



6th “Conference of the Romanian Electron Microscopy Society - C.R.E.M.S.”

30 September – 2 October, 2025

30 th of September, 2025	
16 ⁰⁰ – 19 ⁰⁰ - Registration	
1 st of October, 2025	
8 ³⁰ – 9 ³⁰ - Registration	
9 ³⁰ – 9 ⁴⁰ - OPENING	
Chairman: Bogdan-Ştefan VASILE	
09 ⁴⁰ – 10 ¹⁰	<p><u>Sorin Lazăr</u></p> <p><i>IliadTM: State-of-the-Art Technologies for S (TEM) Applications</i></p> <p>TEM Application Manager, Materials & Structural Analysis, Thermo Fisher Scientific</p>
10 ¹⁰ – 10 ³⁰	<p><u>Celine Perrine Maynau</u></p> <p><i>Plasmonic, Electrocatalytic and Photoelectrocatalytic Properties of Copper-based Nanostructures</i></p> <p>Departamento de Ciencia de los Materiales e Ingeniería Metalúrgica y Química Inorgánica, Facultad de Ciencias, Universidad de Cádiz Campus Río San Pedro S/N, Puerto Real, 11510, Cádiz, Spain</p>
10 ³⁰ – 11 ⁰⁰ – <i>Coffee Break and Poster Session</i>	



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Chairman: Corneliu GHICA

11 ⁰⁰ – 11 ²⁰	<p><u>Marta Petre</u></p> <p><i>Synthesis of peanut shell-based carbons decorated with Bi nanostructures through direct and pulse reversed current using a deep eutectic solvent</i></p> <p>Center for Surface Science and Nanotechnology, National University of Science and Technology POLITEHNICA, Splaiul Independentei 313, Bucharest, Romania</p>
11 ²⁰ – 11 ⁴⁰	<p><u>Luke Ren</u> (online)</p> <p><i>Unlocking the Power of High-Speed Scanning Electron Microscopy Without Compromising Superb Imaging Resolution at Low kV</i></p> <p>CIQTEK Senior Application Scientist, CIQTEK Co., Ltd., High-tech Zone, Hefei, Anhui, China</p>
11 ⁴⁰ – 12 ⁰⁰	<p><u>Victor Eduard Petcu</u></p> <p><i>Nano-liposomes for tissue regeneration</i></p> <p>Ultrastructural Pathology and Bioimaging Lab., “Victor Babeş” Institute of Pathology, Splaiul Independentei 99-101, Bucharest, Romania</p>
12 ⁰⁰ – 12 ²⁰	<p><u>Teodor Jianu</u></p> <p><i>Resolving heterogenous atomic-electronic structures in organic semiconductors using EELS</i></p> <p>Department of Colloid Chemistry, Max Planck Institute of Colloids and Interfaces, Am Mühlenberg 1, Potsdam, Germany</p>
12 ²⁰ – 12 ⁴⁰	<p><u>Cătălina Gabriela Mihalcea</u></p> <p><i>Correlations between the synthesis route and the morpho-structural properties of nickel oxide nanoparticles with applications in gas sensing</i></p> <p>National Institute of Materials Physics, Atomistilor 405A, Măgurele, Romania</p>
12 ⁴⁰ – 13 ⁰⁰	<p><u>Paul Balas</u></p> <p><i>"Your e-Shop of choice - The superstore for microscopes users"</i></p> <p>ALLEM Eastern Europe SRL</p>
13 ⁰⁰ – 14 ³⁰ – <i>Lunch Break</i>	



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Chairman – Victor Eduard PETEU

14 ³⁰ – 15 ⁰⁰	<p><u>Mariana Ioniță</u> <i>Microscopy and 3D Printing: Converging Tools for Functional Bone Tissue Engineering</i> Faculty of Medical Engineering, National University of Science and Technology POLITEHNICA, Splaiul Independenței 313, Bucharest, Romania</p>
15 ⁰⁰ – 15 ²⁰	<p><u>Andrei Cristian Kuncser</u> <i>Deep-learning algorithms for material science</i> National Institute of Materials Physics, Atomistilor 405A, Măgurele, Romania</p>
15 ²⁰ – 15 ⁴⁰	<p><u>Mircea Lapau</u> <i>Corrosion Induced Faults at Discrete Level of Printed Circuit Board Assembly</i> Center for Surface Science and Nanotechnology, National University of Science and Technology POLITEHNICA, Splaiul Independenței 313, Bucharest, Romania</p>
15 ⁴⁰ – 16 ¹⁰ – <i>Coffee Break and Poster Session</i>	
16 ¹⁰ – 16 ³⁰	<p><u>Cristian Radu</u> <i>Dipolar Interactions Influence on Magnetic Properties of Nanoparticle Systems: Insights from Electron Tomography and Micromagnetic Simulations</i> National Institute of Materials Physics, Atomistilor 405A, Măgurele, Romania</p>
16 ³⁰ – 16 ⁵⁰	<p><u>Serban-Constantin Grecu</u> <i>Exploring Red Cathodoluminescence Increase in Quartz under SEM Electron Beam Irradiation</i> Faculty of Environmental Science and Engineering, Babeș Bolyai University, Fântânele 30, Cluj-Napoca, Romania</p>
16 ⁵⁰ – 17 ¹⁰	<p><u>Redouane Belkorissat (to be confirmed)</u> <i>The electron beam enlargement modelling by the Monte-Carlo method for the latest practise in the environmental scanning electron microscope.</i> Department of Computer Science, Ibn Khaldoun University of Tiaret, Algeria</p>
19 ³⁰ – 22 ⁰⁰ – <i>Conference Dinner</i>	



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2 nd of October, 2025	
Chairman – Bogdan-Ştefan VASILE	
09 ⁰⁰ – 09 ³⁰	<u>Wolfgang Schwinger</u> <i>Zeiss – News about latest EM technology</i> Carl Zeiss Austria
09 ³⁰ – 10 ⁰⁰	<u>Adrian Sandu</u> <i>State-of-the-Art Imaging and Analytical Integration in SEM /FIB</i> Staff Scientist, Materials & Structural Analysis, Thermo Fisher Scientific
10 ⁰⁰ – 10 ³⁰ - Coffee Break	
10 ³⁰ – 10 ⁵⁰	<u>Iulian Boeraşu</u> <i>Electron microscopy-based workflow for EUV mask durability evaluation</i> Center for Surface Science and Nanotechnology, National University of Science and Technology POLITEHNICA, Splaiul Independentei 313, Bucharest, Romania
10 ⁵⁰ – 11 ¹⁰	<u>Vasile Adrian Surdu</u> <i>Grain Size-Dependent Relaxor Behavior in High-Entropy</i> <i>Bi0.2K0.2Ba0.2Sr0.2Ca0.2TiO3 Ceramics</i> Department of Materials Science, Faculty of Materials Science and Engineering, Transilvania University, 29 Eroilor Blvd., Braşov, Romania
11 ¹⁰ – 11 ³⁰	<u>Mihai-Vlăduţ Stăncilă</u> <i>Inverted sample preparation for TEM analysis for the prevention of curtaining</i> Center for Surface Science and Nanotechnology, National University of Science and Technology POLITEHNICA, Splaiul Independenţei 313, Bucharest, Romania
11 ³⁰ - 11 ⁵⁰	<u>Valentin Serban Teodorescu</u> <i>Nanostructure of LaFeO3 epitaxial films deposited by PLD on SrTiO3 substrate for photoelectrochemical applications</i> National Institute of Materials Physics, Atomiştilor 405A, Măgurele, Romania



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11 ⁵⁰ – 12 ¹⁰	<p><u>Alina Dragomirescu</u></p> <p><i>SEM evaluation of thermal barrier structures quality obtained with laser cladding technique</i></p> <p>National Institute for Aerospace Research “Elie Carafoli”, Blvd. Iuliu Maniu 220, Bucharest, Romania</p>
12 ¹⁰ - 12 ³⁰	<p><u>Corneliu Ghica</u></p> <p><i>Contribution of nanoscale morphology in tailoring the gas sensing properties of SnO₂-based nanopowders</i></p> <p>National Institute of Materials Physics, Atomistilor 405A, Măgurele, Romania</p>
12 ³⁰ – 12 ⁴⁵	<p>"At the confluence of science and art" - Award ceremony</p>
<p>13⁰⁰ – 14⁰⁰ - <i>Lunch Break</i></p>	



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Poster session

1st of October, 2025

1	Feth Eddine BOUKHEMACHA - <i>Fabrication and Characterization of Core-Shell Nanofibers Loaded with Chitosan-DNA complexes</i> , National University of Science and Technology POLITEHNICA, Splaiul Independentei 313, Bucharest, Romania
2	Elena-Theodora Moldoveanu - <i>Microfluidic Geometry Drives Nanostructure: SEM/EDS and DLS Evidence Supporting Chip Selection</i> , National University of Science and Technology POLITEHNICA, Splaiul Independentei 313, Bucharest, Romania
3	Adelina-Gabriela Niculescu - <i>Optimization of Microfluidic-Synthesized Magnetic Aerogel Nanocomposites: A Correlative Morphostructural and Bioevaluation Approach</i> , National University of Science and Technology POLITEHNICA, Splaiul Independentei 313, Bucharest, Romania
4	Bogdan Stefan Vasile – <i>Electron Microscopy Investigation of Kesterite-Based Materials with Continous Cu Concentration Gradients for Next-Generation Photovoltaics</i> , National University of Science and Technology POLITEHNICA, Splaiul Independentei 313, Bucharest, Romania
5	Alexandru Mihai Grumezescu - <i>Structure–Function Correlation in Magnetic Aerogel Nanocomposites: Electron Microscopy Insights, Antimicrobial Properties, and Environmental Remediation Potential</i> , National University of Science and Technology POLITEHNICA, Splaiul Independentei 313, Bucharest, Romania
6	Dan Eduard Mihaiescu - <i>Process Robustness in Magnetic Aerogels: SEM, EDS, FT-IR, and DLS Consistency Across Replicated CmagAE-Mg-MFVMC Batches</i> , National University of Science and Technology POLITEHNICA, Splaiul Independentei 313, Bucharest, Romania
7	Dana-Ionela Tudorache (Trifa) - <i>Silica-Based Magnetic Aerogels for Pesticide Removal: From Laboratory-Scale Validation to Field-Scale Applications</i> , National University of Science and Technology POLITEHNICA, Splaiul Independentei 313, Bucharest, Romania
8	Alexandra Cătălina Bîrcă - <i>Co-Loaded Alginate Dressings with Silver Nanoparticles and β-Carotene Nanocarriers for Chronic Wound Care</i> , National University of Science and Technology POLITEHNICA, Splaiul Independentei 313, Bucharest, Romania
9	Gabriel Ababei - <i>Direct visualization of the magnetic domain walls in glass-coated amorphous submicron wires by Lorentz Transmission Electron Microscopy</i> , National Institute of Research and Development for Technical Physics, Blvd. Prof. Dimitrie Mangeron 47, Iași, Romania



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10	Sathiyamoorthy Murugesan - <i>Catalytic conversion of lignin into monomers and dimers units over Ni activated carbon supported ruthenium</i> , National University of Science and Technology POLITEHNICA, Splaiul Independentei 313, Bucharest, Romania
11	Cristian Radu - <i>Thickness Measurement in Ferroelectric PZT Thin Films Using Scanning Moiré Fringe Imaging</i> , National Institute of Materials Physics, Atomiștilor 405A, Măgurele, Romania
12	Ionel Mercioniu - <i>Investigations on Semiconductor/relaxor 0-3 type composites</i> , National Institute of Materials Physics, Atomiștilor 405A, Măgurele, Romania
13	Eugenia Tănasă - <i>Scanning Electron Microscopy (SEM) validation of micro and nanostructure in laser-based 3D printing research</i> , National University of Science and Technology POLITEHNICA, Splaiul Independentei 313, Bucharest, Romania
14	Alina Dragomirescu - <i>Microscopic analysis of the extreme temperature influence on ablative materials</i> , National Institute for Aerospace Research “Elie Carafoli”, Blvd. Iuliu Maniu 220, Bucharest, Romania



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