

SEES WORKSHOP for SUSTAINABLE DEVELOPMENT



McDonnell Academy
Global Energy and Environmental Partnership
Solar Energy and Energy Storage (SEES)
June 1–3, 2015 / Cultural and Convention Center (CCC)
Middle East Technical University, Ankara/Turkey



PROGRAM

June 1, 2015, Monday, DAY 1

08.30 - 09.00 Registration

Session 1: Welcome and Opening (CCC-Hall A)

- 09.00 - 9.15 Welcome Speech, Prof. Dr. Ahmet Acar, President, METU, Turkey
- 09.15 - 09.30 Welcome Speech, Raşit TURAN & Pratim Biswas, GÜNAM-METU, Turkey & WUSTL, USA
- 09.30 - 09.45 Özgür Kadir Özer, Ministry of Development, Turkey
"The Role of the Governmental Institutions in Promoting University-Industry Relations"
- 09.45 - 10.00 Çağrı Yıldırım, TUBITAK, Turkey
"Horizon 2020 Energy Program"
- 10.00 - 10.30 COFFEE BREAK

Session 2: Overview of MAGEEP University SEES Research (CCC-Hall A)

Chairperson: Pratim BISWAS, WUSTL, USA

- 10.30 - 12.00 Irem Dikmen Toker, METU, Turkey
Parag Banerjee, WUSTL and SunEdison Solar
Craig Froome, U Queensland, Australia
Sagar Mitra, IIT Bombay, India
Stas Obuchovsky, Technion, Israel
Berat Z. Haznedaroğlu, Bogazici University, Turkey
- 12.00 - 12.30 Discussion of University Collaboration
- 12.40 - 14.00 LUNCH and Presentation (CCC Kümbet)
Güliz Sütçü, TUBITAK, Turkey
"Project opportunities between Turkish and US universities"

Session 3: Solar PV Technical Session (CCC-Hall A)

Chairperson: Craig Froome, U Queensland, Australia

- 14.15 - 14.35 Paul Meredith, U Queensland, Australia
"Perovskite solar cell : a breakthrough for low cost energy conversion"
- 14.35 - 14.55 Raşit Turan , GÜNAM-METU, Turkey
"New Approaches in crystalline Si solar cell"
- 14.55 - 15.15 Sahin Kaya Ozdemir, WUStL, USA
"Micro-resonators for solar harvesting"
- 15.15 - 15.35 Stas Obuchovsky, Technion, Israel
"Studies on organic and hybrid PV at Technion"
- 15.35 - 16.00 COFFEE BREAK

Session 4: Storage Technical Session (CCC-Hall A)

Chairperson: Macit Özenbaş, GUNAM-METU, Turkey

- 16.00 - 16.20 Sagar Mitra, IIT Bombay, India
"Low cost lithium ion and sodium ion batteries for solar storage"
- 16.20 - 16.40 Matthew Lawder, WUStL, USA
"Techno-Economic Assessment of Battery Integration with Solar Power"
- 16.40 - 17.00 Julio D'Arcy, WUStL, USA
"Nanostructured Plastics for Electrochemical Energy Storage"
- 17.00 - 17.20 Emrah Unalan, METU, Turkey
"Studies on energy storage at METU"
- 17.20 - 18.00 Discussion on energy storage
- 18.00 - 19.00 Reception (CCC, Small Foyer)

June 2, 2015, Tuesday, DAY 2

Session 5: University Industry Research Collaboration (CCC-Hall D)

Chairperson: Volkan Atalay, METU, Turkey

- 09.00 - 09.20 Erkan Duysal, Arçelik, Turkey
"Arçelik Experience for University Industry Research Collaboration"
- 09.20 - 09.40 Parag Banerjee, WUStL and SunEdison Solar
"Ever thinner cuts? Diamond wire cutting of Solar Si ingots: Insights using Raman spectroscopy"
- 09.40 - 10.00 Şener Oktik, Şişecam, Turkey
"Şişecam Experience for University Industry Research Collaboration"
- 10.00 - 10.20 Pratim Biswas, WUStL, USA
"ILF&S Energy Group & SERIUS Industry - University Collaboration"
- 10.20 - 10.40 Discussion on University Industry Partnership
- 10.40 - 11.00 COFFEE BREAK

Session 6: MAGEEP Education Network (CCC-Hall D)

Chairperson: Gülbin Dural, METU, Turkey

- 11.00 - 11.15 Ayşegül Daloğlu, METU, Turkey
"METU-Joint Program Experience"
- 11.15 - 11.30 Pratim Biswas, WUSTL, USA
"Co-advised PhD / post doc fellowship program"
- 11.30 - 11.45 Estelita Young, Canvas Corp., USA
"MAGEEP Education Network Framework"
- 11.45 - 12.00 Simantha Das, Ziksana Corporation, Netherlands
"MAGEEP Education Network Framework"
- 12.00 - 12.30 Discussion on Launching Joint PhD / Post Doc. Fellowship Program / Use of MAGEEP Education Network

Technical Visits

- 12.45 - 13.45 LUNCH at METU Technopark/ODTU Teknokent
- 14.00 - 14.30 Mustafa Kızıldaş, METU Technopark/ODTU Teknokent, Turkey
"University Industry Research Collaboration: ODTU Teknokent"
- 14.30 - 16.30 Laboratory and Facility Tours
*METU Technopark/ ODTU Teknokent
Central Laboratory
Center for Solar Energy Research and Applications (GÜNAM)*

Session 7: Action Items for collaborative work (CCC-Hall D)

Moderator: Pratim Biswas, WUSTL, USA

- 16.45 - 17.45 Discussion on Education, Research and Facilities

Concluding remarks and action items

June 3, 2015, Wednesday DAY 3

Session 8: WATTS Project Proposals (CCC-Hall D)

Chairperson: Parag Banerjee, WUSTL and SunEdison Solar

- 09.00 - 09.20 Liam Byrnes and Craig Froome, U Queensland, Australia
"Ardyaloon Solar Project - Stand-alone solar power systems in non-grid connected energy constrained remote communities"
- 09.20 - 09.40 Phil Valko and Matt Lawder, WUSTL, USA
"Sustainable Energy Access for Dense Urban Populations (SEADUP)"
- 09.40 - 10.00 Seçkin Çopur, METU, Turkey
"Greenhouse and solarpark on METU campus"
- 10.00 - 10.20 Craig Froome, U Queensland, Australia
"Kowanyama Solar Project - Stand-alone solar power systems in non-grid connected energy constrained remote communities"
- 10:20 - 11:00 COFFEE BREAK

Session 9: Planning/building/ of the WATTS program (CCC-Hall D)

11.00 - 11.30 WATTS: Finalization of Project Teams, Resource Needs

11.30 - 12.30 Concluding Remarks-Workshop at IIT B, December 12 - 15, 2015