



CONGRESS PROGRAM

ENEFM 2026

INTERPHOTONICS 2026

ENEFM 2026
12th INTERNATIONAL CONGRESS ON ENERGY EFFICIENCY AND
ENERGY RELATED MATERIALS
July 14-16, 2026

INTERPHOTONICS 2026
8th INTERNATIONAL CONFERENCE ON PHOTONICS RESEARCH
July 14-16, 2026

The Twin Towers Hotel-Bangkok, THAILAND

P R O G R A M TUESDAY, JULY 14, 2026	
ENEFM & INTERPHOTONICS	
CHARAS MUANG 2	
PLENARY SESSION 10:15-11:00	Chairperson: Ersin Kayahan Safi Jradi University of Technology of Troyes, France “ID811- Plasmon-Assisted Nanochemistry: From Energy Localization to Integrated Photonic Devices”
11:00-11:30	COFFEE BREAK
PLENARY SESSION 11:30-12:15	Chairperson: A.Yavuz Oral John Bell University of Southern Queensland, Australia “ID669- Building the future energy system”
12:30-14:00	LUNCH
PARALLEL SESSIONS 14:00-15:10	ENEFM & INTERPHOTONICS CHARAS MUANG 2 Chairperson: A.Yavuz Oral 14:00-14:30 Yoshiyuki Uruma NIT(KOSEN), Yonago College, Japan (invited speaker)

	ID790- Development and Evaluation of Photosensitizer-Loaded Polymeric Micelles for Targeted Photodynamic Therapy 14:30-14:50 Nathan Heo Kongju National University, Department of Mechanical Engineering, Korea, Republic Of ID692- Enhancing Mechanical Stability of Nanoporous Pt/C Electrodes via Controlled Thermal Annealing 14:50-15:10 Pranuda Jivaganont National Energy Technology Center, Thailand ID696- Impacts of PV Input Data Fidelity on PV-BESS Sizing: A Sensitivity Study Using Sizing and Financial Deviation Indices
15:10-15:40	COFFEE BREAK
PARALLEL SESSIONS 15:40-17:50	ENEFM & INTERPHOTONICS CHARAS MUANG 2 Chairperson: Ersin Kayahan 15:40-16:00 Weichen Zhang Institute of Science Tokyo, Japan ID794- FUNDAMENTAL STUDY ON THE APPLICATION OF PHOTOACOUSTIC AND LIBS TECHNIQUES FOR UNDERWATER OBJECT CHARACTERIZATION 16:00-16:30 Federica Fernandez University of Palermo, Italy (invited speaker) ID716- Biophilic and Solar-Integrated Façades for Energy-Efficient Buildings: Design Strategies for Reducing Cooling Demand and Enhancing Net-Zero Performance in Climate-Sensitive Urban Contexts 16:30-16:50 Jean-Sebastien Bridel Extramile materials, Belgium ID682- Scaling Silicon-Based Anodes for Automotive Lithium-Ion Batteries: Lessons from Development to Industrialization 16:50-17:20 Vilko Mandić University of Zagreb Faculty of Chemical Engineering and Technology, Croatia (invited speaker) ID722- The role of thin films in energy and green applications 17:20-17:50 Xiongfeng Pan Dalian University of Technology, China (invited speaker) ID668- How do population aging and sub-replacement fertility affect carbon efficiency in European Economic Area? A multi-level and multivariate mediation analysis of population flow and technological innovation considering spatio-temporal effect

P R O G R A M WEDNESDAY, JULY 15, 2026	
ENEFM & INTERPHOTONICS	
CHARAS MUANG 2	
PLENARY SESSION 10:15-11:00	Chairperson: A.Yavuz Oral Ehsan Sharifi Adelaide University, Australia “ID676- Urban greenery and energy efficiency in Urban Heat Islands: Knowledge, application and impact in Australia”
11:00-11:30	COFFEE BREAK
PLENARY SESSION 11:30-12:15	Chairperson: A.Yavuz Oral Saheli Biswas CSIRO, Australia “ID693- Material challenges with proton conducting ceramics for intermediate temperature hydrogenation/dehydrogenation applications”
12:30-14:00	LUNCH
PARALLEL SESSIONS 14:00-15:00	ENEFM & INTERPHOTONICS CHARAS MUANG 2 Chairperson: Ersin Kayahan 14:00-14:30 Omorjit Singh Khwairakpam INFN-LNL, Italy (invited speaker) ID19- SPES Laser Ion Source: Existing design and possible upgrades 14:30-15:00 Satoshi Fujii National Institute of Technology, Okinawa college, Japan (invited speaker) ID714- Defect Engineering in Semiconductor Lattices through Microwave Heating

15:00-15:30	COFFEE BREAK
PARALLEL SESSIONS 15:30-16:30	ENEFM & INTERPHOTONICS CHARAS MUANG 2 Chairperson: Ersin Kayahan 15:30-16:00 Frederic Kuznik INSA LYON, France (invited speaker) ID698- Development of Thermochemical Batteries for Sustainable Energy Management: From Materials to Systems 16:00-16:30 Dong-Joon Lee Korea Research Institute of Standards and Science, Korea, Republic Of (invited speaker) ID796- Bandwidth enhanced Electro-optic probing system for millimeter wave measurement
17:00	<i>SOCIAL PROGRAM</i> <i>17:00 CHAOPHRAYA DINNER CRUISE & ASIATIQUE NIGHT BAZAAR</i> <i>(Gathering at Congress registration desk)</i>

P R O G R A M THURSDAY, JULY 16, 2026	
ENEFM & INTERPHOTONICS	
CHARAS MUANG 2	
PLENARY SESSION 09:45-10:30	Chairperson: Ersin Kayahan Shuyuan Zhao Harbin Institute of Technology, China “ID809- Microstructural Transition Mechanisms, Radiative Properties Synchronous Characterization and Conduction/Radiation/Reactions Involved Heat Transfer Processes Provoked by Physicochemical Reactions in Aerogel Nanocomposites”
10:30-11:00	COFFEE BREAK

PARALLEL SESSIONS 11:00-12:50	ENEFM & INTERPHOTONICS CHARAS MUANG 2 Chairperson: Ersin Kayahan 11:00-11:30 Takahiro Numai Ritsumeikan University, Japan (invited speaker) ID31- SINGLE LONGITUDINAL MODE LASER DIODE - IFRASTRUCTURE OF THE INTERNET 11:30-12:00 Karel Maca Brno University of Technology, Czech Republic (invited speaker) ID799- Processing of transparent polycrystalline ceramics doped with various rare earth elements and transition metals and their luminescent properties 12:00-12:30 Antonio C M Sousa University of Aveiro, Portugal (invited speaker) ID708- A Hydrogen Pathway Toward Sustainable Renewable Energy 12:30-12:50 Chunfei Wang University of Macau, China ID805- Self-Immolative Photosensitizers for Self-Reported Cancer Phototheranostics
	12:30-14:00 LUNCH

	ENEFM & INTERPHOTONICS CHARAS MUANG 2 <i>Chairperson: A. Yavuz Oral</i> 14:00-14:30 Suzanna Akil Université de Lorraine, France (invited speaker) ID810- Beyond Gold: Magnesium Plasmonics for Sustainable Light-to-Chemical Energy Conversion 14:30-14:50 Iyiola Olatunji OTUNNIYI Vaal University of Technology, South Africa ID702- OCCURRENCE, RESOURCE ESTIMATION AND BENEFICIATION PROSPECTS OF RARE EARTH ELEMENTS IN A COAL POWER PLANT ASH DEPOSIT
14:50-16:00	FOYER (Poster Session Area) <i>Chairperson: A. Yavuz Oral</i> POSTER SESSION & COFFEE BREAK (15:00-15:30) ENEFM & INTHERPHOTONICS

PROGRAM LEGEND DESCRIPTIONS	
ID-	ENEFM 2026 oral presentations
ID-	INTHERPHOTONICS 2026 oral presentations

POSTER PROGRAM THURSDAY, JULY 16, 2026 14:50-16:00 FOYER (Poster Session Area) Chairperson: A. Yavuz Oral ENEFM & INTHERPHOTONICS		
ID	TITLE	CONTACT AUTHOR
670	GALLIUM-BASED LIQUID METAL DROPLETS SELF-PROPELLED JUMPING AND THE ENERGY CONVERSION PREDICTION BASED ON CONVOLUTIONAL NEURAL NETWORKS	Xiaomin Wu
673	WATER DROPLET IMPACT AND FREEZING ON SPHERICAL SURFACES	Jingchun Min
720	A study on the development of technical standards for the safety of V2L devices	Woncheol Park
687	Reduced graphene oxide/NiO/Co ₃ O ₄ /cellulose composite film with excellent flexibility and electrochemical performance for supercapacitor	Yang-Ming Lu
25	BORATE CRYSTALS AS FUNCTIONAL MATERIALS FOR PHOTONIC APPLICATIONS	Tatyana Bekker
29	Design and Evaluation of a Three-Stage Elliptical Cavity for Homogenizing the Pumping Distribution in a Solar-pumped Laser	Honami Maki