

"Dunărea de Jos" University of Galați

# Scientific Conference of Doctoral Schools

Perspectives and challenges in doctoral Research  
14<sup>th</sup> Edition of SCDS-UDJG  
11<sup>th</sup> and 12<sup>th</sup> of June 2026

Doctoral School of  
Fundamental and  
Engineering Sciences  
**PROGRAMME**



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14<sup>th</sup> Edition of SCDS-UDJG

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## CONFERENCE PROGRAMME

### THURSDAY – June 11, 2026

08:00-10:00	Invited plenary lectures
09:00-11:00	Participants registration
10:00-13:00	Invited lectures Oral presentations in concurrent sections
13:00-14:00	Lunch (building D - 1 <sup>st</sup> floor)
14:00-16:00	Oral presentations in concurrent sections
16:00-16:30	Coffee break (building D - 1 <sup>st</sup> floor)
16:00-19:00	Oral presentations in concurrent sections

### FRIDAY – June 12, 2026

09:00-10:30	Oral presentations in concurrent sections
10:30-11:00	Coffee break (building D - 1 <sup>st</sup> floor)
11:00-13:00	Posters session
11:00-13:00	Workshop
13:00-14:00	Awarding ceremony. Closing ceremony
14:00-15:00	Lunch (building D - 1 <sup>st</sup> floor)

## SECTION 6: FUTURE OF ECO-NANOTECHNOLOGIES, FUNCTIONAL MATERIALS AND COATINGS, Building AN, Room 212, 111 Domnească Street

THURSDAY – June 11, 2026

### ORAL PRESENTATIONS (10:00-16:00)

**CHAIR:** Daniela BURUIANĂ, Gheorghe GURĂU, *Dunărea de Jos University of Galați*

- OP.6.1.** (10:00-10:20) Andrei Ivanov, Daniela-Laura Buruiană, Constantin Truș, Iulian-Vasile Antoniac, Elena-Emanuela Herbei Nano-Enabled Food Sensing: Smart Packaging, Real-Time Monitoring and Safety Assurance
- OP.6.2.** (10:20-10:40) Georgiana Ghisman Alexe, Gabriel-Bogdan Carp, Tudor-Viorel Țigănescu, Daniela- Laura Buruiană Improving the Performance of Ballistic Protection Materials Through Advanced Coating Technologies: A Review
- OP.6.3.** (10:40-12:00) Ionuț-Cristian Bălan-Balantof, Nicoleta Bogatu, Alina-Crina Mureșan, Daniela-Laura Buruiană Improvement the Corrosion Resistance of Mild Steel in 1M HCl Solution Using Plant Extracts as Eco-Friendly Inhibitors
- OP.6.4.** (12:00-12:20) Elena Ciutac (Nicolaev), Daniela-Laura Buruiană, Cătălina Iticescu, Nicoleta Bogatu, Viorica Ghisman Valorization of Calcium Carbide Residue as a Low-Carbon Binder for Sustainable Construction Materials
- OP.6.5.** (12:20-12:40) Adrian Mazilu, Lidia Benea Investigation of Corrosion Resistance of Low Alloy Steel BVDH36 in Natural Sea Water by Electrochemical Methods
- OP.6.6.** (12:40-13:00) Andromeda Iacob, Daniela-Laura Buruiană, Viorica Ghisman, Gabriel-Bogdan Carp, Elena-Emanuela Herbei Preventing Freeze-Thaw Degradation Using Smart Sensor Technologies

### 13:00-14:00 Lunch (building D - 1<sup>st</sup> floor)

- OP.6.7.** (14:00-14:20) Cristian Ștefănescu, Daniela-Laura Buruiană, Carmela Gurău, Mihaela Marin, Florin-Bogdan Marin, Gheorghe Gurău Thermomechanical Characterization of Ni<sub>50.3</sub>Ti<sub>49.7</sub>/Fe<sub>57</sub>Mn<sub>27</sub>Si<sub>11</sub>Cr<sub>5</sub> (at.%) Bilayer Composite Module Processed via High Speed High Pressure Torsion
- OP.6.8.** (14:20-14:40) Bianca-Elena Roșca (Neagu), Daniela-Laura Buruiană, Nicoleta Bogatu, Viorica Ghisman, Elena-Emanuela Herbei Advanced Protective Coatings and Strategies for Extending the Service Life of Materials Used in Naval Industry
- OP.6.9.** (14:40-15:00) Petrică-Cătălin Aramă, Daniela-Laura Buruiană, Gabriel-Bogdan Carp, Viorica Ghisman Intelligent Systems for Identifying and Marking Wrecks in the Danube River: A Digital Twin-Based Approach, Integrating Artificial Intelligence and Advanced Materials
- OP.6.10.** (15:00-15:20) Tiberiu Alexandru Pirvu, Gabriel-Bogdan Carp, Cătălina Iticescu, Viorica Ghisman, Daniela-Laura Buruiană Comparative Local Characterization of Bullet Jacket Regions in Conventional and Frangible Armor-Piercing Projectiles

**OP.6.11.** Marian-Cristian Staicu, Gabriel-Bogdan Recent Advances in Cryogenic Storage  
(15:20-15:40) Carp, Nicoleta Bogatu, Viorica Systems: Material Perspectives  
Ghisman, Daniela-Laura Buruiană

**POSTERS PRESENTATIONS (15.40-16.00)**

**CHAIR:** Daniela BURUIANĂ, Gheorghe GURĂU, *Dunărea de Jos University of Galați*

**PP.6.1.** Bogdan Manea, Viorica Musat Nanostructured materials for hybrid  
(15:40-16:00) supercapacitors

**16:00-16.30** Coffee break (building D - 1<sup>st</sup> floor)

**16:30-17.30** Concluding remarks / Awarding ceremony