



2nd. SINERGY WORKSHOP

31st. May to 2nd. June 2022 National University of Ireland Galway – Ireland

OPEN EVENT - 2nd JUNE - Evening - Alice Perry Engineering Building Smart Grid Technology underpinning Sustainable and Secure Energy in Europe Sponsored by: Engineers Ireland (EI) - CIBSE Ireland - ASHRAE Ireland

<u>1st. DAY - AGENDA - 31st. May</u> <u>2nd. DAY - AGENDA - 1st. June</u> <u>3rd. DAY - AGENDA - 2nd. June</u> <u>Open Event: Smart Grid Technology underpinning Sustainable and Secure Energy in Europe</u> <u>How to get to GALWAY</u> <u>IMPORTANT Information</u>

Capacity building in Smart and Innovative eNERGY management

DAY 1 – 31st. May 2022 – AGENDA

Location: Alice Perry Building - Boardroom - 3052 (3rd. Floor)

Online: Connection Details (TBD)

Note: Irish Standard Time (IST) = CET - 1hour.

9:00 (IST) - Welcome

9:30 - 12:30 SINERGY General Assembly

- Coordinator updates
- WPs Updates
- Deliverables
- Reporting Status
- 1st. Review Meeting Rehearsal
- Other business
- 12:30 14:00 Lunch Friars

14:00 - 15:00 - Presentations to the SINERGY Steering Committee - ONLINE

- 15:00 15:30 Coffee Break
- 15:30 17:00 NUIG Pilot workshop
 - Introduction to BMS systems in campus (Karl Byrne EWA Controls Ireland)
 - Workshop session around SINERGY pilots and proposed collaborations
 - Tour of the Alice Perry Engineering Building Living Laboratory
 - Visit to Aras de Brun Building

18:30 - Social Dinner

Kirwans Lane Restaurant 19:30

Steering Committee Participants - ONLINE

https://meet.goto.com/949973253

Prof. Miloš Banjac, Faculty of Mechanical Engineering, University of Belgrade

Ruth Buggie, Sustainable Energy Authority of Ireland

Andreas Lugmaier, Siemens, Austria

Prof. Dimitar Taškovski, Faculty of Electrical. Eng. Ss. Cyril and Methodius Univ. in Skopje Gordana Danilović Grković, Science Technology Park Belgrade

Prof. Vedad Pašić, Faculty of Natural Sciences and Mathematics, University of Tuzla Marko Poznanović, Belit, ICT Network

DAY 2 – 1st. June 2022 – AGENDA

Location: Alice Perry Building - Boardroom - 3052 (3rd. Floor)

Online: Connection Details (TBD)

Note: Irish Standard Time (IST) = CET - 1hour.

9:00 (IST) 10:00h (CET) - Coming together

9:30 - 12:30 PhD Workshop - ONLINE

- Individual PhD presentation
- Cross Fertilization Sessions
- Networking Session on Mentoring Activities
- 12:30 14:00 Lunch Friars

14:00 - 15:00 - Proposal Preparation

- Review of call topics of interest
- Discussion and decision of Call Topics

Coffee Break - Refreshments Provided - Networking

- 15:30 16:30 Lecturing Material on Energy Efficient Building Operation
 - Presentation of the EEBO Lecturing Material
- Dr. Marcus M. Keane
- Mr. Luis M. Blanes
- Ms. Dayanne Peretti
- Ms. Raquel Lima
- Ms. Desirée Arias
- Ms. Shima Yousefigarjan
- Dr. Valentina Janev
- Mr. Dušan Popadić
- Dr. Johannes Stöckl

Online Presence:

- https://meet.goto.com/949973253
- Ms. Katarina Stanković
- Ms. Marija Popović
- Mr. Ron Ablinger

DAY 3 – 2nd. June 2022 – AGENDA

Location: Alice Perry Building - Boardroom - 3052 (3rd. Floor) Online: Connection Details (TBD) https://meet.goto.com/467690293 Note: Irish Standard Time (IST) = CET - 1hour. 9:00 (IST) 10:00h (CET) - Coming together 9:15 - 9:55 - 1st - Module of Efficient Building Operation (TBD) 10:15 - 10:55 - 2nd Module on Efficient Building Operation (TBD) Coffee Break - Refreshments Provided - Networking 11:15 - 11:55 - 3rd. Module on Efficient Building Operation (TBD) 12:30 - 14:00 - Lunch - Friars 14:00 - 15:30 - Wrapping of the 2nd. SINERGY Workshop PhD workshop conclusions Feedback of the EEBO Modules by PhD Workshop participants Planning of the 2nd Series of EEBO Modules

- Proposed Mentoring Activities
- Personnel Exchange
- Publications Plan



SINERGY Open Event

Smart Grid Technology underpinning Sustainable and Secure Energy in Europe Sponsored by: Engineers Ireland (EI) - CIBSE Ireland - ASHRAE Ireland	
Thursday 2 nd . June 2022 - 16:00h - 19:30h IST Location: Alice Perry Building - G047 - Ground Floor. National University of Ireland Galway. ONLINE - <u>https://meet.goto.com/467690293</u>	
16:00 h - Opening Remarks	Dr. Marcus M. Keane Assistant Professor - NUIG
16:15 h - Smart Grid Electronics HIL Validation and Certification for Large Infrastructures	Dr. Johannes Stöck Austrian Institute of Technology
16:35 h - Semantic Interoperability in Smart Grid Scenarios	Dr. Valentina Janev Institut Mihailo Pupin - Serbia
16:55 - Cybersecurity in Infrastructures and Smart Grid	Dr. Michael Schukat Associate Professor - Computer Science - NUIG
17:15 - Coffee Break - Alice Perry Ground Floor Atrium	
17:30 - Role of Hydrogen Storage GENNCOMM project	Mr. Tadgh Cummins Researcher - Energy Systems Engineering - NUIG
17:50 - Advances on Storage Technologies STEPS project	Dr. Maeve Duffy Assistant Professor - Electronic Engineering - NUIG
18:10 - Impact of Energy Crisis and on NUIG Sustainability Strategy	Mr. John Gill Chief Operating Officer - NUIG
18:30 - Smart Grid Roadmap for Ireland	Mr. Declan Meally Director of Business, Public Sector and Transport at Sustainable Energy Authority of Ireland (SEAI)
18:50 - Panel Discussion	Chair: Marcus M. Keane - NUIG
19:30 - Closure - Refreshments provided - Alice Perry Building - Atrium	

According to the European Commission (EC-Directorate for Energy) a smart grid is the electricity network that integrates the behavior and actions of all users connected to it (generators, consumers and those that do both), in order to ensure economically efficient, sustainable power system with low losses and high levels of quality and security of supply and safety. As smart grids allow the integration of decentralized renewable energy resources as well as electric vehicle recharging services, they are essential to ensure energy security, economic development and climate change mitigation. The integration of energy production and consumption component through the smart grid concept enables increased demand response and energy efficiency.

This event brings the latest experience from different perspectives on the developments needed for the efficient implementation of the smart grid. International and Irish experts will illustrate how diverse enabling technologies and resources can facilitate smart grid adoption, such as Hardware in the Loop Validation and Certification for Large Infrastructures, Semantic Interoperability and the Cybersecurity requirements. Secondly, NUIG scholars will present the latest advances on EU funded projects Gencomm and STEPS



regarding hydrogen energy and storage technologies, key to ensure effective renewable energy generation and orchestration. Lastly, public sector (NUIG) and policy roadmap (SEAI) are brought to the discussion given the impact of the current energy crisis and the regulatory challenges ahead.

A final panel discussion moderated by Dr. Marcus M. Keane will spark conversation with the speakers bringing different insights and perspectives to shed light into the opportunities the deployment of the smart grid brings to the EU and Irish sustainable and secure energy supply.