



# CMSE 2026

## The 15th Global Conference on Materials Science and Engineering

November 20-23, 2026

City University of Macau, Macao, China

## Conference Program

**Organizers**



Bosen Academic Research Institute

**Co-organizer**



澳門博覽集團有限公司  
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## Table of Content

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|                                          |           |
|------------------------------------------|-----------|
| <b>Conference Committee .....</b>        | <b>1</b>  |
| Technical Committee Chair .....          | 1         |
| International Committee Members* .....   | 1         |
| <b>Conference Program Overview .....</b> | <b>2</b>  |
| <b>Keynote Session .....</b>             | <b>3</b>  |
| <b>Technical Sessions .....</b>          | <b>4</b>  |
| <b>Poster Session .....</b>              | <b>10</b> |
| <b>Featured Speakers .....</b>           | <b>12</b> |
| Keynote Speakers .....                   | 12        |
| Invited Speakers .....                   | 17        |
| <b>Presentations Guideline.....</b>      | <b>19</b> |
| Oral Presentation Instructions .....     | 19        |
| Poster Presentation Instructions .....   | 21        |
| <b>Conference Venue .....</b>            | <b>22</b> |
| <b>Field Trip .....</b>                  | <b>24</b> |

## Conference Committee

### Technical Committee Chair

**Prof. Kwun Nam Hui**, Institute of Applied Physics and Materials Engineering, University of Macau, Macao SAR, China

### International Committee Members\*

Prof. Randa Abdel-Karim, Cairo University, Egypt  
 Prof. Zdzisław Adameczyk, Silesian University of Technology, Poland  
 Prof. Nader Asnafi, Luleå University of Technology, Sweden  
 Prof. Silvio Francisco Brunatto, Federal University of Paraná (UFPR), Brazil  
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 Prof. Massimo Cuomo, University of Catania, Italy  
 Prof. Paulo César DE MORAIS, Catholic University of Brasília / University of Brasília, Brazil  
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 Prof. N. Ethiraj, Dr.M.G.R Educational and Research Institute - University, India  
 Prof. Fábio A.O. Fernandes, University of Aveiro, Portugal  
 Dr. Boutheina Ben Fraj, Research and Technology Center of Energy (CRTEn), Tunisia  
 Assoc. Prof. Luigi Gentile, University of Bari Aldo Moro, Italy  
 Prof. Qixin Guo, Saga University, Japan  
 Dr. Nurhafizah Hasim, Universiti Teknologi Malaysia, Malaysia  
 Assoc. Prof. Azman Ismail, Universiti Kuala Lumpur, Malaysia  
 Dr. Ludovic Jason, Université Paris-Saclay, France  
 Dr. Farida Kapsalamova, Kazakh-British Technical University, Kazakhstan  
 Ir. Dr. Nor Ashikin Muhamad Khairussaleh, Universiti Malaysia Pahang Al-Sultan Abdullah, Malaysia  
 Dr. Alexander Khotsianovsky, Pisarenko Institute of Problems of Strength, NASU, Ukraine  
 Prof. Tahar Laoui, University of Sharjah, The United Arab Emirates  
 Prof. Graciela Mansilla, National Technological University, Argentina  
 Prof. Aurelian Marcu, National Institute for Laser Plasma and Radiation Physics, Romania  
 Prof. Pavlo Maruschak, Ternopil Ivan Puluj National Technical University, Ukraine  
 Dr. Lin Feng Ng, Universiti Teknologi Malaysia (UTM), Malaysia  
 Prof. Ruzica Nikolic, University of Zilina, Slovakia  
 Prof. Leonardo Pagnotta, University of Calabria, Italy  
 Prof. Henryk Paul, Institute of Metallurgy and Materials Science, Polish Academy of Sciences, Poland  
 Dr. Erik Vargas Rojas, National Autonomous University of Mexico (UNAM), Mexico  
 Assoc. Prof. Rita de Cássia M Sales-Contini, ISEP, Polytechnic of Porto, Portugal  
 Assoc. Prof. Sebastian Schwaminger, Medical University of Graz, Austria  
 Prof. Payam Shafigh, Wenzhou University of Technology, China  
 Prof. Liyuan Sheng, Peking University Shenzhen Institute, China  
 Dr. Tomasz Stasiak, National Centre for Nuclear Research, Poland  
 Prof. Mohd Nasir TAMIN, Universiti Teknologi Malaysia, Malaysia  
 Prof. Sigita Tamulevičius, Kaunas University of Technology, Republic of Lithuania  
 Prof. Diego Vergara, Catholic University of Ávila, Spain  
 Prof. Enrico Zacchei, Polytechnic School of University of Salamanca (USAL), Spain  
 Prof. Ali Zaidi, Laghouat University, Algeria  
 Prof. Tingkai Zhao, Northwestern Polytechnical University, China  
 Assoc. Prof. Muhammad Zubair, University of Sharjah, United Arab Emirates  
 Assoc. Prof. Nurul Zuhairah Mahmud Zuhudi, Universiti Kuala Lumpur, Malaysia

\*List in alphabetical order by Last Name from A to Z.

## Conference Program Overview

### Friday, November 20, 2026

| Time        | Activities   | Location                 |
|-------------|--------------|--------------------------|
| 14:00-18:00 | Registration | City University of Macau |

#### Note for on-site registration:

\* Please let us know your name or abstract / paper number for registration.

\* Please pick up all the conference materials at the registration desk (Name Card, Conference Program, Dining Tickets, Tour ticket etc.).

### Saturday, November 21, 2026

| Time        | Activities                     | Location                 |
|-------------|--------------------------------|--------------------------|
| 09:00-09:05 | Opening Speech                 | City University of Macau |
| 09:05-09:40 | Keynote Speech 1               |                          |
| 09:40-10:15 | Keynote Speech 2               |                          |
| 10:15-10:25 | Group Photo                    |                          |
| 10:25-11:05 | Poster Session<br>Coffee Break |                          |
| 11:05-11:40 | Keynote Speech 3               |                          |
| 11:40-12:15 | Keynote Speech 4               |                          |
| 12:15-14:00 | Lunch Break                    |                          |
| 14:00-14:35 | Keynote Speech 5               |                          |
| 14:35-18:00 | Parallel Oral Session 1        |                          |
| 14:35-17:30 | Parallel Oral Session 2        |                          |
| 18:00-20:30 | Welcome Dinner                 | Macau Tower              |

### Sunday, November 22, 2026

| Time        | Activities              | Location                 |
|-------------|-------------------------|--------------------------|
| 09:00-12:20 | Parallel Oral Session 3 | City University of Macau |
| 09:00-12:25 | Parallel Oral Session 4 |                          |
| 12:25-14:00 | Lunch Break             |                          |
| 14:00-17:45 | Parallel Oral Session 5 |                          |
| 14:00-17:00 | Parallel Oral Session 6 |                          |

### Monday, November 23, 2026

| Time        | Activities | Location   |
|-------------|------------|------------|
| 09:00-16:00 | Field Trip | Macao City |



## Keynote Session

Saturday, November 21, 2026

### Opening Speech & Keynote Session

**Host: Prof. Kwun Nam Hui, University of Macau, Macao SAR**

|                                  |                                                                                                                                                                                                                                      |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 09:00-09:05                      | <b>Opening &amp; Welcome Speech</b><br>Prof. Kwun Nam Hui, Technical Committee Chair, University of Macau, Macao SAR                                                                                                                 |
| 09:05-09:40                      | <b>Keynote Speech 1: A Computational Tool to Identify the Impact of New Materials and Joining Processes in the Dynamics of a Road Vehicle</b><br>Prof. Jorge Ambrosio, University of Lisbon, Portugal                                |
| 09:40-10:15                      | <b>Keynote Speech 2: Growth of Intermetallic Phases in Explosively Welded Al–Ti and Al–Mg Multilayer Composites</b><br>Prof. Henryk Paul, Institute of Metallurgy and Materials Science, Polish Academy of Sciences, Krakow, Poland  |
| 10:15-10:25                      | <b>Group Photo</b>                                                                                                                                                                                                                   |
| 10:25-11:05                      | <b><u>Poster Session</u> &amp; Coffee Break</b>                                                                                                                                                                                      |
| 11:05-11:40                      | <b>Keynote Speech 3: Luminescent Properties of Rare Earth Doped Ultrawide-bandgap Semiconductors Characterized by Synchrotron Radiation</b><br>Prof. Qixin Guo, Saga University, Japan                                               |
| 11:40-12:15                      | <b>Keynote Speech 4: Self-healing Nanocontainers for Corrosion Protection. Use of Layered Double Hydroxide (LDH) to Extend the Service Life of Reinforced Concrete</b><br>Prof. Mário G. S. Ferreira, University of Aveiro, Portugal |
| <b>Lunch Break 12:15-14:00</b>   |                                                                                                                                                                                                                                      |
| <b>Afternoon Keynote Session</b> |                                                                                                                                                                                                                                      |
| 14:00-14:35                      | <b>Keynote Speech 5: Structural Lightweight Concrete for Marine and Special Structures: Research and Practice</b><br>Prof. Payam Shafigh, Wenzhou University of Technology, China                                                    |

## Technical Sessions

**Saturday, November 21, 2026**

### Oral Session 1: Polymeric and Composite Materials

|                                 |                                                                                                                                                                                                                                                     |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 14:35-14:55                     | <b>Invited Talk CMSE5473: High-performance Polymer Composites for Tribological Applications</b><br>Prof. Alois K. Schlarb, RPTU Kaiserslautern-Landau, Germany                                                                                      |
| 14:55-15:15                     | <b>Invited Talk CMSE5563: Preparation of Poly(benzylphosphinates) as Flame Retardants via in-situ Generated Carbene Insertion</b><br>Prof. Jiayi Xu, Beijing University of Chemical Technology, China                                               |
| 15:15-15:30                     | <b>CMSE5572: Coupled Effects of Cutting-edge Radius and Cryogenic Cooling on Material Removal During Orthogonal Cutting of CFRP</b><br>Dr. Tao Wang, Northwestern Polytechnical University, China                                                   |
| 15:30-15:45                     | <b>CMSE5573: Investigation on Hole Entrance and Exit Damage in Drilling of CF/PEEK-Ti Stacks</b><br>Dr. Zhijian Meng, Northwestern Polytechnical University, China                                                                                  |
| 15:45-16:00                     | <b>CMSE5557: An Experimental and Thermodynamic Investigation of Substrate-Dependent Delamination Toward Free-Standing PANI:CSA Films</b><br>Dr. Fuat Erden, Sivas University of Science and Technology, Türkiye                                     |
| <i>Coffee Break 16:00-16:20</i> |                                                                                                                                                                                                                                                     |
| 16:20-16:40                     | <b>Invited Talk CMSE5489: Biodegradable and Thermoresponsive Hollow Porous Micro/Nanoparticles for Sustained Drug Release</b><br>Prof. Ildoo Chung, Pusan National University, Republic of Korea                                                    |
| 16:40-17:00                     | <b>Invited Talk CMSE5466: Constructing 3D Boron Nitride Thermal Conductive Network in Epoxy via Magnetic Field-assisted Tape Casting for Thermal Management</b><br>Dr. Zhuo Zhang, Northwestern Polytechnical University, China                     |
| 17:00-17:15                     | <b>CMSE5413: A Multifunctional Bilayer Hydrogel for Effective Pancreatic Fistula Prevention and Post-surgical Adhesion Control</b><br>Mr. Jun Li, Hangzhou Medical College, China                                                                   |
| 17:15-17:30                     | <b>CMSE5574: Investigation on the Damage and Accuracy of the Hole in Drilling Co-cured CFRP/AFRP Laminates</b><br>Dr. Shiming Liang, Northwestern Polytechnical University, China                                                                   |
| 17:30-17:45                     | <b>CMSE5571: Ultrasonic Characterization and Stress Distribution Analysis of g-C<sub>3</sub>N<sub>4</sub> Modified Adhesive in Al7075/CFRP Single-strap Joints</b><br>Dr. Syam Kumar Chokka, PDPM Indian Institute of Information Technology, India |
| 17:45-18:00                     | <b>CMSE5493: Development of a Bio-Inspired Flexible Piezoelectric Sensor Using Collagen and Collagen Composites</b><br>Dr. Phakakorn Panpho, Pibulsongkram Rajabhat University, Thailand                                                            |

|                           |                                                                                                                                                                                             |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Video Presentation</b> | <b>CMSE5527: Experimental Optimization of Post-Cure Dimensional Stability and Compression Set in Extruded HCR Silicone Profiles</b><br>Mr. Jayadip Tejani, National Rubber Corporation, USA |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Oral Session 2: Materials in Power Laser Applications

|             |                                                                                                                                                                                                        |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 14:35-14:55 | <b>Invited Talk CMSE5417: Non-linear Optic Materials in High Power Laser-matter Interaction Diagnosis</b><br>Prof. Aurelian Marcu, National Institute for Laser, Plasma and Radiation Physics, Romania |
| 14:55-15:15 | <b>Invited Talk CMSE5419: Defects Analysis by Optical Methods in Laser Irradiated Metal Alloys</b><br>Dr. Andrei Popescu, National Institute for Laser, Plasma and Radiation Physics, Romania          |
| 15:15-15:30 | <b>CMSE5404: Classification of Material Damage Categories via Laser Ultrasonics, CWT and CNN</b><br>Mr. Lei Wu, Advanced Energy Science and Technology Guangdong Laboratory, China                     |
| 15:30-15:45 | <b>CMSE5418: Laser Welding of Metallic Interconnections for Rechargeable Electric Battery Applications</b><br>Mr. Sabin Mihai, National Institute for Laser, Plasma and Radiation Physics, Romania     |
| 15:45-16:00 | <b>CMSE5396: Effect of Selective Laser Melting Process Parameters on the Microstructure and Properties of 18Ni300 Maraging Steel</b><br>Prof. Fenghong Cao, Chengdu Technological University, China    |

*Coffee Break 16:00-16:20*

|             |                                                                                                                                                                                                       |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 16:20-16:40 | <b>Invited Talk CMSE5450: Mechanical Behavior of Heat Treated Porous Stainless Steel Obtained by Additive Manufacturing</b><br>Prof. Luis Filipe Borrego, Polytechnic University of Coimbra, Portugal |
| 16:40-17:00 | <b>Invited Talk CMSE5540: Exploring Fingerprints of Ultrafast Structural Dynamics in Molecular Solutions with an X-ray Laser</b><br>Dr. Ruslan Kurta, European XFEL, Germany                          |
| 17:00-17:15 | <b>CMSE5524: Preliminary Studies on Nanowire Morphology Influences in Laser-matter Interaction Processes</b><br>Ms. Maria Balan, National Institute for Laser, Plasma and Radiation Physics, Romania  |
| 17:15-17:30 | <b>CMSE5562: Non-contact Ultrasound to Assist Laser Additive Manufacturing</b><br>Dr. Jiasen Han, Northwestern Polytechnical University, China                                                        |

|             |                                                                                                                                                                            |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 18:00-18:30 | <b>Depart for Macau Tower</b><br>Gather at: Rotunda Dr. Carlos A. C. P. D'Assumpção Bus Stop T307 (alongside the uphill road to CityU main gate) 宋玉生博士圓形地巴士站T307 (城大校門上坡旁) |
| 18:30-20:30 | <b>Buffet Dinner at Macau Tower</b>                                                                                                                                        |

**Sunday, November 22, 2026**

**Oral Session 3: Electronic, Magnetic and Photonic Materials**

- 09:00-09:20 **Invited Talk CMSE5521: Electrical Characterization of Compositional  $\text{Al}_2\text{O}_3$  Supplemented  $\text{HfO}_2$  Thin Films Deposited by Atomic Layer Deposition**  
Prof. Jangyong KIM, Xi'an Jiaotong-Liverpool University, China
- 09:20-09:40 **Invited Talk CMSE5504: When Flexible Electronics Becomes a Foundry Technology: A Microelectronic Designer's Perspective**  
Dr. Oscar Alonso, Universitat de Barcelona, Spain
- 09:40-10:00 **Invited Talk CMSE5492: Anomalous Behaviour of the Spin Transition in the  $\text{Fe}^{\text{II}}$ -based Spin-Crossover Compounds under High Pressure**  
Dr. Nikita Liedienov, Jilin University, China
- 10:00-10:15 **CMSE5534: Tailorable Microwave Absorption Performance of Carbon-based Nanocomposites by Microstructure Construction**  
Dr. Kaifeng Wang, Shenzhen University, China
- 10:15-10:30 **CMSE5564: Electronic Structure Calculation of Atom/Molecule within a Cartesian-grid DFT**  
Prof. Amlan Kusum Roy, Indian Institute of Science Education and Research Kolkata, India

*Coffee Break 10:30-10:50*

- 10:50-11:10 **Invited Talk CMSE5484: Pressure-induced Low-spin State Destabilization in an Iron(II) Spin Crossover Complex with Pyrazol-Pyridine-Triazolate Coordination Core**  
Prof. Georgiy Levchenko, Jilin University, China
- 11:10-11:30 **Invited Talk CMSE5515: Nanoimprint of Au-based Thin Film Metallic Glasses for Surface-enhanced Raman Scattering Applications**  
Prof. Chun-Hway Hsueh, National Taiwan University
- 11:30-11:50 **Invited Talk CMSE5439: Advanced Polymer Network Assembly Methods for Responsive Liquid Crystal Materials and Devices**  
Prof. Laurens Theobald de Haan, South China Normal University, China
- 11:50-12:05 **CMSE5549: Surface Chemistry of Emitting Colloidal Quantum Dots and Their Incorporation into Inorganic Materials**  
Dr. Norio Murase, Quantum Materials Technology Co., Ltd. (QMT), Japan
- 12:05-12:20 **CMSE5508: Scale-tailored Localization in Non-Hermitian Systems**  
Dr. Cui-Xian Guo, Institute of Physics, Chinese Academy of Sciences, China
- Video Presentation** **CMSE5510: MXene-based Schottky/S-scheme Dual Heterojunction Composites with Atomic-Scale Ce–O–Ti Bridging Structures: Enhanced Charge Separation and Photocatalytic Oxidation of PPCPs**  
Ms. Yawen Chen, University of Science and Technology of China, China

## Oral Session 4: Solid Mechanics, Structural Dynamics and Advanced Manufacturing

- 09:00-09:20 **Invited Talk CMSE5441: Numerical Investigation of Bubble Collapse-induced Impact and Damage Mechanisms on Thin Solid Plates Near Fluid Interfaces**  
Prof. INABA Kazuaki, Institute of Science Tokyo, Japan
- 09:20-09:40 **Invited Talk CMSE5470: Modeling and Analysis of Lubricated Revolute Joints in Dynamics of Mechanical Systems**  
Prof. Paulo Flores, University of Minho, Portugal
- 09:40-09:55 **CMSE5548: A Temperature-triggered Constitutive Switching Model for TGO Growth Stress and Its Effects on the Stress Field and Crack Initiation around Film-cooling Holes in TBC Systems**  
Mr. Xiaojie Han, Tokyo University of Science, Japan
- 09:55-10:10 **CMSE5475: Stiffness-damping Balance Design of a PA-modified Epoxy Filling Material for Chatter Suppression in Thin-walled Blade Milling**  
Mr. Yizhuo Wang, Northwestern Polytechnical University, China
- 10:10-10:25 **CMSE5517: The Effect of Environmental Conditions on the Guided Ultrasonic Wave Propagation in Fibre Metal Laminates for Structural Health Monitoring**  
Dr. Wolfgang E. Weber, Helmut-Schmidt-University, Germany

*Coffee Break 10:25-10:45*

- 10:45-11:05 **Invited Talk CMSE5543: Effect of Use of Recycled Aggregates on Shear Strength of 50 MPa Concrete Based on Pushoff Tests**  
Prof. Khaldoun Rahal, Kuwait University, Kuwait
- 11:05-11:25 **Invited Talk CMSE5403: Influence of the Multi-directivity of Earthquake Ground Motion on the Rocking Response of a Reinforced Concrete Building**  
Prof. Radan Ivanov, National Institute of Geophysics, Geodesy and Geography - Bulgarian Academy of Sciences, Bulgaria
- 11:25-11:40 **CMSE5478: GPU-accelerated Microscale Stress Reconstruction in Linear-elastic Composite Structures Using Precomputed RVE Responses**  
Dr. Waldemar Mucha, Silesian University of Technology, Poland
- 11:40-11:55 **CMSE5505: Temperature-field Assisted Vat Photopolymerization (TF-VPP) Fabrication of High-strength, Low-shrinkage Silica-Based Ceramic Cores: Effects of Spherical Powders and Vacuum Debinding**  
Mr. Yongyong Liu, Beihang University, China
- 11:55-12:10 **CMSE5536: Dynamic Fracture Analysis of Glass Plates Using an XFEM-VCCT Coupled Approach**  
Ms. Wang Yao, Harbin Institute of Technology Weihai, China
- 12:10-12:25 **CMSE5454: Dynamic Analysis of Electrostatically Coupled Initially Curved Microbeams Employing PZT Sandwich Layers**  
Dr. Ayman Alneamy, Jazan University, Saudi Arabia

*Lunch Break 12:25-14:00*

## Oral Session 5: Functional Materials for Energy and Environmental and Nuclear Systems

|                                 |                                                                                                                                                                                                                                       |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 14:00-14:20                     | <b>Invited Talk CMSE5465: Nanoporous Carbon Textiles: Precise Design of Porosity and Surface Chemistry for Wide Range of Applications</b><br>Prof. Mariusz Barczak, Maria Curie-Skłodowska University, Poland                         |
| 14:20-14:40                     | <b>Invited Talk CMSE5468: On the Use of Cork Composites for Hydrogen-based Applications</b><br>Prof. Ricardo Alves de Sousa, University of Aveiro, Portugal                                                                           |
| 14:40-15:00                     | <b>Invited Talk CMSE5437: From Electronic Structure to Spin-state Control: Redefining Catalysis in Lithium-sulfur Batteries</b><br>Prof. Kwun Nam Hui, University of Macau, China                                                     |
| 15:00-15:15                     | <b>CMSE5545: Glutathione-functionalized Vertically Aligned Carbon Nanotube Arrays for Electrochemical Heavy-metal-ion Sensing</b><br>Dr. Eser Akinoglu, South China Normal University, China                                          |
| 15:15-15:30                     | <b>CMSE5467: Carbon-sulfur Nanocomposites for Efficient Platinum Removal and Recovery from Hospital Effluents</b><br>Ms. Marlena Bytniewska, Maria Curie-Skłodowska University, Poland                                                |
| <i>Coffee Break 15:30-15:50</i> |                                                                                                                                                                                                                                       |
| 15:50-16:10                     | <b>Invited Talk CMSE5554: MXene-based Materials for Sustainable Water Treatment and Desalination: Recent Advances, Challenges, and Future Perspectives</b><br>Dr. Ihsanullah Obaidullah, University of Sharjah, United Arab Emirates  |
| 16:10-16:30                     | <b>Invited Talk CMSE5555: Neutron-material Interaction and Activation Behavior of Gold Foils under Different Reactor Power Levels</b><br>Dr. Muhammad Zubair, University of Sharjah, United Arab Emirates                             |
| 16:30-16:45                     | <b>CMSE5401: Application and Performance Changes of Nuclear Detectors in the High-Power Liquid Lead-Bismuth Spallation Targets of ADS</b><br>Dr. Qian Yu, Institute of Modern Physics, Chinese Academy of Sciences, China             |
| 16:45-17:00                     | <b>CMSE5434: Effect of Mass Fraction on Physicochemical Properties of Coconut Oil-loaded Cobalt-glutamate Bio-MOF</b><br>Dr. Fayza Yulia, Universitas Pertamina, Indonesia                                                            |
| 17:00-17:15                     | <b>CMSE5532: Fabrication and Performance Analysis of TiO<sub>2</sub>-PVDF Composite Membrane to Separate Oil and Water</b><br>Dr. Nonni Soraya Sambudi, Universitas Pertamina, Indonesia                                              |
| 17:15-17:30                     | <b>CMSE5593: Preparation and Hydrogen Elimination Performance of Hydrogen Storage Alloy Supported Noble Metal Catalysts</b><br>Dr. Chunrong Liu, Lanzhou Institute of Technology, China                                               |
| 17:30-17:45                     | <b>CMSE5494: Processing-Morphology-Performance Relationships of Electrospun PAN/MWCNT Nanofibrous Membranes for High-Efficiency PM<sub>2.5</sub> Filtration</b><br>Dr. Rattiphorn Sumang, Pibulsongkram Rajabhat University, Thailand |

## Oral Session 6: Advanced Structural Alloys and Metallic Materials

- 14:00-14:20     **Invited Talk CMSE5511: Nb-Si Based Ultrahigh Temperature Alloys and Their Integrally Directional Solidification Techniques**  
Prof. Xiping Guo, Northwestern Polytechnical University, China
- 14:20-14:40     **Invited Talk CMSE5535: High Performance Bulk Nanotwinned Mg Alloys**  
Prof. Qiuming Peng, Yanshan University, China
- 14:40-14:55     **CMSE5453: Hot Temperature Deformation of High-strength Mg-Zn-based Alloys Prepared by Rapidly Solidified Ribbon Consolidation Technique**  
Mr. Zsolt Beke, Charles University, Czech Republic
- 14:55-15:10     **CMSE5474: Feasibility of Friction Stir Processing for Mitigating Weld Toe Fatigue Cracks in Steel Fillet Joints**  
Mr. Yongshi Tang, The University of Osaka, Japan
- 15:10-15:25     **CMSE5412: Achieving a Balance Between Strength and Ductility of TiN Ceramic Particles Reinforced Ti<sub>2</sub>AlNb Matrix Composites**  
Dr. Kewei Zhang, Northwestern Polytechnical University, China

*Coffee Break 15:25-15:45*

- 15:45-16:00     **CMSE5576: Electrochemical Studies of Ti-Nb Alloys in Simulated Bodily Fluids**  
Mr. Liberty Dzadza, University of Johannesburg, South Africa
- 16:00-16:15     **CMSE5461: Optimization of Machining Parameters in Induction-Assisted Milling of  $\gamma$ -TiAl Alloys**  
Dr. Tao Fan, Northwestern Polytechnical University, China
- 16:15-16:30     **CMSE5579: Leaching Kinetics for Copper Extraction from Oxide Ore in Sulphuric Acid**  
Dr. Momboyo Clotilde Apua, University of Johannesburg, South Africa
- 16:30-16:45     **CMSE5577: Investigation of the Effect of Pulsed DC Ion-plasma Nitriding Temperature on the Mechanical and Tribological Properties of AISI 304 Steel**  
Mr. Kuanysh Ormanbekov, Shakarim University, Republic of Kazakhstan
- 16:45-17:00     **CMSE5580: Heat-input Window for Wear-Resistant PTA Coatings: Ni-Cr-B-Si-WC Versus Fe-Cr-C on Medium-carbon Steels**  
Mr. Aibek Shynarbek, Shakarim University, Republic of Kazakhstan

## Poster Session

**Saturday, November 21, 2026 | Time: 10:25-11:05.**

### List of Poster Presentations

- |          |                                                                                                                                                                                                                                                                                                                                                      |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CMSE5429 | <b>An Ultraviolet-Writable and Infrared-Erasable Anti-Counterfeiting Strategy Based on the Combination of Photochromic <math>\text{Zn}_2\text{GeO}_4</math>: <math>\text{Na}^+</math> Phosphor and Photothermal Converter <math>\text{NaYb}_{0.5}\text{Sm}_{0.5}(\text{MoO}_4)_2</math> Agent</b><br>Mr. Xin Chen, Dalian Maritime University, China |
| CMSE5430 | <b>The Intergrowth of <math>\text{YTa}_7\text{O}_{19}</math> in <math>\text{L-Ta}_2\text{O}_5</math> with <math>\text{Er}^{3+}/\text{Yb}^{3+}</math> Enhancing Pure Green Upconversion Luminescence Intensity by Molten Salt Synthesis</b><br>Ms. Yuhan Fan, Dalian Maritime University, China                                                       |
| CMSE5477 | <b>Electrical and Magnetic Properties of BNBKL-NZLAF Lead-Free Multiferroic Composites Synthesized via the Solid-State Combustion Method</b><br>Prof. Theerachai Bongkarn, Naresuan University, Thailand                                                                                                                                             |
| CMSE5485 | <b>Computational Study of Oxygen Distribution in Heated Soft Tissue</b><br>Dr. Maria Zadoń, Silesian University of Technology, Poland                                                                                                                                                                                                                |
| CMSE5487 | <b>Enhanced Ferroelectric Properties of New Multiferroic Materials Designed by High-Pressure Torsion</b><br>Dr. Chunrui Song, Jilin University, China                                                                                                                                                                                                |
| CMSE5488 | <b>Ferroelectric Properties Improvement of New Multiferroic Materials under High Pressure</b><br>Dr. Yingnan Mu, Jilin University, China                                                                                                                                                                                                             |
| CMSE5512 | <b>Functionalized Antimicrobial Films Based on Antibiotic Imbedded in Bioactive Glass Matrix for Implants Coating</b><br>Dr. Laura Floroian, Transilvania University of Brasov, Romania                                                                                                                                                              |
| CMSE5513 | <b>Nanofat-seeded Artificial Dermis as a Bioactive Scaffold for Improved Scar Outcomes</b><br>Prof. Seung-Kyu Han, Korea University College of Medicine, Republic of Korea                                                                                                                                                                           |
| CMSE5516 | <b>Study on Predicting the Mechanical Behavior of Polycrystalline Graphene Using Artificial Intelligence</b><br>Dr. Jihoon Han, Jeonbuk National University, Republic of Korea                                                                                                                                                                       |
| CMSE5526 | <b>Rare-earth-specific Lattice Perturbation Modulates Field-dependent Vortex Pinning in TFA-MOD REBCO Thin Films</b><br>Dr. Zhenping Su, Beihang University, China                                                                                                                                                                                   |
| CMSE5530 | <b>Screen-printed Electrode Characterization of Freshwater-derived Microalgae for Photosynthetic Bioelectricity Generation</b><br>Prof. Eunyu Kim, Duke Kunshan University, China                                                                                                                                                                    |
| CMSE5551 | <b>An Integrated Sampling Architecture for Continuous <math>\text{CO}_2</math> Emission Assessment under Variable Industrial Exhaust Conditions</b><br>Dr. Jin-Young Kim, Korea Institute of Industrial Technology, Republic of Korea                                                                                                                |
| CMSE5552 | <b>Morphology-Engineered <math>\text{GaN}/\text{SnO}_2</math> Nanowire Heterostructures: Nanoparticle Decoration versus Shell Coating for Highly Selective <math>\text{H}_2\text{S}</math> Sensing</b><br>Dr. Jae-Young Park, Korea Institute of Industrial Technology, Republic of Korea                                                            |

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|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CMSE5581 | <b>Rethinking Specification Criteria for Green Concrete: Long-Term Assessment of Alkalinity</b><br>Dr. Poh-Yee LOH, Universiti Malaya, Malaysia                                                                                                |
| CMSE5582 | <b>Microstructural Evolution and Interface Characteristics of Ta/Cu/Steel Clads Produced by Explosive Welding</b><br>Dr. Sandra Puchlerska, AGH University of Krakow, Poland                                                                   |
| CMSE5584 | <b>Production of High-Strength Lightweight Aggregate Concrete Incorporating Agricultural Waste</b><br>Dr. Muhammad Aslam, Wenzhou University of Technology, China                                                                              |
| CMSE5588 | <b>Microstructure and Tribo-Mechanical Performance of Equiatomic CoCrFeNiMn High-Entropy Alloy Coatings Fabricated by High-Velocity Oxygen Fuel Spraying</b><br>Dr. Dastan Buitkenov, Sarsen Amanzholov East Kazakhstan University, Kazakhstan |
| CMSE5590 | <b>Calculation of the Hardened Layer Depth during Electrolytic-Plasma Processing of Structural Steels Based on a Numerical Thermal Model</b><br>Mr. Rinat Kussainov, Shakarim University, Kazakhstan                                           |
| CMSE5592 | <b>Understanding the Origins of Polarization in Li-CO<sub>2</sub> Batteries</b><br>Dr. Namsheer Kuniyil, Gachon University, Republic of Korea                                                                                                  |

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## Featured Speakers

### Keynote Speakers



**KEYNOTE SPEAKER: Prof. Jorge Ambrosio**

IDMEC, Instituto Superior Técnico  
University of Lisbon, Portugal

**Keynote Speech 1**

**November 21, 2026**

**Time:** 09:05-09:40

**Speech Title:** A Computational Tool to Identify the Impact of New Materials and Joining Processes in the Dynamics of a Road Vehicle

**Abstract.** The Body-in-White (BiW) is the backbone for the structural integrity of road vehicles, connecting the wheels via the suspension, to carry engine and passengers. The use of new materials and structural joints in the BiW requires to understand how its construction affects the vehicle dynamic behaviour. The finite element (FE) method allows to develop models to study the static structural deformation, vibration characteristics of components, and crash scenarios. However, these models tend to oversimplify the tire-road interaction and the suspension elements, being often used to study the BiW alone, but not for vehicle handling and ride. Flexible multibody (FMB) simulations allow considering the tire-road contact, the suspension systems, and to include the structural flexibility of components, being suitable to study how BiW construction affects the vehicle dynamics. Although the effect of the structural flexibility of the BiW in vehicle dynamics has been studied, most of the works consider simple tubular chassis structures, or, when more complex BiW constructions, the FMB models resort to some kind of simplification of the structure. Additionally, there is no consensus about the relevance of using the BiW flexibility in multibody simulations of road vehicles or on the effect of the BiW stiffness in their ride and handling behaviour. This work extends the understanding on the topic by: incorporating a detailed BiW model in the FMB model of a luxury sports car; discussing the FMB formulation used in the in-house code MUBODyn, and; exploring the impact of BiW design in vehicle dynamics including the use of novel materials and the required joining processes.

**Keywords:** Automotive structures, New Material, Joining Process, Vehicle Dynamics

**Acknowledgements:** The authors acknowledge Fundação para a Ciência e a Tecnologia (FCT) for its financial support via LAETA (project <https://doi.org/10.54499/UID/50022/2025>)

**Biography:** Prof. Jorge A.C. Ambrósio, having received his Ph.D. degree from the University of Arizona in 1991, he is currently Full Professor and head of the Structural and Computational Mechanics group at the Mechanical Engineering Department of Instituto Superior Técnico at the University of Lisbon, Portugal. He is the author of more than 300 publications, including several books and a large number of papers in international journals in the areas of Multibody Dynamics, Flexible Multibody Dynamics, Structural Mechanics, Vehicle Dynamics, Crashworthiness and Biomechanics. His current SCOPUS h-index is 53 with more than 8000 citations. He has been responsible for several national and international projects in railway dynamics, biomechanics and passive safety. Currently he is the Editor-in-Chief of Multibody System Dynamics and member of the editorial boards of several international journals.

**KEYNOTE SPEAKER: Prof. Henryk Paul**

Institute of Metallurgy and Materials Science, Polish Academy of Sciences, Krakow, Poland

**Keynote Speech 2**

**November 21, 2026**

**Time:** 09:40-10:15

**Speech Title:** Growth of Intermetallic Phases in Explosively Welded Al–Ti and Al–Mg Multilayer Composites



**Abstract.** Interfacial layers formed during explosive welding are subjected to extremely rapid heating and cooling, which lead to localized melting and mixing within the reaction zones. However, the metallurgical and crystallographic characteristics of these regions, as well as their role in subsequent intermetallic phases growth during post-processing growth, remain insufficiently understood. In this work, the mechanisms governing microstructural evolution and intermetallic phase growth were investigated in two multilayer systems produced by single-shot explosive welding: a fifteen-layer Ti–Al composite consisting of alternating 1 mm sheets of Ti (Gr.1) and AA1050 (Al), and an eleven-layer Mg–Al composite composed of AZ31 (Mg) and AA1050 (Al) sheets. Post-weld annealing was carried out at 903 K for the Ti–Al system and 673 K for the Mg–Al system for times ranging from less than 1 h to more than  $10^3$  h. Interfacial microstructures were characterized by scanning and transmission electron microscopy, complemented by synchrotron X-ray diffraction, while local mechanical properties were evaluated by microhardness and shear-strength measurements.

Explosive welding produced solidified melt regions along all interfaces in both systems. These regions consisted predominantly of non-equilibrium phases with ultrafine-grained or amorphous structures. Short annealing treatments promoted rapid formation of intermetallic layers through the transformation of these metastable products. In the Ti–Al system, a continuous  $Al_3Ti$  layer developed at all interfaces, and prolonged annealing led to the formation of a Ti– $Al_3Ti$ –Al multilayer architecture with residual Ti and Al layers. In the Mg–Al system, short-duration annealing ( $<1$  h) at 673 K promoted significant growth of the  $\gamma$ - $Mg_{17}Al_{12}$  and  $\beta$ - $Mg_{28}Al_{45}$  phases near all interfaces and induced transformation of the pre-existing non-equilibrium phases within the reaction regions into the  $\beta$  phase. Prolonged annealing ( $\geq 500$  h) resulted in the formation of intermediate  $\epsilon$ - $Mg_{23}Al_{30}$  layers between the  $\beta$  and  $\gamma$  layers, giving rise to an Al– $\gamma/\epsilon/\beta$ –Mg multilayer intermetallic structure. In both composites, the intermetallic layers exhibited pronounced morphological and crystallographic heterogeneity. In the Ti–Al system, this heterogeneity was associated with the formation of  $Al_3Ti$ -based superstructures alongside the conventional  $D0_{22}$ - $Al_3Ti$  phase, as well as with the development of distinct fibre textures in the interfacial regions. In the Al–Mg system, the  $\beta$  and  $\gamma$  phase layers consisted of highly elongated grains, whereas the  $\epsilon$  phase was composed of equiaxed grains. However, none of these phases exhibited a preferred crystallographic orientation.

**Biography:** Professor Henryk Paul received his Doctor of Engineering degree from the Institute of Metallurgy and Materials Science (IMMS) at the Polish Academy of Sciences in Kraków, Poland, in 1989. After serving as an assistant professor, he was promoted to associate professor in 2003 and to full professor in 2010, all at IMMS PAS. He has completed numerous fellowships and internships at French institutions, including an extended stays at the École des Mines de Saint-Étienne and several study visits to LLB Saclay and Université Paris-Sud. He has authored over 290 original papers, 22 book chapters, and 22 review papers on various aspects of phase transformations. His research interests include explosive welding technology, the formation of plastic flow instabilities during the semi-static and high strain rate deformation of metallic materials, recovery and recrystallization phenomena associated with the phase transformations. He has been a plenary, keynote, or invited speaker at 50 international conferences. He has supervised several PhD students and post-doctoral researchers and has been actively involved in teaching graduate and doctoral courses in physical metallurgy and advanced engineering materials. His publications have been cited over 2,600 times, and he has an h-index of 31.



**KEYNOTE SPEAKER: Prof. Qixin Guo**

Department of Electrical and Electronic Engineering  
Synchrotron Light Application Center, Saga University, Japan

**Keynote Speech 3**

**November 21, 2026**

**Time:** 11:05-11:40

**Speech Title:** Luminescent Properties of Rare Earth Doped Ultrawide-bandgap Semiconductors Characterized by Synchrotron Radiation

**Abstract.** Ultrawide-bandgap (UWBG) semiconductors, including AlN, BN, diamond, and Ga<sub>2</sub>O<sub>3</sub>, have attracted extensive research interest owing to their unique physical properties and broad potential applications in electronic and optoelectronic devices. Among these applications, microscale light-emitting diodes ( $\mu$ LEDs) have emerged as promising candidates for next-generation augmented reality and virtual reality displays. High-performance  $\mu$ LED displays require high pixel density, high efficiency, high brightness, excellent emission stability, and full-color capability. However, realizing full-color  $\mu$ LED displays remains challenging because conventional fabrication relies on the mass transfer and precise alignment of red, green, and blue  $\mu$ LED chips grown on different epitaxial wafers.

Rare-earth (RE)-doped semiconductors exhibit intense, spectrally narrow emissions arising from intra-4f electronic transitions of RE ions, making them attractive for color display and solid-state lighting applications. Considerable efforts have been devoted to developing visible-light emitters based on RE-doped GaN. It has been suggested that employing ultrawide-bandgap host materials can further enhance the luminescence efficiency of RE ions. We have demonstrated distinct red, green, and blue emissions from Eu-, Er-, and Tm-doped Ga<sub>2</sub>O<sub>3</sub> thin films, respectively. Furthermore, the normalized emission intensities of RE-doped Ga<sub>2</sub>O<sub>3</sub> exhibit significantly smaller temperature dependence than those of RE-doped GaN, indicating superior thermal stability. Optical luminescence studies provide valuable information on the electronic structure, host lattice, and defect states of semiconductors, thereby facilitating the optimization of crystal growth and material quality.

Synchrotron radiation is an ideal excitation source for investigating the optical properties of UWBG semiconductors because of its exceptionally high brightness and continuously tunable photon energy. To support such studies, we have established the Saga University Beamline (BL13) at the Saga Light Source (SAGA-LS), Japan, and developed a dedicated luminescence spectroscopy system. In this presentation, we will introduce the recent progress in our synchrotron radiation-based luminescence measurement system and present representative experimental results on rare-earth-doped ultrawide-bandgap semiconductors.

**Biography:** Prof. Dr. Guo received B.E., M.E., and Dr. Eng. degrees in Electronic Engineering from Toyohashi University of Technology, Japan, in 1990, 1992, and 1996, respectively. He is currently a Professor in the Department of Electrical and Electronic Engineering at Saga University, Japan. He also served as Director of the Saga University Synchrotron Light Application Center from April 2012 to March 2022. His research focuses on the epitaxial growth and characterization of semiconductor materials, particularly ultrawide-bandgap semiconductors for electronic and optoelectronic applications. He has authored and co-authored more than 400 scientific papers published in leading journals, including Nature Communications, Advanced Materials, Physical Review B, and Applied Physics Letters. His publications have received more than 12,500 citations, with an h-index of 56. He has been recognized among the World's Top 2% Scientists in the Stanford University ranking.

**KEYNOTE SPEAKER: Prof. Mário G. S. Ferreira**

Department of Materials & Ceramic Engineering,  
CICECO-Aveiro Institute of Materials, University of Aveiro, Portugal

**Keynote Speech 4**

**November 21, 2026**

**Time:** 11:40-12:15

**Speech Title:** Self-Healing Nanocontainers for Corrosion Protection. Use of Layered Double Hydroxide (LDH) to Extend the Service Life of Reinforced Concrete



**Abstract.** The active corrosion protection of metallic substrates can be achieved by addition of corrosion inhibitors. However, direct mixing of an inhibitor with coating formulations can lead to important drawbacks decreasing barrier properties of the coating and diminishing activity of the inhibitor.

In this work novel protective nanostructured coatings with self-healing ability are presented. This effect is obtained based on nanocontainers that release entrapped corrosion inhibitors in response to local pH changes or presence of corrosive species. The development of new nanocontainers for organic and inorganic green corrosion inhibitors is described, especially the most promising from industrial point of view, based on Layered Double Hydroxides (LDH). The combination of different of these nanocontainers in the same system has proved to be effective to accomplish further functions. To extend the service life of reinforced concrete a similar solution could be envisaged with the addition of LDH to concrete mixture.

Emphasis is placed on integrating environmentally conscious components to reduce ecological impact without compromising performance.

**Biography:** Mário GS Ferreira is recognized worldwide for his expertise in corrosion and materials protection, with a career spanning five decades. He has made significant contributions across various areas, including passive film electronic structures, aluminium alloys, reinforced concrete, biomaterials, coatings, corrosion inhibitors, and self-healing materials. His work also covers atmospheric corrosion and the use of localized electrochemical techniques.

He is currently an Honorary Full Professor at the University of Aveiro, Portugal, and a member of the Aveiro Institute of Materials (CICECO). He has held leadership roles such as Head of the Department of Materials and Ceramic Engineering and coordinator of the Surface Engineering and Corrosion Protection Group at Instituto Superior Técnico and University of Aveiro.

Ferreira has published over 370 peer-reviewed articles in leading corrosion journals, holds an h-index of 93 (Scopus, July 2025), and has edited 4 scientific books, co-authored 18 book chapters, and registered 5 patents. He has led numerous national and international R&D projects funded by EU programs such as Horizon 2020 and BRITE-EURAM.

He has played a pivotal role in bridging academia and industry through collaborations with companies like EADS, Airbus, FIAT, ThyssenKrupp, and Tata Steel. He has supervised many successful MSc, PhD, and postdoctoral researchers, and frequently delivers keynote and plenary lectures at international conferences.

Ferreira co-founded SmallMaTek LDA, a spin-off dedicated to corrosion and biofouling protection. He has been active in several scientific societies and EU technical committees, and also served as Deputy Director-General for Higher Education in Portugal.

Mário Ferreira received the following honors: “H.H. Uhlig Award” of Corrosion Division of The Electrochemical Society (2013), CAVALLARO Gold Medal, Univ. Ferrara/EFC (2014), Fellow of the International Society of Electrochemistry (ISE), Fellow of The Electrochemical Society (ECS), European

Corrosion Medal of the European Federation of Corrosion/EFC (2017), Marcel Pourbaix Award of the International Corrosion Council/ICC (2021), Engineers Association Award (OE Portugal)- Senior Adviser Member (2015), FEMS European Materials Gold Medal (2025).



**KEYNOTE SPEAKER: Prof. Payam Shafigh**

College of Architecture and Energy Engineering, Wenzhou University of Technology, China

Director, Zhejiang-Malaysia Joint Laboratory on Marine Low-carbon (Green) Building Materials

**Keynote Speech 5**

**November 21, 2026**

**Time: 14:00-14:35**

**Speech Title:** Structural Lightweight Concrete for Marine and Special Structures: Research and Practice

**Abstract.** As the most consumed man-made material, concrete is used in a wide range of applications in construction projects. It is generally considered a heavy material while it is also responsible for a significant portion of the carbon footprints of the construction sector. Structural Lightweight Concrete (LWC), which is typically made of a type of lightweight aggregate, is a type of concrete designed to lower the overall weight of concrete and structures while maintaining its strength and integrity. Typically, its density ranges between 1.4 to 2.0 tonnes per cubic meter with a compressive strength ranging between 20 to 70 MPa. After the fall of the Roman Empire, the use of LWC was limited until the 20th century and was used to build the warship in the First World War in the USA. The structural applications of LWAC got more attention due to its properties from the energy-related floating structures, due to it can reduce the weight of structures up to 50% while submerged in water compared to normal weight concrete. Although, there are numerous direct and indirect benefits of using structural LWC in construction industry including reducing foundation costs, enable longer span bridges, high durability, easier handling and transportation, environmental impact, and savings in time, energy and labour costs; however, its application in structures particularly in marine and high-rise building structures is still limited in many countries.

**Keywords:** Concrete Technology, Special Concrete, Lightweight Aggregate, Building, Bridge

**Biography:** Payam Shafigh has received his doctoral degree (with distinction) in Structural Engineering & Materials from the Universiti Malaya in 2013 and obtained his MSc in Civil Engineering Structure (2003) and BSc in Civil Engineering (2000) from the Babol Noshirvani University of Technology, Iran. He worked in the Universiti Malaya from 2013 to 2024 in different academic positions and he is currently working as a Distinguished Professor in the College of Architecture and Energy Engineering, Wenzhou University of Technology, Wenzhou, China. He is a Chartered Fellow of the Chartered Association of Building Engineers (CABE) and a Graduate Member of the Institution of Civil Engineers (ICE), UK. He was listed among world's top 2% scientists by Stanford University for the years 2021 to 2025. He was involved in several public and private projects as site supervisor, building surveyor, and applied advanced concrete materials in bridges and buildings such as structural lightweight aggregate concrete in Terengganu Drawbridge, Malaysia.

## Invited Speakers



**Prof. Aurelian Marcu**  
National Institute for Laser, Plasma and  
Radiation Physics, Romania



**Prof. Ildoo Chung**  
Pusan National University  
Republic of Korea



**Dr. Andrei POPESCU**  
National Institute for Laser, Plasma and  
Radiation Physics, Romania



**Prof. Kwun Nam Hui**  
University of Macau, Macao SAR



**Prof. Laurens Theobald de Haan**  
South China Normal University, China



**Dr. Nikita Liedienov**  
Jilin University, China



**Prof. Mariusz Barczak**  
Maria Curie-Skłodowska University  
Poland



**Dr. Zhuo Zhang**  
Northwestern Polytechnical University  
China



**Prof. Jangyong Kim**  
Xi'an Jiaotong-Liverpool University  
China



**Prof. Kazuaki Inaba**  
Institute of Science Tokyo, Japan



**Dr. Oscar Alonso**  
University of Barcelona, Spain



**Prof. Chun-Hway Hsueh**  
National Taiwan University



**Prof. Xiping Guo**  
Northwestern Polytechnical University  
China



**Prof. Ricardo Alves de Sousa**  
University of Aveiro, Portugal



**Dr. Ruslan Kurta**  
European XFEL, Germany



**Dr. Ihsanullah Obaidullah**  
University of Sharjah, UAE



**Dr. Muhammad Zubair**  
University of Sharjah, UAE



**Prof. Paulo Flores**  
University of Minho, Portugal



**Prof. Jiayi Xu**  
Beijing University of Chemical  
Technology, China



**Prof. Qiuming Peng**  
Yanshan University, China



**Prof. Alois K. Schlarb**  
RPTU Kaiserslautern-Landau, Germany



**Prof. Georgiy Levchenko**  
Jilin University, China



**Prof. Radan Ivanov**  
National Institute of Geophysics,  
Geodesy and Geography, BAS Bulgaria



**Prof. Khaldoun Rahal**  
Kuwait University, Kuwait

# Presentations Guideline

## Oral Presentation Instructions

### Time Allotted for Each Presentation

Keynote Speech: 35 min

Invited Talk: 20 min

Oral Presentation: 15 min

**Note:** The allotted time includes 3-5 minutes of Q&A.

### Devices Provided by the Conference Organizer

- Laptops (with MS-Office & Adobe Reader)
- Projectors & Screen: Ratio 16:9
- Laser Sticks
- Microphones

### Materials Provided by the Oral Presenters

- Microsoft PowerPoint or PDF Presentation file (Please show your paper ID as CMSE\*\*\*\* on the last page.)

For presenters who do not send the presentation file to the Conference Secretary before the conference, please have your presentation ready on a memory stick, and save it on the laptop of your corresponding session about **15 minutes** before session starts.

## Best Oral Presentation Award

### Selection Criteria

ONE best presentation will be selected from EACH Oral Session based on the following criteria:

- Research Quality
- Presentation Performance
- Presentation Language
- Interaction with Listeners
- PowerPoint Design

### Selection Procedure

- An assessment sheet will be delivered to listeners before the session.
- Write the numbers of two best presentations and submit the filled assessment sheet (with the listener's name and signature) to the Session Chair before the session termination.
- The Session Chair will count the votes for each presentation and name the winner based on the maximal number of votes. The Session Chair has three votes but can use only one in favor of his/her own presentation (if any). To avoid any conflict of interest, only registered listeners are entitled to vote.

**Note:** The Best Oral Presentation Awards are open to contributed oral presentations only.

### Nature of the Award

- This award consists of free registration for the next conference CMSE 2027 and a certificate.
- The winners will be announced at the end of each session, and results will be updated on the CMSE 2026 official website after the conference.

## Assessment Sheet Sample

### CMSE 2026 Oral Presentation Assessment

Dear participants,

After carefully listening to the presentations of this session, please kindly recommend two excellent Oral Presentations with reference to the following evaluation criteria.

The Session Chair will count the votes from each presentation and select ONE Best Oral Presentation in this session. If there is a tie, the Session Chair will make the final decision.

The winner will be announced at the official website after the conference.

**You can refer to the following Criteria:**

| Items       | Assessment                                                  |
|-------------|-------------------------------------------------------------|
| Content     | Right, Logical, Original, Well-Structured                   |
| Language    | Standard, Clear, Fluent, Natural                            |
| Performance | Spirited Appearance, Dress Appropriately, Behaves Naturally |
| PPT         | Layout, Structure, Typeset, Animation, Multimedia           |
| Reaction    | Build a Good Atmosphere, Speech Time Control Properly       |

**Please write down paper ID and give reasons for your recommendation:**

| Paper ID | Reasons |
|----------|---------|
|          |         |
|          |         |

Evaluated by: \_\_\_\_\_ (Paper ID: \_\_\_\_\_)

**Note: When the session finished, please fill it out and give it to the Session Chair so that the Best Oral Presentations in this session can be selected.**

## **Poster Presentation Instructions**

### **Materials Provided by the Conference Organizer**

- Poster Softboard
- Adhesive Tapes or Clamps

### **Materials Provided by the Presenters**

- Electronic Posters
- Posters Printed by the Conference Organizing Committee

### **Requirements for the Posters**

- Material: not limited
- Size: 160 cm (height) × 60 cm (width)

## **Best Poster Presentation Award**

### **Selection Criteria**

- Research Quality
- Presentation Skill
- Design

### **Selection Procedure**

- Judges (who have no conflict of interest with the presenters) will be invited to evaluate the posters
- 2 red stickers and 2 green stickers will be provided for the judges. The red sticker stands for “Research Quality” with a value of 2 points; the green sticker stands for “Presentation Skill and Design” with a value of 1 point
- Each judge will go around the poster session and give stickers to the poster which he/she thinks is of high quality or well designed and well presented. Please note that the judge cannot give 2 red or 2 green stickers to the same poster (one red and one green sticker are acceptable)
- After the poster session, the conference secretary will count the points from each poster and TWO best poster presentations with more points will be selected. If there is a tie, the one with more red (Research Quality) stickers wins.

### **Nature of the Award**

- This award consists of free registration to CMSE 2027 and a certificate.
- **TWO Best Poster Presenters** will be selected after session finishes, with certificates issued and results announced on CMSE 2026 official website.

### **Samples of Stickers**



## Conference Venue

### City University of Macau

**Address:** Avenida Padre Tomás Pereira Taipa, Macau

**Website:** <https://cityu.edu.mo/en/>





## Access to Venue

### 1. From Macao Airport (澳門國際機場)

- About 4 KM
- Approx. 8 - 10 minutes by taxi
- Approx. 40 minutes by bus MT1, and get off at T300 Esparteiro/Lou Lim Ieok (史伯泰/盧廉若站)

### 2. From Border Gate Terminal (澳門關閘) (注：大陸方向為拱北口岸)

- About 10 KM
- Approx. 15 - 20 minutes by taxi
- Approx. 45 - 60 minutes by bus No. 25, and get off at T300 Esparteiro/Lou Lim Ieok (史伯泰/盧廉若站)

### 3. From Hong Kong- Zhuhai-Macao Bridge Frontier Port (港珠澳大橋澳門口岸)

- About 16 KM
- Approx. 25 minutes by taxi
- Approx. 45 - 60 minutes. Take bus No.102X, and get off at Chun Lai Garden (泉禮花園)

### 4. From New Hengqin Port (橫琴口岸澳門口岸)

- About 9 KM
- Approx. 20 minutes by taxi
- Approx. 30 - 40 minutes. Take bus No. 101X, and get off at T300 Esparteiro/Lou Lim Ieok (史伯泰/盧廉若站)

**Notes:** The campus is located on a hill. If you alight at Esparteiro/Lou Lim Ieok, please allow 10-15 minutes for the uphill walk. Comfortable footwear is recommended.

## Field Trip

**Monday, November 23, 2026 | Time: 09:00-16:00**

|             |                                                                                                                                                                                           |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 09:00       | <b>Depart from City University of Macau</b><br>Gather at: Rotunda Dr. Carlos A. C. P. D'Assumpção Bus Stop T307 (alongside the uphill road to CityU main gate) 宋玉生博士圓形地巴士站 T307 (城大校門上坡旁) |
| 09:00-10:00 | <b>Ruins of St. Paul</b>                                                                                                                                                                  |
| 10:00-11:00 | <b>Maritime Museum</b>                                                                                                                                                                    |
| 11:00-12:00 | <b>A-Ma Temple</b>                                                                                                                                                                        |
| 12:00-16:00 | <b>Free time at The Venetian Macao</b>                                                                                                                                                    |

*Note: This itinerary is subject to changes based on operational needs and the tour guide's instructions.*

### Tips:

- 1) Participant information is required for registration.
- 2) Please present your Tour Ticket when getting on the bus. Please take care of your Tour Ticket as it is the only access to the tour.
- 3) Please follow the arrangement of the guide. Participants are not allowed to leave the team without permission.



**Ruins of St. Paul**



**A-Ma Temple**



**Maritime Museum**



**The Venetian Macao**

# Memo

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

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## Website



## Contact Us

Conference Secretary: Ms. Kelly Feng

E-mail: [cmse@cmseconf.org](mailto:cmse@cmseconf.org)

[www.cmseconf.org](http://www.cmseconf.org)