

## 2. Mobilitate internă și externă pentru diseminarea rezultatelor (conferințe, participări la congrese științifice internaționale), anul 2024 (anul al III - lea). <https://bionanosurf.ugal.ro/>

În anul 2024 s-a reușit participarea la **2 conferințe științifice** internaționale cu **4 lucrări prezentate oral**, depășind numărul propus în planul de realizare, astfel:

Trei profesori și cercetători științifici de la Universitatea Dunărea de Jos din Galați, membri ai proiectului de cercetare științifică 102/2024 sau colaboratori au participat, cu prezentări științifice KeyNote sau Oral la Sesiunea științifică **International Conference on Materials Science, Engineering and Technology, 10-12 Septembrie 2024, Furama RiverFront, SINGAPORE. The theme of the conference was: "Shaping The Future Through Materials Research And Innovation"**.

<https://www.chemistryviews.org/2nd-international-conference-on-materials-science-engineering-and-technology-2024/>

[www.materialsconference.net](http://www.materialsconference.net)



<https://materialsconference.net/conference-abstract-book/>

<https://materialsconference.net/conference-program/>

Cele 3 lucrări științifice au fost denumite și prezentate astfel:

### 2.1. Session 1: OPENING AND PLENARY SESSION, 10 September 2024.

**Keynote Talk at Session 9: Materials Horizons for New Edge Technology.**

**Title: Nanoporous TiO<sub>2</sub> film obtained electrochemically on Ti6Al4V implant alloy.**

**Presenter: Lidia Benea, Dunărea de Jos university of Galati, Romania.**

**Authors: Lidia Benea, Daniela Laura Buruiană.**

<https://materialsconference.net/conference-abstract-book/>

<https://materialsconference.net/conference-program/>



## 2.2. Session 4: BIOMATERIALS and BIODEVICES, 10 September 2024

Oral presentation.

**Title:** Corrosion behavior of 316L stainless steel structures in salivary solutions in the presence of lactic acid.

**Presenter:** Daniela Laura Buruiană.

**Authors:** Daniela Laura Buruiană, Lidia Benea.

<https://materialsconference.net/conference-abstract-book/>

<https://materialsconference.net/conference-program/>



## 2.3. Session 20: ADVANCED MATERIALS FOR SUSTAINABILITY AND INNOVATION

Keynote Talk:

**Title:** Surface functionalization of zinc with polymers by electrochemical techniques for enhanced properties.

**Presenter:** Alina Crina Ciubotariu

**Authors:** Alina Crina Ciubotariu, Lidia Benea.

<https://materialsconference.net/conference-abstract-book/>

<https://materialsconference.net/conference-program/>



#### 2.4. Chair Sesiune 9.

La această conferință, profesor Lidia Benea a fost chair la Sesiunea 9 (Session 9): Materials Horizons for New Edge Technology, 11 September 2024.

Session 9: Materials Horizons for New Edge Technology.

<https://materialsconference.net/conference-program/>

#### SESSION 9: MATERIALS HORIZONS FOR NEW EDGE TECHNOLOGY

Date: 11 September 2024  
Time: 09:00-10:30 (SGT)  
Room B: Mercury II (Level 5)  
Chair: Lidia Benea, *Dunarea de Jos University of Galati, Romania*

##### 09:00-09:20 Invited Talk (Virtual)

Title: Native point defect control of Schottky barriers and piezovoltage in ZnO nanowires  
**Leonard J Brillson**, *The Ohio State University, United States*

##### 09:20-09:40 Invited Talk (Virtual)

Title: Acoustofluidics-enabled Raman spectroscopy of living human red blood cells in a 3D-printed chip  
**Ueslen Rocha Silva**, *Federal University of Alagoas, Brazil*

##### 09:40-10:00 Invited Talk (Virtual)

Title: Harvesting neutralization energy creatively  
**Guo-Ming Weng**, *Shanghai Jiao Tong University, China*

##### 10:00-10:20 Invited Talk (Virtual)

Title: Developing carbon materials for energy storage solutions  
**Manmatha Mahato**, *Korea Advanced Institute of Science and Technology, South Korea*

##### 10:20-10:30 e-Poster Presentation (Virtual)

Title: Electrical and thermal properties of XLPE based nanocomposites for cable insulation  
**Nur Amira Nor Arifin**, *Cable Diagnostics Laboratory, TNB Research, Malaysia*

10:30-11:00 Networking Coffee/Tea Break at Conference Area, Level 5

## 11 SEPTEMBER 2024: DAY 2

### SESSION 8: PLENARY SESSION

Date: 11 September 2024  
 Time: 09:00-10:30 (SGT)  
 Room A: Mercury III (Level 5)  
 Chair: John Zhou, *University of Technology Sydney, Australia*

#### 09:00-09:30 Keynote Talk

**Title:** Emerging semiconductor ionic materials and advanced fuel cells  
**Bin Zhu**, *Southeast University, China*

#### 09:30-10:00 Keynote Talk

**Title:** Designing and optimizing alternant and non-alternant nanographenes for spintronic and optoelectronic applications  
**Aristides Zdetsis**, *University of Patras, Greece*

#### 10:00-10:30 Keynote Talk

**Title:** Phonon-mediated microfluidic synthesis, processing and manipulation of two-dimensional and bulk crystals  
**Leslie Yeo**, *Royal Melbourne Institute of Technology, Australia*

### SESSION 9: MATERIALS HORIZONS FOR NEW EDGE TECHNOLOGY

Date: 11 September 2024  
 Time: 09:00-10:30 (SGT)  
 Room B: Mercury II (Level 5)  
 Chair: Lidia Benea, *Dunarea de Jos University of Galati, Romania*

#### 09:00-09:20 Invited Talk (Virtual)

**Title:** Native point defect control of Schottky barriers and piezovoltage in ZnO nanowires  
**Leonard J Brillson**, *The Ohio State University, United States*

#### 09:20-09:40 Invited Talk (Virtual)

**Title:** Acoustofluidics-enabled Raman spectroscopy of living human red blood cells in a 3D-printed chip  
**Ueslen Rocha Silva**, *Federal University of Alagoas, Brazil*

#### 09:40-10:00 Invited Talk (Virtual)

**Title:** Harvesting neutralization energy creatively  
**Guo-Ming Weng**, *Shanghai Jiao Tong University, China*

#### 10:00-10:20 Invited Talk (Virtual)

**Title:** Developing carbon materials for energy storage solutions  
**Manmatha Mahato**, *Korea Advanced Institute of Science and Technology, South Korea*

#### 10:20-10:30 e-Poster Presentation (Virtual)

**Title:** Electrical and thermal properties of XLPE based nanocomposites for cable insulation  
**Nur Amira Nor Arifin**, *Cable Diagnostics Laboratory, TNB Research, Malaysia*

#### 10:30-11:00 Networking Coffee/Tea Break at Conference Area, Level 5

Date: 11 September 2024; Time: 09:00-10:30 (SGT).

Room B: Mercury II (Level 5)

Chair: Lidia Benea, Dunarea de Jos University of Galati, Romania.

<https://materialsconference.net/conference-program/>

**2.5. Adrian Mazilu, Lidia Benea, Vasile Basliu.**

**Corrosion Resistance in Seawater of Low Alloy Steels BVDH36 and LRAH36.**

Lucrare prezentată la:

12<sup>th</sup> Edition of SCDS-UDJG, **Scientific Conference of Doctoral Schools from “Dunărea de Jos” University of Galati**, 6<sup>th</sup> and 7<sup>th</sup> of June 2024, Section **"Future of Nanotechnologies, Functional Materials and Coatings"**.



<https://cssd-udjg.ugal.ro/>

<https://cssd-udjg.ugal.ro/index.php/programme>

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