dietrich Hesse, Max Planck Institute, Germany
Fikret Yildiz, Gebze Institute of Technology, Turkey
Theme E

POSTER PRESENTATIONS

P3.E. 19
Large Area Graphene as Transparent Thin Conducting Electrode
Görkem Soyumer, Sabanci University, Turkey
Cem Çelebi, Sabanci University, Turkey
Seda Aksoy, Sabanci University, Turkey
Ahmet Oral, Sabanci University, Turkey
İsmet Kaya, Sabanci University, Turkey

P3.E. 20
Fabrication of Metallic Nanogaps Using In-situ Controlled Thermal Evaporation
Anıl Günay Demirkol, Sabancı University, Turkey
İsmet İnönü Kaya, Sabancı University, Turkey

P3.E. 21
On The Organic Nanodevice Applications
Arezki Benfdila, University M. Mammeri Tizi-Ouzou, Algeria

P3.E. 22
Graphene Based Nano-hall Sensor for Scanning Hall Probe Microscopy
Selda Sonuşen, Sabancı University, Turkey
Hidayet Çetin, Bozok University, Turkey
Münir Dede, Nanomagnetics Instruments Ltd, Turkey

P3.E. 23
Effect Of Electrolyte Concentration on Composition, Grain Size, and, Surface Morphology of NiCu Films Electrodeposited On Ito Glass Substrates
M. Celalettin Baykul, Osmangazi Universitesi, Turkey
Umut Sarac, Osmangazi Universitesi, Turkey

P3.E. 24
Application of Phase-imaging Tapping Mode AFM of Electrodeposited NiFeCu/Cu Films
Umut Sarac, Osmangazi University, Turkey
M.Celalettin Baykul, Osmangazi University, Turkey
Mursel Alper, Uludag University, Turkey

P3.E. 25
Pentacene Based Organic Thin Film Transistor with SiO2 Gate Dielectric
Ahmet Demir, Gebze Institute of Technology, Turkey
Zekeriya Doğruyol, Yıldız Technical University, Turkey
Sehat Tunç, Gebze Institute of Technology, Turkey
Salih Okur, İzmir Institute of Technology, Turkey
Sait Eren San, Gebze Institute of Technology, Turkey
Mustafa Okutan, Yıldız Technical University, Turkey
Arif Kösemen, Muş Alparslan University, Turkey
Zuhal Alpaslan, Gebze Institute of Technology, Turkey

P3.E. 26
Electrical Characterization of Inhomogeneous FeCrNi/p-si Structure in a Wide Temperature Range
Ayşe Nida Beştaş, Atatürk Üniversitesi, Turkey
Seda Yazıcı, Atatürk Üniversitesi, Turkey
Perihan Aksu, Kırşehir Ahi Evran Üniversitesi, Turkey
Fatih Aktaş, Atatürk Üniversitesi, Turkey
Bahattin Abay, Atatürk Üniversitesi, Turkey

P3.E. 27
Shallow Mo: Si Silicide Formation and Minimisation of Interface Inhomogeneities
Hakan Ertaş, Atatürk Üniversitesi, Turkey
Atakan Aboşoğlu, Atatürk Üniversitesi, Turkey
Hasan Efeoğlu, Atatürk Üniversitesi, Turkey

P3.E. 28
Er: Si Silicide Formation and Interface Inhomogeneities
Yunus Babacan, Erzincan University, Turkey
Hasan Efeoğlu, Atatürk Üniversitesi, Turkey

P3.E. 29
Theoretical Study of Methylene Blue Photo Degradation Using ZnO Nanoparticles with Various Size Scales by Oniom Method
Mohsen Oftadeh, Payame Noor University, Iran

P3.E. 30
Defect Engineering for Nanoelectronic Devices
Şeref Kalem, TÜBİTAK-BİLGEM-UEKA, Turkey
P3.E. 31

Polarisability Calculation For Nanoscopic Liquid Crystal Scb

Anissa Besbes, Mostaganem University, Algeria

P3.E. 32

Quantum Computing Based On Near-field Optically Coupled Quantum Dot System

Nooshin Dolati Ilkhechi, Tabriz University, Iran
Ali Rostami, Tabriz University, Iran
Saeed Golmohammadi Heris, Tabriz University, Iran

P3.E. 33

Electron Spin Manipulation In Quantum Dot

Nazli Rasouli Sarabi, Tabriz University, Iran
Ali Rostami, Tabriz University, Iran
Sanaz Shoar, Tabriz University, Iran
Mahshid Zand Mashayekhi, Tabriz University, Iran
Karim Abbasian, Tabriz University, Iran

P3.E. 34

Electrical Characteristics of The Graphene Under Vacuum and Atmosphere

Muhittin Öztürk, Bozok University, Turkey
Hidayet Çetin, Bozok University, Turkey
Munir Ded, Nanomagnetic Instruments Ltd., Turkey
Enise Ayyıldız, Erciyes University, Turkey
Ahmet Oral, Sabancı University, Turkey
P3.F. 1

**Analysis of Illumination Intensity Dependent Equivalent Circuits Parameters for Organic Solar Cells**

Ömer Mermer, Ege Üniversitesi, Turkey
Cem Baytöre, Ege Üniversitesi, Turkey

P3.F. 2

**Morphology of Tris-edta Buffer Remnants on Solid Substrates**

Merve Altay, Istanbul Technical University, Turkey
Mazluma Balca Karaçor, Istanbul Tec. Univ., Turkey
Mert Kumru, Istanbul Technical University, Turkey
Alper Tunga Akarsubaş, Istanbul Technical Un., Turkey
Oğuzhan Gürlü, Istanbul Technical University, Turkey

P3.F. 3

**A New 1h-pyridin-(2e)-ylidene Ruthenium Complex as Sensitizer for Dye Sensitized Solar Cell**

Cigdem Sahin, Pamukkale University, Turkey
Ceylan Zafer, Ege University, Turkey
Canan Varlikli, Ege University, Turkey
Qi Shi Shi, University Of York, United Kingdom
Richard Douthwaite, Un. Of York, United Kingdom

P3.F. 4

**Temperature Dependent Electrical Characterization of Au/pdi/n-si Schottky Diodes**

Narın Şimşir, Selçuk University, Turkey
Zeynep Nasırcıgil, Selçuk University, Turkey
Haluk Şafak, Selçuk University, Turkey
Özgür Yüksel, Selçuk University, Turkey
Mahmut Kuş, Selçuk University, Turkey

P3.F. 5

**Low Threshold Voltage PPVBased PLED Using Indium Free Anode**

Nesrin Töre, TUBITAK-UME, Turkey
Elif Altırk Parlık, TUBITAK-UME, Turkey
Emine Tekin, TUBITAK-UME, Turkey
Alp Osman Kodolbaş, TUBITAK-UME, Turkey

P3.F. 6

**Poly (3-hexylthiophene) Based Field-effect Transistors with Gate Sio2 Dielectric**

Fatih Önal, Gebze Institute of Technology, Turkey
Ahmet Demir, Gebze Institute of Technology, Turkey
Yusuf Yerli, Gebze Institute of Technology, Turkey
Ari Kösemen, Gebze Institute of Technology, Turkey
Mustafa Okutan, Yıldız Technical University, Turkey
Sait Eren San, Gebze Institute of Technology, Turkey

P3.F. 7

**Performance of Colloidal Magnetic Nanoparticle Doped Polymer Ledds**

Mahmut Kus, Selçuk University, Turkey
Faruk Özel, Selçuk University, Turkey
Nurhan Mehmet Varal, Selçuk University, Turkey
Mustafa Ersoz, Selçuk University, Turkey

P3.F. 8

**Structure-reactivity Relationships of Alkyl α-hydroxymethacrylate And Acrylate Derivatives**

Özge Gencer, Bogazici Universities, Turkey
Özlem Karahan, Bogazici Universities, Turkey
Viktorya Aviyente, Bogazici Universities, Turkey

P3.F. 9

**Environmental and Structural Effects on the Band Gap of the Conducting Polymers with Bisfulleroid Group**

Alimet Sema Özen, Sabanci University, Turkey
P3.F. 10
*Synthesis and Characterization of Carboxylic Acid and Ester Derivatives of Phthalocyanine Compounds*

Gökçen Gündoğan, Ege University, Turkey
Bircan Dindar, Ege University, Turkey

P3.F. 11
*Aggregation Induced Emission and Luminescence Properties of Novel Tetraphenylethylene-based Emitter with Indole Side Groups*

Serhat Odabaş, TUBITAK Marmara Res. Center, Turkey
Dr. Figen Türksoy, TUBITAK Marmara Res. Center, Turkey
Prof. Dr. Cihangir Tanyeli, Middle East Technical University, Turkey

P3.F. 12
*The Synthesis and Characterization Of Polypyridyl Ruthenium (ii) Complexes With Swallow-tail Alkyl Chains*

Cigdem Sahin, Pamukkale University, Turkey
Ilker Oner, Ege University, Turkey

P3.F. 13
*Investigation of Photovoltaic Performance Differences In Dye Sensitized Solar Cells Based On Different Ionic Liquids By Electrochemical Impedance Spectroscopy*

Banu Aydin, Ege Un. Solar Energy Institute, Turkey
Salıha Özdemir, Ege Un. Solar Energy Institute, Turkey
Ceylan Zafer, Ege Un. Solar Energy Institute, Turkey
Canan Varlıkli, Ege Un. Solar Energy Institute, Turkey
Siddik Icli, Ege Un. Solar Energy Institute, Turkey

P3.F. 14
*Organic Electrochemical Light Emitting Field Effect Transistors*

Cigdem Yumusak, Yildiz Technical University, Turkey
Serdar Sariciillé, Linz Institute for Organic Solar Cells, Austria

P3.F. 15
*Development of Quantitative Structure-reactivity Relationships for the Free Radical Polymerization of Acrylate Monomers*

Mehtap İşik, Boğaziçi University, Turkey
Özlem Karahan, Boğaziçi University, Turkey
Viktorya Aviyente, Boğaziçi University, Turkey

P3.F. 16
*The Effects of PEDOT:PSS layer and Temperature Annealing on the Performance of Inverted Type Polymer Solar Cells*

Ergul Meltem Akcan, Yildiz Technical University, Turkey
Adem Karsli, Yildiz Technical University, Turkey
Nursel Yavuz, Yildiz Technical University, Turkey
Serap Gunes, Yildiz Technical University, Turkey

P3.F. 17
*A Computational Approach To The Free Radical Polymerization Kinetics Of Ethyl (α-hydroxy) methacrylates In Solvent*

Berna Dogan, Bogazici University, Turkey

P3.F. 18
*Enhanced Charge Mobility of Hole Transport Materials on Ito via Self Assembled Monolayers Investigated By Using Space-charge-limited Current*

Ali Kemal Havare, Ege University, Turkey
Nesli Yagmurcukardes, Izmir Institute of Tec., Turkey
Hasan Aydin, Izmir Institute of Technology, Turkey
Mavise Seker, Izmir Institute of Technology, Turkey
Mustafa Can, Ege University, Turkey
Serafettin Demic, Ege University, Turkey
Salih Okur, Izmir Institute of Technology, Turkey

P3.F. 19
*Pleds Based on PPE-PPV Polymers*

Emine Tekin, TUBITAK-UME, Turkey
Selin Pravadlı Mucur, TUBITAK-UME, Turkey
Elif Altı̇ṛ Parlåk, TUBITAK-UME, Turkey
Daniel A. M. Egbe, Linz Institute for Organic Solar Cells (LIOS), Austria
**THEME G:**
Nano-optics, Nano-Optoelectronics, Nano-Photonics

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**June 30, Thursday 15:00 – 16:30**
**SUNUM**

**P3.G. 1**
*Temperature Dependence of Optical Properties of PMN-base Nano-powders*
Mahdi Ghasemifard, Shahid Beheshti University, Iran

**P3.G. 2**
*Determination and Analysis of the Optical Properties of Organic Perylene and Its Derivatives Thin Films*
Zeynep Nałçąçgil, Selcuk University, Turkey
Narin Şimşir, Selcuk University, Turkey
Ö. Faruk Yüksel, Selcuk University, Turkey
Mehmet Şahin, Selcuk University, Turkey
Mahmut Kuş, Selcuk University, Turkey

**P3.G. 3**
*Intersubband Optics in Semiconductor Quantum Wells Under The Electric And Magnetic Fields*
Ibrahim Karabulut, Selçuk University, Turkey

**P3.G. 4**
*Inflective Structures on The Orbitals Of Electron Sharing Molecules With The Stochastic Discontinuity Effects: The Definition Of Orbitron Mechanism*
Taner Sengör, Yıldız Technical University, Turkey

**P3.G. 5**
*Plasmonics Waveguide Arrays Based On Metal Nanoparticles*
Halil Akcalı, TOBB.ETU, Turkey
İbrahim Akcalı, TOBB ETU, Turkey

**P3.G. 6**
*Nonlinear Optical Properties of Nanocrystalline ZnS: Mn Thin Films*
Reza Sahraei, University of Ilam, Iran
Alireza Goudarzi, University of Golestan, Iran
Mohammad Hosien Majles Ara, Tarbiat Moallem University, Iran
Ali Daneshfar, University of Ilam, Iran

**P3.G. 7**
*New Frequency Generation with Metallic Nanoantennas on As2Se3*
Hüseyin Duman, UNAM, Turkey
Murat Kılınç, Bilkent University, Turkey
Tural Khudiyev, UNAM, Turkey
Mehmet Bayındır, UNAM, Turkey

**P3.G. 8**
*Light Reflection from A Cholesteric Liquid Crystal Film*
Sevda Özev, Yuzuncu Yil University, Turkey
Hava Bektaş, Yuzuncu Yil University, Turkey
Rıdvan Karapinar, Yuzuncu Yil University, Turkey

**P3.G. 9**
*Studies on the Chromaticity and Phase Conversion in Nanocrystalline Y2O3: Eu Synthesized By Pechini and Combustion Methods*
Yadolah Ganjkhanlou, MERC, Iran
Mahmood Kazemzad, MERC, Iran
Fereidoun Alikhani Hessari, MERC, Iran
NanoTR VII - 7th Nanoscience and Nanotechnology Conference

POSTER PRESENTATIONS

THEME H:
Nano-Fabrication, Nano-Lithography, Nano-Manipulation

June 30, Thursday 15:00 – 16:30
SUNUM

P3.H. 1
Deposition and Characterization of YBCO/STO Thin Films on Cube-textured Niw Substrates By Pulsed Electron Deposition
Yasar Gul Mutlu, Selcuk University, Turkey
Zafer Mutlu, Selcuk University, Turkey
Oguz Dogan, Selcuk University, Turkey

P3.H. 2
Focused Ion Beam Based Prototyping, Structuring and Characterization of Organic Optoelectronic Devices at Nanoscale
Meltem Sezen, Graz University of Technology, Austria
Harald Plank, Graz University of Technology, Austria
Thomas Haber, Graz University of Technology, Austria
Christoph Auner, Joanneum Research GmbH, Austria
Evelin Fisslthaler, Graz University of Tech., Austria
Boril Chernev, Graz Center for Electron Microscopy, Austria
Werner Grogger, Graz University of Tech., Austria
Peter Poelt, Graz University of Technology, Austria

P3.H. 3
Synthesis, Transfer and Characterization of Cvd Growth Graphene on Gold and Cupper
Görkem Soyumer, Sabanci University, Turkey
Seda Aksoy, Sabanci University, Turkey
Cem Celebi, Sabanci University, Turkey
Ahmet Oral, Sabanci University, Turkey
Ismet Inonu Kaya, Sabanci University, Turkey

P3.H. 4
Construction of a Combined Non-contact Atomic Force Microscope & Scanning Tunnelling Microscope (NC-AFM/STM)
Derya Gemicic, Sabanci University, Turkey
Ümit Çelik, Istanbul Technical University, Turkey
Ahmet Oral, Sabanci Universitesi, Turkey
Husnu Aslan, Sabanci Universitesi, Turkey

P3.H. 5
Effects of Roughness and Relative Humidity on Adhesion for Si (100)
Arzu Çolak, University of Twente, Netherlands
Herbert Wormeester, Un. of Twente, Netherlands
Harold J. W. Zandvliet, Un. of Twente, Netherlands
Bene Poelsema, University of Twente, Netherlands

P3.H. 6
Sensitive Position Detection in Optical Trapping By Optical Scattering
Ahmet Danış, Eskisehir Osmangazi University, Turkey
Sevinç Gündüz, Eskisehir Osmangazi University, Turkey
Elvan Sayin, Eskisehir Osmangazi University, Turkey
Sertaç Eroğlu, Eskisehir Osmangazi University, Turkey

P3.H. 7
Importance of Beam-steering In Optical Trapping
Sertaç Eroğlu, Eskisehir Osmangazi University, Turkey
Elvan Sayin, Eskisehir Osmangazi University, Turkey
Ahmet Danış, Eskisehir Osmangazi University, Turkey
Sevinç Gündüz, Eskisehir Osmangazi University, Turkey
**Theme I:**
Nanoscale Characterization, Nano-imaging, Nanoscopy, Nano-Metrology

**June 30, Thursday 15:00 – 16:30  
SUNUM**

| P3.I. 1 | Multi-frequency Measurements for Discerning the Layers  
Mustafa Ürel, UNAM, Turkey  
Okan Öner Ekiz, UNAM, Turkey  
Aykutlu Dâna, UNAM, Turkey |
| --- | --- |
| P3.I. 2 | Sensitivity Comparison of First Two Flexural Modes for Different Samples Using Bimodal-AFM  
Tugba Nur Ozturk, Istanbul Technical Un., Turkey  
Ramazan Sahin, Istanbul Technical University, Turkey  
Umit Celik, Istanbul Technical University, Turkey  
Hakan O兹gur Ozer, Istanbul Technical Un., Turkey |
| P3.I. 3 | Fabrication and Characterization of Nanocrystalline Cobalt Oxide Thin Films  
Gholjamal Toghdori, University of Guilan, Iran  
Seyed Mohammad Rozati, University of Guilan, Iran |
| P3.I. 4 | Low Temperature Scanning Probe Microscope (It-spM) Operating in A Cryogen-free Cryostat, 1.5-300k  
Өзгүр Карци, NanoManyetik Bilimsel Cihazlar Ltd, Hacettepe University, Turkey  
Гизем Дurar, NanoManyetik Bilimsel Cih. Ltd, Turkey  
Yury Bugoslavsky, Cryogenic Ltd, United Kingdom  
Renny Hall, Cryogenic Ltd, United Kingdom  
Ahmet Oral, Sabanci University, Turkey |
| P3.I. 5 | Surface Characterization of Materials by Micr- 
tomography And Comparison with Sem Stereoscopic Imaging: A Case Study For Volcanic Ash Particles  
Orkun Ersoy, Niğde University, Turkey  
Ердаль Сын, Hacettepe University, Turkey  
Еркан Айдар, Hacettepe University, Turkey  
Илкан Татар, Hacettepe University, Turkey  
Хакан Хамдий Челик, Hacettepe University, Turkey |
| P3.I. 6 | Use of AFM for Probing Charge Distribution On Oxide Surfaces In The Presence Of Specifically Adsorbing Ions.  
Ayse Gurel, Izmir Institute of Technology, Turkey  
Гулнигал Озек Йелкен, Izmir Institute of Tech., Turkey  
Мехмет Полат, Izmir Institute of Technology, Turkey |
| P3.I. 7 | Photon Scanning Tunneling Microscopy System for Observing Optical Excitations at Nanoscale Tunnel Junctions  
Мехмет Сельман Тамер, Istanbul Technical Un., Turkey  
Огuzhan Гүрлии, Istanbul Technical University, Turkey |
| P3.I. 8 | Preparation and Study of Nanostructure Black Chrome By Electroplating Technique for Use in Solar Collector: Effect of Different Substrates  
Zahra Jafari Farshami, University of Guilan, Iran  
Seyed Mohammad Rozati, University of Guilan, Iran |
| P3.I. 9 | Scanning Tunnelling Microcopy (STM) At 20mk In A Cryogen Free Dilution Refrigerator (dr)  
Мунир Деде, Nanomagnetics Instruments Ltd., Turkey  
Chris Snelling, Oxford Instruments, United Kingdom  
Ahmet Oral, Sabanci University, Turkey |
P3.I. 10

Construction of Small Amplitude Atomic Force/ scanning Tunneling Microscope
Ramazan Şahin, Istanbul Technical University, Turkey
Umit Çelik, Istanbul Technical University, Turkey
Hakan Özgür Özer, Istanbul Technical University, Turkey

P3.I. 11

Characterization of Nanostructure Black Nickel Coatings Electrodeposited On Brass Substrate for Using In Solar Collectors
Zahra Ghasempour, University of Guilan, Iran
Seyed Mohammad Rozati, University of Guilan, Iran

P3.I. 12

Measuring Lateral Forces of Graphene Layers Using Frictional Force Microscopy (FFM) At Different Crystallographic Directions
Nihan Özkan Aytekin, Istanbul Technical University, Turkey
Selçuk Sonuşen, Sabanci University, Turkey
Ümit Çelik, Istanbul Technical University, Turkey
Hidayet Çetin, Bozok University, Turkey
Ahmet Oral, Sabanci University, Turkey

P3.I. 13

Fpga Based Fully Digital Lock-in And Phase Locked Loop (pll) For Non-contact Atomic Force Microscopy
Ümit Çelik, Istanbul Technical University, Turkey
H. Özgür Özer, Istanbul Technical University, Turkey
Ahmet Oral, Sabanci University, Turkey

P3.I. 14

Scanning Transmission Electron Microscope Studies on Interphase Boundaries In Al Infiltrated B4C
Pinar Kaya, Anadolu University, Turkey
Servet Turan, Anadolu University, Turkey
Gürsoy Arslan, Anadolu University, Turkey

P3.I. 15

Particular Thickness Effect on Relative Interfacial Displacements Fields
Hülya Öztürk, Ahi Evran University, Turkey

P3.I. 16

Determination of Residual Stresses and Nano Mechanical Properties of Nanostructured Materials After Different Shot Peening Processes
Okan Unal, Bartin University, Turkey
Abdullah Cahit Karaoglanli, Bartin University, Turkey
İbrahim Karademir, Bartin University, Turkey
Remzi Varol, Bartin University, Turkey

P3.I. 17

Study of TiO2 (100) Reconstructed Surfaces by Scanning Nonlinear Dielectric Microscopy
Nobuhiro Sawai, Tohoku University, Japan
Yasuo Cho, Tohoku University, Japan

P3.I. 18

Nexafs-txm Of TiO2-based Nanostructures
Peter Guttmann, Helmholtz-Zentrum Berlin, Germany
Carla Bittencourt, University of Antwerp, Belgium
Xiaxing Ke, University of Antwerp, Belgium
Gustaf Van Tendeloo, University of Antwerp, Belgium
Polona Umek, Institute Jozef Stefan, Slovenia
Chris P. Ewels, Université de Nantes, France
Stefan Rehbein, Helmholtz-Zentrum Berlin, Germany
Gerd Schneider, Helmholtz-Zentrum Berlin, Germany

P3.I. 19

Towards Atomic-scale engineering Of Sialon Ceramics
Hilmi Yurdakul, Anadolu University, Turkey
Juan C. Idrobo, Oak Ridge National Laboratory, USA
Stephen J. Pennycook, Oak Ridge National Lab., USA
Servet Turan, Anadolu University, Turkey

P3.I. 20

Advanced Scanning Capacitance Microscopy
Mao-Nan Chang, National Chung Hsing Un., Taiwan
Chin-Wei Hu, National Chung Hsing Un., Taiwan
Tung-Huan Chou, National Nano Device Laboratories, Taiwan
THEME K: Nano-Fluidics
THEME L: Nano-Actuators, Nano-Sensors

June 30, Thursday 15:00 – 16:30
SUNUM

P3.K. 1
One Step Synthesis of Ceria (CeO2) Nanofluids With Enhanced Thermal Transport Properties.
Mohsin Saleemi, Royal Institute of Tec. (KTH), Sweden
Nader Nikkam, Royal Institute of Tec. (KTH), Sweden
Muhammet S Toprak, Royal Institute of Tec., Sweden

P3.K. 2
Poiseuille Flow in a Nano-channel
Nevsan Şengil, Turkish Aeronautical Ass. Un., Turkey

P3.L. 1
Fevzi Sümer, Ege University, Turkey
Celrail Özbez, Izmir Institute of Technology, Turkey
Ömer Mermer, Ege University, Turkey
Mustafa Yılmaz, Selçuk University, Turkey
Serkan Sayın, Selçuk University, Turkey
Mahmut Kuş, Selçuk University, Turkey
Salih Okur, Izmir Institute of Technology, Turkey

P3.L. 2
Size and Morphology Dependent Humidity-sensing Properties of Zno Nanostructures
Nurdan Aşar, Istanbul University, Turkey
Nesli Tekgüzel Yaşmürkule, İzmir Institute of Technology, Turkey
Ayşe Erol, Istanbul University, Turkey
Salih Okur, İzmir Institute of Technology, Turkey
M. Çetin Arıkan, Istanbul University, Turkey

P3.L. 3
Gas Sensing Properties of TiO2 Nanotubes Fabricated By Anodization of Ti Thin Films'ı Bulk
Erdem Şennik, Gebze Yüksek Teknoloji Ens., Turkey
Necmettin Kılınç, Gebze Yüksek Teknoloji Ens., Turkey
Zafer Ziya Öztürk, Gebze Yüksek Teknoloji Ens., Turkey

P3.L. 4
Ibrahim Dursun, Izmir Institute Of Technology
Celrail Özbek, Izmir Institute Of Technology
Fevzi Sümer, Ege University, Turkey
Ömer Mermer, Ege University, Turkey
Mustafa Yılmaz, Selçuk University, Turkey
Serkan Sayın, Selçuk University, Turkey
Mahmut Kuş, Selçuk University, Turkey
Salih Okur, Izmir Institute Of Technology, Turkey

P3.L. 5
Structural, Electrical, Optical Properties of Semiconductor Ru-sno2 Films Derived By Sol-gel Method and Humidity Sensor Application
Hande Sözbilen, Ege Üniversitesi, Turkey
Mustafa Erol, Dokuz Eylül Üniversitesi, Turkey
Murat Bektas, Dokuz Eylul Üniversitesi, Turkey
Ömer Mermer, Ege Üniversitesi, Turkey
Erdal Çelik, Dokuz Eylül Üniversitesi, Turkey

P3.L. 6
Artificial Muscle by Using Nitinol
Kadir Sabanci, Selcuk University Doganhisar Vocational School, Turkey
THEME M: Nano-Robotics
THEME N: Nano-Mechanics, Nano-Tribology, Nano-Composites

June 30, Thursday 15:00 – 16:30
SUNUM

P3.M. 1
Magnetic E.coli in Channel: Theory vs. Experiment
Ahmet Fatih Tabak, Sabanci University, Turkey
Fatma Zeynep Temel, Sabanci University, Turkey
Serhat Yesilyurt, Sabanci University, Turkey

P3.N. 1
Effect of Two-step Sintering On Microstructure and Mechanical Properties of Mullite-sic Nanocomposites
Seyed Saeed Mirzaee, Material And Energy Research Center (MERC), Iran
Esmail Salahi, Material and Energy Research Center (MERC), Iran
Toraj Ebadzadeh, Material and Energy Research Center (MERC), Iran

P3.N. 2
Solid Phase Extraction and Determination of Ultra Trace Amounts of Calcium and Magnesium Ions Using Modified Magnetite Nanoparticles and Flame Atomic Adsorption Spectrometry
Mohammad Ali Karimi, Payame Noor University (PNU), Iran
Dadrahim Hooti, Payame Noor University (PNU), Iran
Asghar Askarpour Kabir, Payame Noor University (PNU), Iran
Shahla Nezhad Khorasani, Payame Noor University (PNU), Iran

P3.N. 3
Properties of Zinc Borate – Polymer Nano Composite Materials
Osman G. Ersoy, Arcelik A.S., Turkey
Ayhan Mergen, Marmara University, Turkey
Eren Dalgakiran, Arcelik A.S., Turkey
Hulya Bolek, Arcelik A.S., Turkey

P3.N. 4
Mg/Si3N4 Nano-composite Surface Layers On Az31 by Friction Stir Processing
Roozbeh Nassiri, 1Department of Welding, Science and Research Branch, Islamic Azad University, Iran
Seyed Farshid Kashani Bozorg, Univ. of Tehran, Iran

P3.N. 5
Processing Of Carbon Nano-tubes Reinforced Polymers by Plastic Injection
Sinan Dönmez, Marmara University, Turkey
Aykut Kentli, Marmara University, Turkey

P3.N. 6
Mechanical Properties of Mixed-layered Clay/polyethylene (mlc/pe) Nanocomposites
Ahmet Gürses, Atatürk University, Turkey
Semra Karaca, Atatürk University, Turkey
Kübra Güneş, Atatürk University, Turkey
Mehtap Ejder Korucu, Ataturk University, Turkey
Çetin Doğar, Erzincan University, Turkey

P3.N. 7
Production of Steel/tic Nano-composite Surface Layer Employing Friction Stir Processing
Ahmad Ghasemi, University of Tehran, Iran
Seyed Farshid Kashani-Bozorg, University of Tehran, Iran

P3.N. 8
In-situ Synthesis of Polystyrene Nanocomposites Containing Clay Modified with Vinlyc Surfactants
Merve Çetintaş, Istanbul Technical University, Turkey
Nurseli Uyanık, Istanbul Technical University, Turkey
**P3.O. 1**  
*Amyloid-like Peptide Templated Synthesis of Anatase TiO2 for Dssc Applications*  
*Ruslan Garifullin*, Bilkent University UNAM, Turkey  
*Oya Ustahüseyin*, Bilkent University UNAM, Turkey  
*Mustafa Övgür Güler*, Bilkent Univ. UNAM, Turkey

**P3.O. 2**  
*Investigation of Annealing Effects on the Structural and Optical Properties of Cigs Thin Films Deposited By Sputtering Technique*  
*İdris Candan*, Middle East Technical University, Turkey  
*H.Hüseyin Güllü*, Middle East Technical Un., Turkey  
*Mehmet Parlak*, Middle East Technical Un., Turkey

**P3.O. 3**  
*Determination of Optimal Carbon Content on A Particle Size of Life PO4/C Cathode Active Nano-material For Lithium-ion Batteries*  
*Ahmet Örnek*, Sakarya University, Turkey  
*Emrah Bulut*, Sakarya University, Turkey  
*Mahmut Özacar*, Sakarya University, Turkey

**P3.O. 4**  
*Investigation of Structural, Electrical and Optical Properties of Cu1-xagxinse2 Thin Films with Different Cu-Ag Ratios*  
*Hasan Hüseyin Güllü*, METU, Turkey  
*İdris Candan*, Middle East Technical University, Turkey

**P3.O. 5**  
*Microwave-assisted Synthesis of Copper Nanofluids for Heat Transfer Applications*  
*Nader Nikkam*, Royal Institute of Technology, Sweden  
*Mohsin Saleemi*, Royal Institute of Technology, Sweden  
*Muhhamet Toprak*, Royal Institute of Tech., Sweden  
*Mamoun Muhammed*, Royal Institute of Tech., Sweden  
*Ehsan Bitaraf Haghighi*, Royal Institute of Tech., Sweden  
*Rahmatollah Khodabandeh*, Royal Inst. of Tech., Sweden  
*Björn Palm*, Royal Institute of Technology, Sweden

**P3.O. 6**  
*Effects of Dielectric Environment of Metal Nanoparticles on Plasmonic Scattering for Light Trapping In Solar Cells*  
*Irem Tanyeli*, METU, Turkey  
*Fırat Es*, METU, Turkey  
*Raşit Turan*, METU, Turkey

**P3.O. 7**  
*Preparation and Characterization of the Thin Films of Delta-bi2o3-based Electrolyte Stabilized with Yb2O3 for Solid Oxide Fuel Cell Application*  
*Handan Ozlu*, Erciyes University, Turkey  
*Ersay Ersoy*, Nigde University, Turkey  
*Soner Çakar*, Erciyes University, Turkey  
*Orhan Turkoğlu*, Erciyes University, Turkey

**P3.O. 8**  
*Surface Plasmonic Enhancement of Bulk Heterojunction Solar Cells*  
*Ahmet Deniz Usta*, Bilkent University, Turkey  
*Ali Kemal Okyay*, Bilkent University, Turkey

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**THEME O:**  
Nanotechnology for Energy (fuel cell, solar cell, hydrogen storage)

**June 30, Thursday 15:00 – 16:30**  
**SUNUM**
P3.O. 9

*Magnetron Sputtering Of Large Area Ito Thin Films on Glass and Polycarbonate Substrates*

Zeynep Meriç, İzmir Institute of Technology, Turkey

P3.O. 10

*The Synthesis and Characterization of Composite LaNi0.6Fe0.4O3 /delta-dsb Thin Film Cathode Active Layers In Sofc’s*

Ersay Ersoy, Nigde University, Turkey
Handan Özlü, Erciyes University, Turkey
Soner Çakar, Erciyes Universities, Turkey
Orhan Turkoğlu, Erciyes University, Turkey

P3.O. 11

*Indirect Hydrogen Storage In Metal Ammines*

Adem Tekin, Istanbul Technical University, Turkey
THEME P: Nanotechnology in Textile, Agriculture and Food Science
THEME R: Social, economical and environmental effects, safety and ethical issues

June 30, Thursday 15:00 – 16:30
SUNUM

P3.P. 1
Zinc Oxide Nanowire Decorated Multifunctional Cotton Fabrics
Elif Selen Ates, Middle East Technical University, Turkey
Husnu Emrah Unalan, METU, Turkey

P3.P. 2
Silver Nanoparticles as New Agents to Extend Vase-life Of Cut Chrysanthemum Flowers
Mahdieh Mohadesi, Islamic Azad University, Iran
Amin Baghizadeh, Int. Center for Science, Iran
Dariush Afzali, International Center for Sciences, Iran

P3.P. 3
The Interaction between Selected Contaminators in Water Resources and Biological Molecules by Molecular Modelling Methods
Cemal Köprülioğlu, Ege University, Turkey

P3.P. 4
Usage of the Ultrasound Technology for Producing Textile Finishing Chemicals Having Nano Particle Size
Onur Balci, The University Of Kahramanmaras Sütçü Imam, Turkey

P3.P. 5
Electrospinning of Silk Fibroin/ Hyaluronic Acid Blend Nanofibers
Senem Karagönlü, Ege University, Izmir, Turkey
Güldemet Başal, Ege University, Izmir, Turkey
Oğuz Bayraktar, Izmir Institute of Technology, Turkey
Atay Atabay, Dokuz Eylül University, Turkey

P3.P. 6
Fabrication of Olive Leaf Extract Loaded Silk Fibroin/ Hyaluronic Acid Nanofibers
Senem Karagönlü, Ege University, Turkey
Güldemet Başal, Ege University, Turkey
Oğuz Bayraktar, Izmir Institute of Technology, Turkey
Atay Atabay, Dokuz Eylül University, Turkey

P3.P. 7
Embedded TiO2 Short Nanofibers into Polymeric Nanofibrous Matrix
Ali Ekrem Deniz, Bilkent University UNAM, Turkey
Aslı Çelebioğlu, Bilkent University UNAM, Turkey
Tamer Uyar, Bilkent University UNAM, Turkey
Fatma Kayaci, Bilkent University UNAM, Turkey

P3.P. 8
Cyclodextrin Functionalized Hydroxypropylcellulose Nanofibers via Electrospinning
Zeynep Aytaç, Bilkent University- Unam, Turkey
Tamer Uyar, Bilkent University-Unam, Turkey

P3.P. 9
Electrospun Nanofibers from Non-polymeric Structures: Cyclodextrin Nanofibers
Aslı Çelebioğlu, Bilkent University-UNAM, Turkey
Tamer Uyar, Bilkent University-UNAM, Turkey

P3.P. 10
Investigation of Synergistic Effect of Znb and App for Flame Retardant Textile Finishing Chemical
Elif Kaynak, Anadolu University, Turkey
Mustafa E. Ureyen, Anadolu University, Turkey
A. Savas Koparal, Anadolu University, Turkey
Aydin Dogan, Anadolu University, Turkey
**P3.P. 11**  
*Electrospinning of Acrylonitrile-vinyl Acetate Copolymers*  
**Suat Çetiner**, Istanbul Technical University, Turkey  
**Burcu Arman**, Istanbul Technical University, Turkey  
**Selda Şen**, Istanbul Technical University, Turkey  
**A. Sezai Saraç**, Istanbul Technical University, Turkey

**P3.P. 12**  
*Electrokinetic Properties of the Grape Wood As A Low-cost Sorbent*  
**Esra Evrim Yalçınkaya**, Ege University, Turkey  
**Ebru Mavioglu Ayan**, Ege University, Turkey  
**Gülşah Kbrisloğlu**, Ege University, Turkey  
**Ash Toptaş**, Ege University, Turkey

**P3.P. 13**  
*Air Permeability of A Micro-fiber Filter Coated With Pa6 Nanofibers*  
**Gamze Doğan**, Ege University, Turkey  
**Güldemet Başal**, Ege University, Turkey  
**Oğuz Bayraktar**, Izmir Institute of Technology, Turkey

**P3.P. 14**  
*Structures and Characterization of Inclusion Complexes of Vanillin With α-, β- And γ – Cyclodextrin*  
**Fatma Kayacı**, Bilkent University Unam, Turkey  
**Tamer Uyar**, Bilkent University Unam, Turkey

**P3.P. 15**  
*Effect of Ambient Parameters on Electrospun Polyvinyl Alcohol (PVA) Nanofibers*  
**Sema Helvacikara**, Gaziantep University, Turkey  
**Ali Kirecci**, Gaziantep University, Turkey

**P3.P. 16**  
*Silver Containing Nanofibers for Protective Clothes*  
**Murat Demirbilek**, Hacettepe University, Turkey  
**Zeynep Karahaliloğlu**, Hacettepe University, Turkey  
**Eda Yalçın**, Aksaray University, Turkey  
**Emir Baki Denkbaş**, Hacettepe University, Turkey

**P3.R. 1**  
*Sepration/preconcentration Of Hg (ii) In Water Samples Using Modified Magnetite Nanoparticles Prior To Determination By Cold Vapor Atomic Absorption Spectrometry*  
**Mohammad Ali Karimi**, Payame Noor University (PNU), Sirjan, Iran  
**Ali Reza Mohadesi**, Payame Noor University (PNU), Kerman, Iran  
**Asghar Askarpour Kabir**, Payame Noor University (PNU), Sirjan, Iran

**P3.R. 2**  
*Sister Chromatid Exchanges Induced By Titanium Dioxide Nanoparticles*  
**Funda Demirtaş**, Gazi University, Turkey  
**Fatma Ünal**, Gazi University, Turkey  
**Deniz Yüzbaşıoğlu**, Gazi University, Turkey

**P3.S. 1**  
*Turkish Accelerator Complex, Self Amplified Spontaneous Emission Free Electron Laser*  
**Hatice Duran Yıldız**, Dumlupinar University, Turkey  
**Ilker Yıldız**, Metu, Turkey  
**Omer Yavas**, Ankara University, Turkey
CAMPUS PLAN

01 MAIN GATE
10 SHUTTLE STATION
21 LAKE

ACADEMIC AND ADMINISTRATIVE FACILITIES

02 ADMINISTRATION
03 INFORMATION CENTER
04 SCHOOL OF LANGUAGES
05 FACULTY OF ARTS & SOCIAL SCIENCES
  FASS-G062 (Auditorium)
06 SCHOOL OF MANAGEMENT
07 FACULTY OF ENGINEERING & NATURAL SCIENCES
  FENS-L045
  FENS-G032
  FENS-G035
  FENS-G077 (Auditorium)
08 GREENHOUSE
09 NANOTECHNOLOGY CENTER (SUNUM)
11 CENTRAL PLANT
24 WASTE TREATMENT PLANT

HOUSING

13 STAFF HOUSING
19 PRESIDENT’S RESIDENCE

17 DORMITORIES

SOCIAL FACILITIES

12 UNIVERSITY CENTER
   Cinema Hall
   Cafeteria
   AKBANK Bank Office
   Dia-SA Grocery Store
   HOMER Bookstore
   Dry Cleaning
14 DAY CARE CENTER
15 PLAYGROUND
16 HANGAR CAFE
18 COMMUNITY SUPPORT – HEALTH CENTER
20 AMPHITHEATRE
22 PERFORMING ARTS CENTER (PAC)
23 SPORTS CENTER
25 SPORTS HALL
EXHIBITION FLOOR PLAN
İNŞEL Yapı ve Teknik Donatım Sistemleri Ltd. Şti.