• 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 28, Tuesday**
13:30 – 15:00
Chair: Carla Bittencourt
FENS G077

**13:30 S1-A.1***
*Development of Novel Quantum dots and Magnetic-Luminescent Hybrid*
Funda Yagci Acar, Koç University, Turkey

**14:00 S1-A.2**
*Decreasing the Branch Frequency in Precision Polyethylene: The Effect of Alkyl Branch Size On Nanoscale Morphology*
Bora Inci, University of Florida, USA
Kenneth B. Wagener, University of Florida, USA

**14:15 S1-A.3**
*The Stability of Silicon Cage Nanostructures*
Ali Zerentürk, Gebze Institute Of Technology, Turkey
Savaş Berber, Gebze Institute Of Technology, Turkey

**14:30 S1-A.4**
*Superoleophobic Surfaces: Pattern Size and Geometry Effects*
C. Elif Özen Cansoy, Gebze Institute Of Tech., Turkey
H. Yildirim Erbil, Gebze Institute Of Tech., Turkey
Orhan Akar, Middle East Technical University, Turkey

**14:45 S1-A.5**
*Geometric Control of Graphite Micro-stains By Drop Evaporation of SDS-graphite Dispersions*
Sevgi Cavusoglu, Gebze Institute of Technology, Turkey
Merve Dandan Doganci, Gebze Institute of Technology, Turkey
H. Yildirim Erbil, Gebze Institute of Technology, Turkey

**June 28, Tuesday**
16:30 – 17:45
Chair: İskender Yılgör
FENS G077

**16:30 S1-A.6***
*Organic-Inorganic Polymer Nano-Hybrids Based on Sol-Gel Reaction*
Yoshiki Chujo, Kyoto University, Japan

**17:00 S1-A.7**
*Contact Angle Hysteresis-surface Coverage Relation by Drop-wise Condensation*
Ikrime Orkan Ucar, Gebze Institute of Tech., Turkey
H. Yildirim Erbil, Gebze Institute of Tech., Turkey

**17:15 S1-A.8**
*Magnetic and Dielectric Properties of MnxCo1-xFe2O4 Nanoparticles Synthesized By PEG Assisted Hydrothermal Method*
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

**17:30 S1-A.9**
*Large Area Micro Patterned Polymer Surfaces from Sulphonated Polystyrene and Polypropylene-Polyethylene Copolymer Blends*
Nevin Atalay Gengec, Gebze Institute Of Tech., Turkey
H. Yildirim Erbil, Gebze Institute Of Technology, Turkey

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* Invited talks
### ORAL PRESENTATIONS SESSION SERIES 1

**June 29, Wednesday**

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<tr>
<td>11:00</td>
<td>S1-A.10</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>
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<td>11:30</td>
<td>S1-A.11</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>
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<td>11:45</td>
<td>S1-A.12</td>
<td>Effects of Vacancy Defects On Thermal Conductivity In Crystalline Silicon</td>
<td>Aylin Yildiz, Dokuz Eylul University, Turkey, Tahir Cagin, Texas A&amp;M University, USA</td>
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<tr>
<td>12:00</td>
<td>S1-A.13</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, Ehsan Marzbanrad, Material &amp; Energy Research Center, Iran, Babak Raissi, Material &amp; Energy Research Center, Iran</td>
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<tr>
<td>12:15</td>
<td>S1-A.14</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, Oezgur Cevher, Sakarya University, Turkey, Deniz Gultekin, Sakarya University, Turkey, Hatem Akbulut, Sakarya University, Turkey</td>
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<tr>
<td>13:30</td>
<td>S1-A.15</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, Caefer Yavuz, KAIST, Korea, Republic Of</td>
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<tr>
<td>13:45</td>
<td>S1-A.16</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 Urbietha, University Complutense of Madrid, Spain, Paloma Fernandez, Univ. Complutense of Madrid, Spain, Javier Piqueras, Univ. Complutense of Madrid, Spain</td>
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<tr>
<td>14:00</td>
<td>S1-A.17</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>
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<td>14:30</td>
<td>S1-A.19</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>
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 Yanmaz 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 Afm Study Of Exfoliated Graphene On SiO2 And Mica
Serhat Yanık, Fatih University, Turkey
Kurtuluş Gölcük, 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 Çiftçioglu, 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 Gültekin, 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 Gürlü, Istanbul Technical University, Turkey
THEME B:
Nanotubes, Nanowires

June 30, Thursday 11:00 – 12:30
Chair: Oğuz Gülseren  FENS G077

11:00  S1-B.1*
Self Assembly of Peptides into Nanotubes: When and How?
Seyda Bucak, Yeditepe University, Turkey

11:30  S1-B.2*
Interactions between Metals and Oxygen-Plasma Treated Carbon Nanotubes
Carla Bittencourt, University of Antwerp, Belgium

12:00  S1-B.3
Highly Ordered Arrays of Nickel Nanowires Fabricated by Using the AAO Template Combined with the Electrodeposition
Pembe Özer, TUBITAK MAM, Turkey
Behiye Yüksel, TUBITAK MAM, Turkey
Mustafa Aslan, TUBITAK MAM, Turkey
Yücel Birol, TUBITAK MAM, Turkey

12:45  S1-B.4
Kilometer-long, Ordered, Uniform Piezoelectric Nanotube Array
Mehmet Kanik, UNAM, Turkey
Mecit Yaman, UNAM, Turkey
Mehmet Bayındır, UNAM, Turkey

June 30, Thursday 13:30 – 15:00
Chair: Oğuz Gülseren  FENS G077

13:30  S1-B.5*
Graphene and Graphene-Oxide based Materials for Energy Applications
Taner Yıldırım, NIST, USA

June 30, Thursday 16:30 – 17:45
Chair: Oğuz Gülseren  FENS G077

16:30  S1-B.10*
Graphene Materials and Applications
Cengiz Özkan, University of California Riverside, US

17:00  S1-B.11
Nanowires for Sensing and Wave-guiding
Can Boran Akdal, Bahcesehir University, Turkey
Ergun Simsek, Bahcesehir University, Turkey
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
Özcan 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 Özbek, 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, Yildiz technical University, Turkey
Cem B. Ustundag, Yildiz Technical University, Turkey
Ali Celik, Anadolu University, Turkey
Alpagut Kara, Anadolu University, Turkey
Figen Kaya, Yildiz Technical University, Turkey
Cengiz Kaya, Yildiz 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
Chair: Ali Arslan Kaya

09:00 – 10:30
FASS G062

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 Çiftçioğlu, İzmir Institute of Techn., Turkey

10:00  S1-C.5
Synthesis and Characterization of Pani/ZnO Nanocomposites and Photo-catalytic Properties
Gülsah Şefika Aslım, Selcuk University, Turkey
Fahriye Sara, Selcuk University, Turkey
Handan Gülce, Selcuk University, Turkey
Ahmet Gülce, Selcuk University, Turkey
Volkan Eskizeybek, 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
Chair: Ali Arslan Kaya

11:00 – 12:15
FASS G062

11:00  S1-C.7
Synthesis of TiO2 Coated Self-cleaning Materials
Münevver Sökmen, Karadeniz Technical Univ., Turkey
İlknur Tatlidil, Karadeniz Technical University, Turkey
Chris Breen, Karadeniz Technical University, Turkey
Emin Bacaksiz, 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 Kilinc, 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*

**Gülnan 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)
### June 28, Tuesday 13:30 – 15:00

**Chair:** Zafer Gedik  
**Location:** FENS L045

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<tr>
<td>13:30</td>
<td>S2-E.1*</td>
<td>Magnetic Nanostructures; Top Down and Bottom up Approach</td>
<td>Peter Varga, The Vienna University of Tech., Austria</td>
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<td>14:00</td>
<td>S2-E.2</td>
<td>Interlayer Exchange Coupling in Py/cr/py Multilayers</td>
<td>Bekir Aktaş, Gebze Institute of Technology, Turkey</td>
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<td>Ramazan Topkaya, Gebze Institute of Tech., Turkey</td>
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<td>Mustafa Erkovan, Gebze Institute of Techn., Turkey</td>
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<td>14:15</td>
<td>S2-E.3</td>
<td>High Frequency Performance of Individual and Arrays of Single-walled Carbon Nanotubes</td>
<td>Osman Balci, Bilkent University, Turkey</td>
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<td>Coskun Kocabas, Bilkent, Turkey</td>
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<td>14:30</td>
<td>S2-E.4</td>
<td>Ono Type Flash Memory Using a High-k Tunnel Oxide Layer</td>
<td>Deniz Kocaay, UNAM, Bilkent University, Turkey</td>
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<td>Aykutlu Dana, UNAM, Bilkent University, Turkey</td>
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<tr>
<td>14:45</td>
<td>S2-E.5</td>
<td>Thermal Properties of Two Dimensional Quantum Dots Confined by An-harmonic Potentials</td>
<td>Berna Gulveren, Selcuk University, Turkey</td>
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*Invited talks

### June 28, Tuesday 16:30 – 17:45

**Chair:** Fikret Yıldız  
**Location:** FENS L045

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<td>16:30</td>
<td>S2-E.6*</td>
<td>Irreversibility of Single-Electron Transfer through a Small Conductor</td>
<td>Bruno Küng, ETH Zürich, Switzerland</td>
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<td>17:00</td>
<td>S2-E.7</td>
<td>Landau-Lifshitz-Bloch Simulations of Magnetization Dynamics at Elevated Temperatures</td>
<td>Ufuk Kilic, Bogazici University, Turkey</td>
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<td>Ismail Volkan Inlek, Bogazici University, Turkey</td>
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<td>Ibrahim Cinar, Turkey</td>
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<td>Bruce Terris, Hitachi Global Technologies, USA</td>
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<td>Gulen Aktas, Bogazici University, Turkey</td>
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<td>Ozhan Ozatay, Bogazici University, Turkey</td>
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<td>17:15</td>
<td>S2-E.8</td>
<td>Spin Transport in CVD Synthesized Single Layer and Bilayer Graphene</td>
<td>Ahmet Avsar, National Univ. of Singapore, Singapore</td>
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<td>Tsung-Yeh Yang, RWTH Aachen University, Germany</td>
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<td>Su-Kang Bae, Sungkyunkwan Univ., Korea</td>
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<td>Gernot Guntherodt, RWTH Aachen Univ., Germany</td>
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<td>Byung Hee Hong, Sungkyunkwan Univ., Korea</td>
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<td>Bernd Beschoten, RWTH Aachen University, Germany</td>
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<td>Barbaros Ozyilmaz, National Univ. of Singapore,</td>
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<td>17:30</td>
<td>S2-E.9</td>
<td>3-D Simulation Model of Switching Dynamics in Phase Change Memory</td>
<td>İbrahim Çinar, Bogaziçi Universitesi, Turkey</td>
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<td>Gülşen Kösoğlu, Bogaziçi Universitesi, Turkey</td>
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<td>Özgür Burak Aslan, Bogaziçi Universitesi, Turkey</td>
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<td>Gulen Aktas, Bogaziçi University, Turkey</td>
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<td>Ozhan Ozatay, Bogaziçi University, Turkey</td>
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*Invited talks
June 29, Wednesday
11:00 – 12:30
FENS L045
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, İzmir Institute of Tech., Turkey
Lütfi Özyüzer, İzmir 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
FENS L045
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 İbrahim 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
THEME F:
Organic and Hybrid Electronics: OLED, OTFT, OSC, DSSC

June 30, Thursday 11:00 – 12:15
Chair: İsmat Shah

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, Sabanci University, Turkey
Anıl Günay Demirkol, Sabanci University, Turkey
Cem Çelebi, Sabanci University, Turkey
İsmet İnönü Kaya, Sabanci 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 Varlıklı, Ege Univ. Solar Energy Institute, Turkey
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<th>Time</th>
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<tr>
<td>June 30, Thursday</td>
<td>16:30 – 17:30</td>
<td><strong>S2-G.1</strong> Coupling of Localized and Surface Plasmons on Subwavelength Silver Gratings</td>
<td>Sencer Ayas, UNAM, Bilkent Universitesi, Turkey, Hasan Guner, UNAM, Bilkent Universitesi, Turkey, Burak Türker, UNAM, Bilkent Universitesi, Turkey, Okan Öner Ekiz, UNAM, Bilkent Universitesi, Turkey, Aykutlu Dana, UNAM, Bilkent Universitesi, Turkey</td>
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<td><strong>S2-G.2</strong> Nanopillar Arrays for High-efficiency Photodetection in the Nightglow Wavelength Window</td>
<td>Levent E. Aygün, Bilkent University, Turkey, M. Cengiz Onbasli, Massachusetts Institute of Technology, USA, Ali Kemal Okyay, Bilkent University, Turkey</td>
</tr>
<tr>
<td>July 1, Friday</td>
<td>09:00 – 10:15</td>
<td><strong>S2-G.5</strong> Structural Coloring in Cylindrical Core-shell Nanowires</td>
<td>Tural Khudiyev, Bilkent University, Turkey, Erol Ozgur, Bilkent University, Turkey, Mecit Yaman, Bilkent University, Turkey, Mehmet Bayindir, Bilkent University, Turkey</td>
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<td><strong>S2-G.6</strong> Quasi One-way Light Propagation in Chirped Photonic Crystal Waveguides</td>
<td>Hamza Kurt, TOBB ETU, Turkey, Dönê Erbaş, TOBB ETU, Turkey</td>
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<td><strong>S2-G.7</strong> Quasi-bessel Beam Generation by Annular Photonic Crystals</td>
<td>Mirbek Turduev, TOBB ETU, Turkey, Hamza Kurt, TOBB ETU, Turkey, Kadir Üstün, TOBB ETU, Turkey</td>
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<td><strong>S2-G.8</strong> Large and Dynamical Tuning of Chalcogenide Photonic Crystal by Temperature Modulation</td>
<td>Mecit Yaman, Bilkent University, Turkey, Hasan Esat Kondakci, Bilkent University, Turkey, Mehmet Bayindir, Bilkent University, Turkey</td>
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<td><strong>S2-G.9</strong> Wavelength Division Demultiplexer on Diffraction Inhibited Photonic Crystal</td>
<td>Kadir Üstün, TOBB ETU, Turkey, Hamza Kurt, TOBB ETU, Turkey</td>
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<tr>
<td>Time</td>
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| 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

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 Sağroğlu, 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 Onbaşı, 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
Bahadir Tunaboylu, Istanbul Şehir University, Turkey
**THEME O:**
Nanotechnology for Energy (fuel cell, solar cell, hydrogen storage)

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**June 30, Thursday**

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<tr>
<td>13:30 – 15:00</td>
<td>S2-O.1*</td>
<td>Nanotechnology and Energy Alternatives</td>
<td>S. Ismat Shah, University of Delaware, US</td>
</tr>
<tr>
<td>14:00</td>
<td>S2-O.2</td>
<td>New Fuel Cell Electrodes Made From Graphene Nanosheets and Their Nanocomposites</td>
<td>Burcu Saner, Sabanci University, Turkey; Alp Yürüm, Technion Israel Institute of Tech., Israel; Selmiye Alkan Gürsel, Sabanci University, Turkey; Yuda Yürüm, Sabanci University, Turkey</td>
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<tr>
<td>14:15</td>
<td>S2-O.3</td>
<td>Nanostructures by Glancing Angle Deposition for Energy Applications</td>
<td>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</td>
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<tr>
<td>16:30 – 17:30</td>
<td>S2-O.5</td>
<td>Carrier Transport and Recombinations in CdSe Quantum Dot Sensitized Solar Cells</td>
<td>Saim Emin, University of Nova Gorica, Slovenia; Saim Emin, National Inst. for Materials Science, Japan</td>
</tr>
<tr>
<td>16:45</td>
<td>S2-O.6</td>
<td>Novel Nano-composite Membrane Electrode Assembly for High Temperature Polymer Electrolyte Membrane Fuel Cell</td>
<td>Lale İşıkel Şanlı, Sabancı University, Turkey; Didem Çilingir Doğan, Sabancı University, Turkey; Selmiye Alkan Gürsel, Sabancı University, Turkey</td>
</tr>
<tr>
<td>17:00</td>
<td>S2-O.7</td>
<td>Development of Photovoltaic Fiber Structure with Different Polymer-based Nanomaterials</td>
<td>Ali Demir, Istanbul Technical University, Turkey; Ayse Bedeolgu, Dokuz Eylul University, Turkey; Kubra Tutuncu, Istanbul Technical University, Turkey; Ismail Borazan, Istanbul Technical University, Turkey; Derya Ozdemir, Korteks A.Ş., Turkey</td>
</tr>
<tr>
<td>17:15</td>
<td>S2-O.8</td>
<td>New Generation Zeolite-like Nanomaterials for Gas Storage</td>
<td>Erhan Atcı, Koç University, Turkey; Seda Keskin, Koç University, Turkey</td>
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### July 1, Friday

#### 09:00 – 10:00

**Chair:** Fevzi Ç. Cebeci  
**FENS G032**

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<thead>
<tr>
<th>Time</th>
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</table>
| 9:00   | **Insertion of Lithium into Vertically-aligned Carbon Nanotubes during Growth** | Kuldeep Singh Rana, Bilkent University, Turkey  
         |                                                                               | Gokce Kucukayan, Bilkent University, Turkey  
         |                                                                               | Erman Bengu, Bilkent University, Turkey |
| 9:15   | **New N-type Materials for Organic Solar Cells**                             | Burak Gultekin, Ege University, Turkey  
         |                                                                               | Banu Aydin, Ege University, Turkey  
         |                                                                               | Ceylan Zafer, Ege University, Turkey  
         |                                                                               | Siddik Icli, Ege University, Turkey  |
| 9:30   | **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   | **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 |

#### 11:00 – 12:00

**Chair:** Fevzi Ç. Cebeci  
**FENS G032**

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<tr>
<th>Time</th>
<th>Presentation</th>
<th>Authors</th>
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</table>
| 11:00  | **Silicon Nanowire - PEDAT:PSS Heterojunction Solar Cells**                  | Baris Ozdemir, METU, Turkey  
         |                                                                               | Mustafa Kulakci, METU, Turkey  
         |                                                                               | Rasit Turan, METU, Turkey  
         |                                                                               | Husnu Emrah Unalan, METU, Turkey |
| 11:15  | **Bulk Nanostructured Thermoelectric Bismuth Telluride**                    | Muhammet Toprak, Royal Institute of Tech., Sweden  
         |                                                                               | Mohsin Saleemi, Royal Institute of Technology, Sweden  |
| 11:30  | **Fabrication and Characterization of Si Nanocrystals in SiC Multilayer Film for Third Generation Photovoltaics** | Arife Gencer Imer, Yüzüncü Yıl University, Turkey  
         |                                                                               | Rasit Turan, Middle East Technical University, Turkey  |
| 11:45  | **Influence of Nanosized Pt Loading into LbL Modified Composite Membranes on Fuel Cell Performance At Different Operation Conditions** | Tolga Gümüşoğlu, Istanbul University, Turkey  
         |                                                                               | Hüseyin Delioguz, Istanbul University, Turkey  
         |                                                                               | Serpil Yılmaztürk, Istanbul University, Turkey  |
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Uzun yılların verdiği tecrübe, baştan sona her aşamada sağlanan teknik destek ve dünyanın öncü markalarının temsilcilikleriyle Mem's, sektöründe fark yaratıyor.
Siz de Türkiye’nin birçok lider kuruluşu gibi, Mem's ayrıcalıklarıyla tanışmak için lütfen bizle iletişime geçin.

MEMS
Diş Ticaret Limited Şirketi
• THEME H
Nano-Fabrication, Nano-Lithography, Nano-Manipulation

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

• THEME L
Nano-Actuators, Nano-Sensors
## ORAL PRESENTATIONS

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

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<tbody>
<tr>
<td>13:30</td>
<td>S3-H.1*</td>
<td>Fabrication of functional nanostructures via focused electron beam induced deposition</td>
<td>Harald Plank, Graz University of Technology, Austria</td>
</tr>
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</table>
| 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 Polyaminoacids | Cem Levent Altan, 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 Küçükdermenci, 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**

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<tr>
<td>16:30</td>
<td>S3-H.6*</td>
<td>Nano and Micro-Patterning of Carbon</td>
<td>Marc Madou, Univ. of California at Irvine (UCI), USA</td>
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| 17:00 | S3-H.8 | Femtosecond Laser Crystallization of Amorphous Ge | Omer Salihoglu, Bilkent University, Turkey  
Ulas Kurum, Ankara Universitesi, Turkey  
Gul Yaglıoğlu, Ankara Universitesi, Turkey  
Ayhan Elmali, Ankara Universitesi, Turkey  
Atilla Aydını, 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 |

* Invited talks
June 29, Wednesday 13:30 – 15:00
Chair: Marc Madou FENS G035

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 Univ., 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 Ibrahимova, Bilkent University, Turkey

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

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-x 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 Bryikli, Bilkent University, Turkey
**THEME I:**
Nanoscale Characterization, Nano-imaging, Nanoscopy, Nano-Metrology

### June 29, Wednesday

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<tr>
<td>11:00</td>
<td>S3-I.1*</td>
<td>Calibrated Nanoscale Capacitance and Dopant Profile Measurements Using a Novel Nearfield Scanning Microwave Microscope</td>
<td>Gerald Kada, Agilent, Austria.</td>
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<tr>
<td>11:30</td>
<td>S3-I.2</td>
<td>Effect of Substrate Temperature on Nanoscale Cadmium Oxide Thin Films Deposited by Spray Pyrolysis Technique</td>
<td>Zahra Halaj, University of Guilan, Iran</td>
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<td>Seyed Mohammad Rozati, University of Guilan, Iran</td>
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<tr>
<td>11:45</td>
<td>S3-I.3</td>
<td>Nano-scale Surface, Structural and Optical Characterization of AlN Layers Grown By Self-limiting Atomic Layer Deposition</td>
<td>Mustafa Alevli, Bilkent University, Turkey</td>
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<td>Çağla Özgit, Bilkent University, Turkey</td>
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<td>İnci Dönmez, Bilkent University, Turkey</td>
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<td>Necmi Biyikli, Bilkent University UNAM, Turkey</td>
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<tr>
<td>12:00</td>
<td>S3-I.11</td>
<td>Quantitative Atomic 3-D Imaging Of Single/Double Sheet Graphene Structure</td>
<td>Emrah Yucelen, FEI Electron Optics, the Netherlands</td>
</tr>
<tr>
<td>12:15</td>
<td>S3-I.16</td>
<td>Top-Down Fabrication and Characterization of Silicon Nanowire Devices and Arrays</td>
<td>Yusuf Leblebici, EPFL-LSM, 1015 Lausanne, Switzerland</td>
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<tr>
<td>11:00</td>
<td>S3-I.6*</td>
<td>In Situ Transmission Electron Microscopy of Dynamic Processes And Functional Properties in Nanoscale Materials</td>
<td>Rafal E. Dunin-Borkowski, Technical Univ. of Denmark</td>
</tr>
<tr>
<td>11:30</td>
<td>S3-I.7</td>
<td>Design of Mili-kelvin Magnetic Force Microscope (mK-MFM, ~320mK) for He3 Systems</td>
<td>Özgür Karcı, NanoManyetik Bilimsel Cihazlar Ltd, Hacettepe University, Turkey</td>
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<td>Rui Rui Du, Rice University, USA</td>
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<td>Ahmet Oral, Sabanci University, Turkey</td>
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<td>11:45</td>
<td>S3-I.8</td>
<td>The Observation of Clustering At Nanoscales: The Birth of a Nanocrystal</td>
<td>Yunus Eren Kalay, Middle East Technical Univ., Turkey</td>
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<td>Tuba Demirtas, Middle East Technical University, Turkey</td>
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<td>Matthew Kramer, Ames Laboratory of US DOE, USA</td>
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<td>12:00</td>
<td>S3-I.9</td>
<td>Nanoscale Cadmium Oxide Thin Films Deposited by Spray Pyrolysis Technique</td>
<td>Zahra Halaj, University of Guilan, Iran</td>
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<td>Seyed Mohammad Rozati, University of Guilan, Iran</td>
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<tr>
<td>12:15</td>
<td>S3-I.10</td>
<td>Quantitative Method for Obtaining Surface Potentials from EFM Measurements</td>
<td>Melike Arslan, Ankara University, Turkey</td>
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<td>Svetlana Klimova, Saratov State University, Russian</td>
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<td>Ivan Malyar, Saratov State University, Russian</td>
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<td>Sergey Venig, Saratov State University, Russian</td>
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<td>Ilker Dincer, Ankara University, Turkey</td>
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<td>Yalcin Elerman, Ankara University, Turkey</td>
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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 Özök Yelken, İzmir Yüksek Tek. Enst., Turkey
Mehmet Polat, İzmir Yüksek Teknoloji Enstitüsü, Turkey
## THEME L:
Nano-Actuators, Nano-Sensors

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<th>11:45 – 12:00</th>
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<td><strong>Chair:</strong> Cem Çelebi</td>
<td><strong>FENS G035</strong></td>
<td><strong>Chair:</strong> Oğuzhan Gürlü</td>
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### 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 Yıldırım, Bilkent Üniversitesi, Turkey
- Hülya Budunoğlu, Bilkent Üniversitesi, Turkey
- Hakan Deniz, Bilkent Üniversitesi, Turkey
- Mustafa Ö. Güler, Bilkent Üniversitesi, Turkey
- Mehmet Bayındır, Bilkent Üniversitesi, Turkey

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

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**June 30, Thursday**

**Chair:** Cem Çelebi  
**FENS G035**

16:30 S3-L.1

*Surface Plasmon Polariton Assisted Inter-order Scattering in Biharmonic Metallic Gratings for Sensing and Imaging*

- Hasan Güner, UNAM, Turkey
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17:00 S3-L.3

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- Mustafa Ö. Güler, Bilkent Üniversitesi, Turkey
- Mehmet Bayındır, Bilkent Üniversitesi, Turkey
• THEME D

Nanobiotechnology, Nanobiosensors, Applications of Nanotechnology in Medicine
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<td>13:30 – 15:00</td>
<td>S4-D.1*</td>
<td>Spintronic Microsystems: from Lab On Chip to MEMS applications</td>
<td>Paulo Jorge Peixeiro de Freitas, INESC Microsystems and Nanotechnologies, Portugal</td>
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<td>S4-D.2</td>
<td>Nanoparticle Gradients for Investigation of Cell-surface Interactions</td>
<td>Mattias Berglin, Gothenburg University/Interface Biophysics, Sweden</td>
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<td>S4-D.3</td>
<td>Hierarchically Patterned Surfaces for Cell Guidance</td>
<td>Cenk Aktas, Leibniz- Institut für Neue Materialien, Germany</td>
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<td>Marina Martinez Miró, Leibniz- Institut für Neue Materialien, Germany</td>
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<td>Cagri Kaan Akkan, Leibniz- Institut für Neue Materialien, Germany</td>
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<td>Juseok Lee, Leibniz- Institut für Neue Materialien, Germany</td>
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<td>Hashim Abdul-Khaliqu, Universitätsklinikum des Saarlandes, Germany</td>
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<td>Lukas K. Schwarz, University of Applied Sciences Kaiserslautern, Germany</td>
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<td>Karl Herbert Schäfer, University of Applied Sciences Kaiserslautern, Germany</td>
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<td>Michael Veith, Leibniz- Institut für Neue Materialien, Germany</td>
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<td>14:30 – 17:45</td>
<td>S4-D.4</td>
<td>Probing Gold Nanoparticle and Cell Interactions in Cell Culture Medium</td>
<td>Ahmet Can Sabuncu, Old Dominion University, USA</td>
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<td>Ali Beskok, Old Dominion University, USA</td>
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<td>S4-D.5</td>
<td>Optimized DVD Substrates As Label-free Biomolecular Affinity Sensors</td>
<td>Burak Turker, Bilkent University, Turkey</td>
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<td>Nihan Guvener, Hacettepe University, Turkey</td>
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<td>Hasan Guner, Bilkent University, Turkey</td>
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<td>Sencer Ayas, Bilkent University, Turkey</td>
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<td>Okan O. Ekiz, Bilkent University, Turkey</td>
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<td>Erhan Piskin, Hacettepe University, Turkey</td>
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<td>Aykutlu Dana, Bilkent University, Turkey</td>
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<td>16:30 – 17:45</td>
<td>S4-D.6*</td>
<td>Nanomaterial Based Electrochemical Sensor Technologies</td>
<td>Arzum Erdem Gürsan, Ege University, Faculty Of Pharmacy, Turkey</td>
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<td>S4-D.7</td>
<td>Nanotechnology in The Diagnosis and Therapy of Cancer</td>
<td>Bulent Aydogan, The University of Chicago, USA</td>
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<td>S4-D.8</td>
<td>Extracellular Matrix Mimetic Peptide Nanofibers for Regenerative Medicine</td>
<td>Tekinay Ayse Begum, Bilkent University-UNAM, Turkey</td>
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NanoTR VII - 7th Nanoscience and Nanotechnology Conference

17:30 S4-D.9

Electrochemical, Photoelectrochemical and Piezoelectric Analysis of Tyrosinase Activity by Functionalized Nanoparticles

Huseyin Bekir Yıldız, Karamanoglu Mehmetbey University, Turkey
Ronit Freeman, The Hebrew Univ. of Jerusalem, Israel
Ron Gill, The Hebrew University of Jerusalem, Israel

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 Yildirim, 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/Interfaece Biophysics, Sweden

12:00 S4-D.13
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. Hosseini, Shahid Bahonar Univ. of Kerman, Iran

12:15 S4-D.14
Self-assembled Peptidic Nanostructures for Cell Materials Interactions
Mustafa Özgür Güler, Bilkent University, Turkey

June 29, Wednesday 13:30 – 15:00
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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 Tihanlioğlu, 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
11:45   S4-D.23  
*Label-free and Ultrasensitive Microcavity Biosensors with High Selectivity*

**Erol Ozgur**, Bilkent University, Turkey  
**Ozan Aktaş**, Bilkent University, Turkey  
**Mehmet Bayındır**, Bilkent University, Turkey

12:00   S4-D.24  
*Asymmetric Cellulose Acetate Membranes Containing Silver Nanoparticles for Wound Healing*

**Filiz Yaşar Mahlıçlı**, İzmir Yüksek Teknoloji Enst., Turkey  
**Sacide Alsay Altıncaya**, İzmir Yüksek Tekn. Enst., Turkey

June 30, Thursday  11:00 – 12:30  
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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**, Yıldız Technical University, Turkey  
**Ali Can Zaman**, Yıldız Technical University, Turkey  
**Cem Bulent Ustundag**, Yıldız Technical Univ., Turkey  
**Figen Kaya**, Yıldız Technical University, Turkey  
**Cengiz Kaya**, Yıldız Technical University, Turkey  
**Emrah Sefik Abamor**, Yıldız Technical Univ., Turkey  
**Melahat Bagrova**, Yıldız Technical University, Turkey  
**Adil Allahverdiyev**, Yıldız Technical University, Turkey

11:45   S4-D.19  
*Cell Attahment Tests of Dental Implants with Zr+O by MEVVA Ion Implantation*

**Ali Erdem Turanlı**, Ege University, Turkey  
**Emel Sokullu Urkac**, Ege University, Turkey  
**Taner Dagcı**, Ege University, Turkey

June 30, Thursday  13:30 – 14:45  
Chair: Devrim Gözüaçık  
FASS G062

13:30   S4-D.27  
*Diphenylalanine Peptide Nanospheres for Targeted Therapy*

**Fatma Demir**, Hacettepe University, Turkey  
**Betül Bozdoğan Pala**, Hacettepe University, Turkey  
**Tamer Çırak**, Hacettepe University, Turkey  
**Murat Demirbilek**, Hacettepe University, Turkey  
**Emir Baki Denkbaş**, Hacettepe University, Turkey

13:45   S4-D.28  
*Dendrimer Modified Superparamagnetic Iron Oxide Nanoparticle Synthesis for Targeted Cancer Therapy*

**Rouhollah Khodadust**, Middle East Tech. Univ., Turkey  
**Güngör Gündüz**, METU- Dep. of Cemical Eng., Turkey  
**Ufuk Gündüz**, METU-Dep. of Biological Sience, 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
• 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
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### June 28, Tuesday

**13:30 – 15:00**

**Chair: Yusuf Z. Menceloğlu**

**FENS G032**

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<td>S5-N.1*</td>
<td>Nanomechanical Resonators</td>
<td>Jörg Peter Kotthaus, Ludwig-Maximilians-Univ., Germany</td>
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<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>
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<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>
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<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 Karslioglu, 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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<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 Yildirim, 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**

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<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>
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<td>17:00</td>
<td>S5-N.7</td>
<td>Fluoroacrylate Liquid Marbles Floating on Water for Long Duration and the Calculation of Effective Liquid Marbles Surface Tension</td>
<td>Ugur Cengiz, Gebze Institute of Techonology, Turkey, H. Yildirim Erbil, Gebze Institute of Techonology, Turkey</td>
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<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>
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<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 Duvarıci, Izmir Institute of Tech., Turkey, Muhsin Çiftçioğlu, Izmir Institute of Technology, Turkey</td>
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*Invited talks*
**July 1, Friday**

Chair: Uğur Tamer

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<td>S5-N.10 Flame Retardant Properties of Mineral Nanopowders Reinforced Composites</td>
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<td>Hüsnügül Yılmaz Atay, Dokuz Eylül University, Turkey</td>
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<td>Erdal Celik, Dokuz Eylül University, Turkey</td>
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<td>10:15</td>
<td>S5-N.11 Nanomechanical Mapping: Why And How?</td>
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<td>Aykutlu Dana, Bilkent University, Turkey</td>
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<td>Necip Aslan, Istanbul Technical University, Turkey</td>
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<td>Ayse Tekinay, Bilkent University, Turkey</td>
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<td>Mustafa Guler, Bilkent University, Turkey</td>
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**June 29, Wednesday**

Chair: Mustafa Çulha

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<td>S5-K.1 Magnetic Nanoparticle Based Nanofluid Actuation with Dynamic Magnetic Fields</td>
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<td>Ali Koşar, Sabanci Univ, Turkey</td>
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<td>Evrim Kurtoğlu, Sabanci Univ, Turkey</td>
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<td>Alp Bilgin, Sabanci Univ., Turkey</td>
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<td>Hadi Çağdaş Erk, Sabanci Univ, Turkey</td>
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<td>Muhsincan Şesen, Sabanci Univ, Turkey</td>
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<td>Havva Funda Yağcı Acar, Koç Univ., Turkey</td>
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**THEME K: Nano-Fluidics**
THEME P:
Nanotechnology in Textile, Agriculture and Food Science

June 29, Wednesday
11:15 – 12:30
Chair: Mustafa Çulha
FENS G032

11:15 S5-P.1
Relationship Between Needle and Needle-less Electrospinning

11:30 S5-P.2
Synthesis of Carbon Nano Spheres from Waste Biomass, Glucose and Lactose with Hydrothermal Carbonization
Kıvanç Aydıncak, Ankara University, Turkey
Ali Sınağ, Ankara University, Turkey
Tuğrul Yumak, Ankara University, Turkey
Bekir Esen, Ankara University, Turkey
Mustafa Karatok, Ankara University, Turkey

11:45 S5-P.3
Synthesis of Graphene on Gold
Erçağ Pinçe, Bilkent University, Turkey
Emre Ozan Polat, Bilkent University, Turkey
Osman Balci, Bilkent University, Turkey
Ömer Salihoglu, Bilkent University, Turkey
Coşkun Koçabaş, Bilkent University, Turkey
Tuğba Öznüner, Atatürk University, Turkey

12:00 S5-P.4
Thickness Dependence of Resistance in Nanometer Thick Ag Deposited Fibers by Cylindrical Inverted Magnetron Sputtering
Zeynep Meric, İzmir Institute of Technology, Turkey

12:15 S5-P.5
Antibacterial Coating of Fabrics
Ali Kirecci, Gaziantep University, Turkey
Burcu Ademoglu, Gaziantep University, Turkey
Halil Ibrahim Icoglu, Gaziantep University, Turkey

July 1, Friday
9:00 – 10:00
Chair: Uğur Tamer
FENS G035

9:00 S5-P.6
Synthesis and Characterization of Calcium Phosphate Coated Silk/nylon-6/ Nanofiber Membranes
Eda Yalçın, Aksaray University, Turkey
Murat Demirbilek, Hacettepe University, Turkey
Zeynep Karaahaliloglu, Hacettepe University, Turkey
Cem Bayram, Hacettepe University, Turkey
Mesut Şam, Hacettepe University, Turkey
Necdet Sağlam, Hacettepe University, Turkey
Emir Baki Denkbaş, Hacettepe University, Turkey

9:15 S5-P.7
An Investigation of Needleless Electrospinning Methods
Funda Cengiz Callioglu, Süleyman Demirel Univ., Turkey
Oldrich Jirsak, Technical Univ. of Lib., Czech Republic
Mehmet Dayik, Süleyman Demirel University, Turkey

9:30 S5-P.8
Effect of Concentration on Pa6 (Polyamide 6) Nanofibers
Umran Ozkoc, Gaziantep University, Turkey
Ali Kirecci, Gaziantep University, Turkey
Halil Ibrahim Icoglu, Gaziantep University, Turkey

9:45 S5-P.9
The Formation of Stable Sodium Caseinate-gum Arabic Complex for Nanoencapsulation and Delivery of Epa/dha Fatty Acids in Fruit Juice
Hulya Ilyasoğlu, Ege University, Turkey
Sedef Nehir El, Ege University, Turkey

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
**THEME S:**
Nanotechnology Governance and National Nanotechnology Policies

**June 29, Wednesday**  
Chair: Hasan Mandal

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<tr>
<td>13:30</td>
<td>S6-S.1*</td>
<td>The Role of Quantum Coherence in Nanocrystallization and Its Industrial Applications</td>
<td>Alkiviadis-Constantinos Cefalas, National Hellenic Research Foundation, Theoretical and Physical Chemistry Institute, Greece</td>
</tr>
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<td>14:00</td>
<td>S6-S.2*</td>
<td>Point and Stand-off Detection for Safety, Security, and Sustainability</td>
<td>Ashok Vaseashta, Institute for Advanced Sciences Convergence &amp; Int’l Clean Water Institute, NUARI, Herndon, USA</td>
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| 14:30  | S6-S.3  | Creation of Regulatory Framework and Policy Environment for the Development of Nanotechnology in India | Madhulika Bhati Madhu, National Inst. of Science, India  
|        |         | Sujit Bhattacharya, National Insitute of Science, India              |
| 14:45  | S6-S.4  | Understanding Individual and Organizational Factors Affecting University-Industry Interactions in Nanotechnology: Turkish Case | Berna Beyhan, Middle East Technical University, Turkey |

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

**June 29, Wednesday**  
Chair: Hasan Mandal

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<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Speaker(s)</th>
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<td>16:30</td>
<td>S6-R1*</td>
<td>Application Areas of Nanomaterials in Household Appliance Industry</td>
<td>Deniz Taşkan, Arçelik A.Ş. R&amp;D Center, Turkey</td>
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| 17:00  | S6-R.2  | Environmental Application of Chitosan-TiO2 Nanocomposite in Removal of Methylene Blue and Nickel From Waste Water | Mohammadreza Khanmohammadi, IKIU, Iran  
|        |         | Hamideh Elmizadeh, IKIU, Iran                                      |
| 17:15  | S6-R.3  | Nanoparticles in the Subsurface Environment: Aggregation, Deposition and Pore Straining Phenomena | Burcu Uyuşur, TUBITAK, Turkey  
|        |         | Özgür Doğan, TUBITAK, Turkey                                      |
| 17:30  | S6-R.4  | Nanotechnology in Water Resources                                   | Levent Yılmaz, Technical University Of Istanbul, Turkey |
| 17:45  | S6-R.5  | Barriers to Nano-Technology Readiness for Young Researchers         | Sonmez Arslan, GYTE & Batman University, Turkey  
|        |         | Ramazan Kaynak, GYTE, Turkey                                       |
|        |         | Nursev Bilgin, GYTE & Batman University, Turkey                    |
|        |         | Ali Bilgin, GYTE, Turkey                                           |

* Invited talks
• Elisabetta Chierici  Tethis S.p.A, Italy
• Nezih Unal  GenISys GmbH, Germany
• Ude D. Hangen  Hysitron Inc., USA
• Michael Hornung  SUSS MicroTec 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*
*Muhammet Toprak*, NEXTEC, KTH Royal Institute of Technology, Sweden

June 29, Wednesday 16:30 – 18:00
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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*
*Muhammet 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*
*Margarethe Kampling*, SPECS Surface Nano Analysis GmbH, Germany
*Andreas Thissen*, SPECS Surface Nano Analysis GmbH, Germany

17:45  IT.11  
*To Be Announced*
*TEKSER-JEOL*