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UNIVERSITY of IAȘI



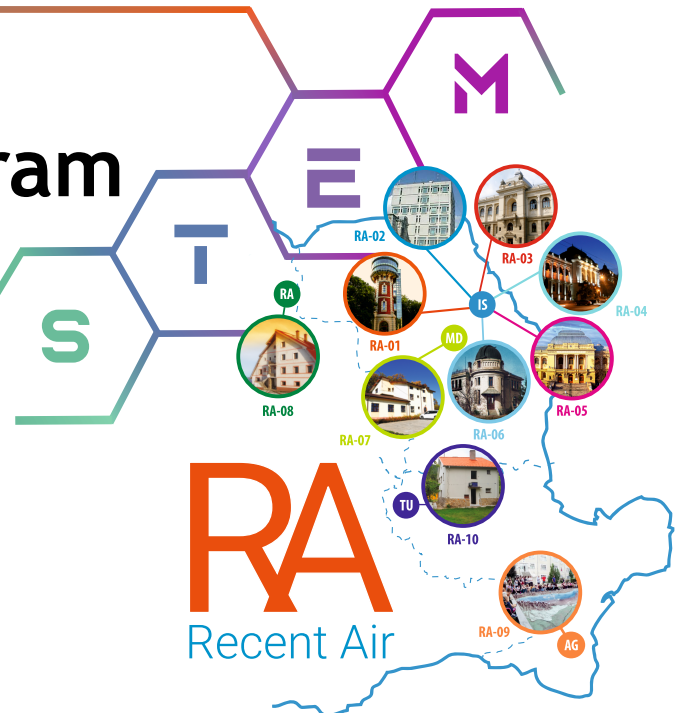
RECENT AIR CENTER



RECENT ADVANCES IN NATURAL  
SCIENCES YIELD THE FUTURE FOR  
THE EUROPEAN CITIZENS AND SOCIETY

Ready for EUROPE  
2<sup>nd</sup> Edition

RARE 2025 Program



02-05 October 2025, Agigea, Romania



**RARE 2025**  
02 – 05 October 2025  
Agigea Research Station, Romania



## Recent Advances in Natural Sciences Yield the Future for the European Citizens and Society

### Ready For EUROPE RARE 2025 - 2<sup>nd</sup> Edition

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“Alexandru Ioan Cuza” University of Iasi, Geography

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“Alexandru Ioan Cuza” University of Iasi, Biology

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“Alexandru Ioan Cuza” University of Iasi, RECENT AIR, Chemistry

**R2 Junior Researcher Ionut Costel CODRU**

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**R2 Junior Researcher Georgiana CRETU VACULISTEANU**

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**R2 Junior Researcher Alina Giorgiana NEGRU**

“Alexandru Ioan Cuza” University of Iasi, RECENT AIR, Chemistry

**R2 Junior Researcher Laurentiu-Valentin SOROAGA**

“Alexandru Ioan Cuza” University of Iasi, RECENT AIR, Chemistry

**R2 Junior Researcher Tudor VARTOLOMEI**

“Alexandru Ioan Cuza” University of Iasi, RECENT AIR, Mathematics



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## Organizer

**RECENT AIR** – Research center with integrated techniques  
for the investigation of atmospheric aerosols in Romania  
<https://recent-air.uaic.ro/>



## Partner

“Prof. Dr. Ioan Borcea” Marine Biological Station Agigea  
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# **RARE 2025 Program**

## **Day 1, Thursday, October 02 2025**

**“Prof. Dr. Ioan Borcea” Marine Biological Station Agigea  
Nicolae Titulescu 163, 907018 Agigea, Constanta, Romania**

### **Pavilion building**

16<sup>00</sup>-17<sup>00</sup> **Registration of participants and guests**

17<sup>00</sup>-19<sup>00</sup> **Visit to RA09 - Interdisciplinary Marine Environment  
Research Laboratory**

R3 Established Researcher **Emanuel BALTAG**

*Director of “Prof. Dr. Ioan Borcea” Marine Biological Station Agigea*

Research Station Administrator **Paul-Cristian DINCA**

*RECENT AIR Center - RA-09*

R2 Junior Researcher **Vitalie AJDER**

*RECENT AIR Center - RA-09*

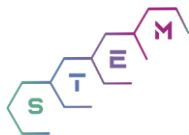
First stage researcher **Alexandru Mihai PINTILIOAIE**

*RECENT AIR Center - RA-09*

### **Alternative activities during RARE 2025**

In addition to the main sessions, participants are invited to join a series of optional activities that highlight local research, natural heritage, and historical landmarks. These alternatives offer a unique opportunity to explore the region while engaging with field demonstrations and guided visits.

- **Guided visit to RA09, including presentations of the ongoing research projects.**
- **Field demonstration of wild bird capture and ringing techniques at the Agigea Bird Observatory.**
- **Guided tour of the Elizabeth II Battery, a World War II Coastal Defence structure.**



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- **Guided visit to the Marine Dunes Nature Reserve at Agigea.**

Contact persons: **Paul-Cristian DINCA, Vitiaie AJDER, Alexandru Mihai PINTILIOAIE.**





**RARE 2025**  
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Agigea Research Station, Romania



# **RARE 2025 Program**

## **Day 2, Friday, October 03 2025**

**“Prof. Dr. Ioan Borcea” Marine Biological Station Agigea**  
**Nicolae Titulescu 163, 907018 Agigea, Constanta, Romania**

### **Dining Room**

07<sup>00</sup>-08<sup>30</sup> **Breakfast**

### **Pavilion building & Museum Hall**

08<sup>30</sup>-09<sup>00</sup> **Registration of participants and guests**

### **Museum Hall**

09<sup>00</sup>-11<sup>00</sup> **PANEL I - The role of academia in STEM development**  
**Chairs: Prof. Silviu Octavian GURLUI**  
**Prof. Ionel MANGALAGIU**

09<sup>00</sup>-09<sup>10</sup> **Welcome address by the Coordinator of RECENT AIR**  
Prof. Cecilia ARSENE

09<sup>10</sup>-09<sup>20</sup> **Welcome message from UAIC leadership**  
Prof. Romeo-Iulian OLARIU  
Prof. Ovidiu Gabriel IANCU  
Assoc. Prof. Lilian NIACSU

09<sup>20</sup>-09<sup>30</sup> **Welcome message from Research Station Director**  
**A few words about the history of the research station**  
R3 Established Researcher Emanuel BALTAG



09<sup>30</sup>-10<sup>00</sup>

## Development of Lifelong Learning Programs within the RECENT AIR Center: from Models to a Real STEM Curricula

Cecilia ARSENE<sup>1,2</sup>, Romeo-Iulian OLARIU<sup>1,2</sup>, Lilian NIACSU<sup>2,3,4</sup>, Emanuel Stefan BALTAG<sup>2,5</sup>

<sup>1</sup>Faculty of Chemistry, “Alexandru Ioan Cuza” University of Iasi, 11 Carol I, 700506 Iasi, Romania

<sup>2</sup>RECENT AIR Center, “Alexandru Ioan Cuza” University of Iasi, 11 Carol I, 700506 Iasi, Romania

<sup>3</sup>Faculty of Geography and Geology, “Alexandru Ioan Cuza” University of Iasi, Carol I, 700505 Iasi, Romania

<sup>4</sup>RECENT AIR Center, Laboratory of interdisciplinary research in geochemistry of rural areas, Environmental Quality Monitoring Station for Geographic Research, 707290 Madarjac, Iasi, Romania

<sup>5</sup>RECENT AIR Center, Laboratory of Interdisciplinary Research on the Marine environment and the Marine Terrestrial Atmosphere, Prof. dr. Ioan Borcea Marine Biological Station, Agigea, 163 Nicolae Titulescu, Constanta, Romania

10<sup>00</sup>-11<sup>00</sup>

## STEM discussion with the target group - Panel I To identify the role of universities in modernizing STEM education and in training skills for the labor market.

### Target Group:

Prof. Lenuta ALBOAIE  
Prof. Cecilia ARSENE  
Assoc. Prof. Alin Constantin DIRTU  
Prof. Dragos Lucian GORGAN  
Prof. Adrian IFTENE  
Assoc. Prof. Lilian NIACSU  
Prof. Romeo-Iulian OLARIU  
Assoc. Prof. Adrian URSU

## Recent Air Laboratories Hallway

11<sup>00</sup>-11<sup>30</sup>

## POSTER SESSIONS

**Chairs: Assoc. Prof. Robert Vasile GRADINARU  
Prof. Dragos Lucian GORGAN**

**Posters will be displayed all along the RARE 2025 time period**

11<sup>00</sup>-11<sup>30</sup>

## Poster Session & Coffee Break

## Museum Hall

11<sup>30</sup>-13<sup>00</sup>

## PANEL II - Public Policies and Strategies for STEM





**Chairs: Prof. Romeo Iulian OLARIU**

**R3 Estab. Res. Emanuel BALTAG**

11<sup>30</sup>-12<sup>00</sup> **Connecting doctoral research with the private sector:  
examples of good practices (CASE - Collaborative  
Awards in Science and Engineering)**

Silviu PETROVAN<sup>1,2</sup>

<sup>1</sup>*University of Cambridge*

<sup>2</sup>*People's Trust for Endangered Species*

12<sup>00</sup>-13<sup>00</sup> **STEM discussion with the target group - Panel II**  
**Integrate governmental and institutional perspectives to support  
STEM development through regulation, funding, and  
infrastructure.**

**Target Group:**

PhD Student Marian Liviu ALBU  
PhD Student Ana-Maria ANASTASIEI  
Master Student Robert Iulian BERARI  
PhD Student Oana CIUBOTARIU  
Student Teodora COZMA  
Master Student Paula CRETU  
Student Antonio DONCEA  
Master Student Mihai GHILAN  
PhD Student Valentina ISOPESCU  
PhD Student Ana JURESCU  
Master Student Maria KOZHEMYAKO  
PhD Student Ioana MOROSAN  
PhD Student Andrei OLARIU  
Master Student Andrei PANA  
Master Student Roxana PENCIUC  
Master Student Adina POPOVICI  
Student Denis SPASENI  
PhD Student Petronel SPASENI  
PhD Student Laura TOPALA

**Dining Room**

13<sup>00</sup>-14<sup>00</sup> **Lunch**

**Museum Hall**

14<sup>00</sup>-16<sup>30</sup> **PANEL III - Partnerships with the private sector and  
NGOs**

**Chairs: Prof. Cecilia ARSENE**



**Assoc. Prof. Adrian URSU**

**14<sup>00</sup>-14<sup>30</sup> Environmental Screening Parameters – An Efficient Tool for Environmental Monitoring**

Oliver BUETTEL<sup>1</sup>, Stefan JEZIERSKI-RAECKE<sup>1</sup>, Angela GROEBEL<sup>1</sup>, Nora ENGEL<sup>1</sup>

<sup>1</sup>*Analytik Jena GmbH & Co. KG*

**14<sup>30</sup>-15<sup>30</sup> STEM discussion with the target group - Panel III**  
**To build bridges between academia, NGOs and the private sector to develop joint projects.**

**Target Group:**

R2 Junior Researcher Andrei STEFAN  
Eng. Benone BAIESU  
PhD Student Ramona Andreea BIVOLEANU  
Ec. Daniela DAMIAN  
R3 Established Researcher Sergiu DOBROJAN  
Director Analytik Jena Romania Carmen DUMITRESCU  
PhD Student Ianula DUTA  
R2 Junior Researcher Maria Magdalena FUSU  
R2 Junior Researcher Roxana IONASCU  
R2 Junior Researcher Cosmin Iulian IRIMIA  
Assoc. Prof. Gheorghe JIGAU  
Sales representative Analytik Jena Romania Iulian LEOCA  
Lect. Vlad-Alexandru LUKACS  
Sales Representative ProAnalysis Andreea MAINEA  
Sales Representative Laboratorium Iuliana PAL  
Assoc. Prof. Valentin POHOATA  
Technician Adrian POSTOLACHE  
R4 Leading Researcher Sorin TASCU  
PhD Student Razvan ZAHARIA

**Recent Air Laboratories Hallway**

**15<sup>30</sup>-16<sup>00</sup> Poster Session & Coffee Break**

**Museum Hall**

**16<sup>00</sup>-18<sup>00</sup> PANEL IV - Proposals for advancing STEM education**

**Chairs: Assoc. Prof. Lilian NIACSU**  
**Assoc. Prof. Alin Constantin DIRTU**

**16<sup>00</sup>-16<sup>30</sup> Mineralogical Characteristics of Chondrules from Meteorites that fell on Romanian Territory**

Ovidiu Gabriel IANCU<sup>1</sup>



*<sup>1</sup>Department of Geology, Faculty of Geography and Geology, “Alexandru Ioan Cuza” University of Iasi, 20 A Carol I, 700505, Iasi, Romania*

16<sup>30</sup>-17<sup>30</sup>

## **STEM education presentation of proposals - Panel IV** **Creation of a STEM network (academia – industry – civil society)**

### **Good Laboratory Practice in Instrumental Chromatography (LLPCHEM01- LLLPCHEM02- LLLPCHEM03)**

Cecilia ARSENE<sup>1,2</sup>, Romeo-Iulian OLARIU<sup>1,2</sup>,  
Alina-Giorgiana NEGRU<sup>2</sup>, Cornelia NITA<sup>2</sup>, Robert Iulian BERARI<sup>1</sup>

*<sup>1</sup>Faculty of Chemistry, “Alexandru Ioan Cuza” University of Iasi, 11 Carol I, 700506 Iasi, Romania*

*<sup>2</sup>RECENT AIR Center (RA-01, RA-02, RA-03), “Alexandru Ioan Cuza” University of Iasi, 11 Carol I, 700506 Iasi, Romania*

### **From Basic to Advanced Sample Preparation Techniques for Modern Laboratory Methods in Metal Analysis (LLLCHEM04 - LLLCHEM05 - LLLCHEM06)**

Romeo-Iulian OLARIU<sup>1,2,3</sup>, Laurentiu-Valentin SOROAGA<sup>1,2,3</sup>,  
Cecilia ARSENE<sup>1,2,3</sup>

*<sup>1</sup>“Alexandru Ioan Cuza” University of Iasi, Faculty of Chemistry, Iasi, Romania,*

*<sup>2</sup>“Alexandru Ioan Cuza” University of Iasi, RECENT-AIR, Iasi, Romania,*

*<sup>3</sup>“Alexandru Ioan Cuza” University of Iasi, ICI-CERNESIM, Iasi, Romania*

### **The Identification of Uncertainty-Related Critical Steps in the Inorganic Elements Content Determination (LLLCHEM07)**

Laurentiu-Valentin SOROAGA<sup>1,2,3</sup>, Cecilia ARSENE<sup>1,2,3</sup>, Romeo-Iulian OLARIU<sup>1,2,3</sup>

*<sup>1</sup>Faculty of Chemistry, “Alexandru Ioan Cuza” University of Iasi, Iasi, Romania*

*<sup>2</sup>RECENT AIR Center (RA-03), “Alexandru Ioan Cuza” University of Iasi, Iasi, Romania*

*<sup>3</sup>CERNESIM Center, “Alexandru Ioan Cuza” University of Iasi, Iasi, Romania*

### **User-friendly Software Tools for Data Processing and Tracking Atmospheric Pollution Sources (LLPCHEM08)**

Alina-Giorgiana NEGRU<sup>1</sup>, Romeo-Iulian OLARIU<sup>1,2</sup>, Cecilia ARSENE<sup>1,2</sup>

*<sup>1</sup>RECENT AIR Center (RA-01, RA-02, RA-03), “Alexandru Ioan Cuza” University of Iasi, 11 Carol I, 700506 Iasi, Romania*

*<sup>2</sup>Faculty of Chemistry, “Alexandru Ioan Cuza” University of Iasi, 11 Carol I, 700506 Iasi, Romania*



**Mapping the World from Above: Drones in Geographic Research (LLLPGEO01 - LLLPGEO02 - LLLPGEO03)**

Ionut-Costel CODRU<sup>1,2</sup>, Andrei ENEA<sup>2</sup>, Daniel BOICU<sup>1,2</sup>

<sup>1</sup>RECENT AIR Center (RA-07) Interdisciplinary Research Laboratory in the Geochemistry of Rural Areas, Madarjac, “Alexandru Ioan Cuza” University of Iasi, Romania

<sup>2</sup>Department of Geography, Faculty of Geography and Geology, “Alexandru Ioan Cuza” University of Iasi, Romania

**Underground Insights: Non-invasive Geophysical Investigation of Water and Soil (LLLPGEO-04 - LLLPGEO-05 - LLLPGEO-06)**

Daniel BOICU<sup>1,2</sup>, Ionut-Costel CODRU<sup>1,2</sup>, Andrei ENEA<sup>2</sup>, Lilian NIACSU<sup>1,2</sup>

<sup>1</sup>RECENT AIR Center (RA-07) Interdisciplinary Research Laboratory in the Geochemistry of Rural Areas, Madarjac, “Alexandru Ioan Cuza” University of Iasi, Romania

<sup>2</sup>Department of Geography, Faculty of Geography and Geology, “Alexandru Ioan Cuza” University of Iasi, Romania

17<sup>30</sup>-18<sup>00</sup>      **Conclusions and Future Directions for STEM Education**

19<sup>00</sup>-22<sup>00</sup>      **Official Dinner – Pescaria lui Matei**





**RARE 2025**  
02 – 05 October 2025  
Agigea Research Station, Romania



# RARE 2025 Program

## Day 3, Saturday, October 04 2025

**“Prof. Dr. Ioan Borcea” Marine Biological Station Agigea**  
**Nicolae Titulescu 163, 907018 Agigea, Constanta, Romania**

### Dining Room

07<sup>00</sup>-09<sup>00</sup> **Breakfast**

### Pavilion building & Museum Hall

09<sup>00</sup>-09<sup>30</sup> **Registration of participants and guests**

### Recent Air Laboratories Hallway

09<sup>30</sup>-10<sup>30</sup> **Poster Session & Coffee Break**

### Museum Hall

10<sup>30</sup>-11<sup>30</sup> **SESSION I**

**Chairs: Prof. Lenuta ALBOAIE**  
**Prof. Adrian IFTENE**

10<sup>30</sup>-11<sup>00</sup> **Non-Invasive Techniques Provided by RECENT-AIR Platform for Interdisciplinary Research of Water/Soil/Land Resources. Case studies from Eastern Romania**

Lilian NIACSU<sup>1</sup>, Ionut-Costel CODRU<sup>1,2</sup>, Daniel BOICU<sup>1,2</sup>,  
Andrei ENEA<sup>1</sup>, Emanuel BALTAG<sup>3</sup>

<sup>1</sup>Faculty of Geography and Geology, “Alexandru Ioan Cuza” University of Iasi, 20A Carol I, 700506 Iasi, Romania

<sup>2</sup>RECENT AIR Center (RA-07), “Alexandru Ioan Cuza” University of Iași, 11 Carol I, 700506 Iasi, Romania



<sup>3</sup>RECENT AIR Center (RA-09), “Alexandru Ioan Cuza” University of Iasi, Prof. dr. Ioan Borcea Marine Biological Station, Agigea, 163 Nicolae Titulescu, Constanta, Romania

11<sup>00</sup>-11<sup>15</sup> **Inventory and Distribution of Gullies in the Moldavian Plateau**

Ionut-Costel CODRU<sup>1,2</sup>, Andrei ENEA<sup>2</sup>, Lilian NIACSU<sup>2</sup>

<sup>1</sup>RECENT AIR Center (RA-07) Interdisciplinary Research Laboratory in the Geochemistry of Rural Areas, Madarjac, “Alexandru Ioan Cuza” University of Iasi, Romania

<sup>2</sup>Department of Geography, Faculty of Geography and Geology, “Alexandru Ioan Cuza” University of Iasi, Romania

11<sup>15</sup>-11<sup>30</sup> **A CORINE Land Cover Dataset Accuracy Assessment – Insights into the Northeastern Part of Romania**

Georgiana CRETU - VACULISTEANU<sup>1</sup>, Silviu-Costel DORU<sup>2</sup>, Mihai NICULITA<sup>2</sup>

<sup>1</sup>RECENT AIR Center (RA-10), Geography and Earth Physics Laboratory, Tulnici Research Station, “Alexandru Ioan Cuza” University of Iasi, 627365 Tulnici, Iasi, Romania

<sup>2</sup>Department of Geography, Faculty of Geography and Geology, “Alexandru Ioan Cuza” University of Iasi, 700505 Iasi, Romania

## Recent Air Laboratories Hallway

11<sup>30</sup>-12<sup>00</sup> **Poster Session & Coffee Break**

## Museum Hall

### SESSION II

**Chairs: Prof. Ovidiu Gabriel IANCU**

**R4 Leading Researcher Sorin TASCU**

12<sup>00</sup>-12<sup>30</sup> **Preliminary Assessment of Tropospheric Ozone Profiles over Iasi County Based on Complex UV Lidar Observations**

Alexandru COCEAN<sup>1,2</sup>, Vasile PELIN<sup>1,2</sup>, Silvia GAROFALIDE<sup>1,2</sup>, Dana PRICOP<sup>1,2</sup>, Razvan ABABEI<sup>1,2</sup>, Sebastian PRICOP<sup>2</sup>, Iuliana COCEAN<sup>1</sup>, and Silviu GURLUI<sup>1,2</sup>

<sup>1</sup>RECENT AIR Center (RA-05, RA-06), “Alexandru Ioan Cuza” University of Iasi, 11 Carol I, 700506 Iasi, Romania

<sup>2</sup>Faculty of Physics, LOASL, “Alexandru Ioan Cuza” University of Iasi, 11 Carol I, 700506 Iasi, Romania

12<sup>30</sup>-12<sup>45</sup> **Black Crusts on Historical Walls: Formation Processes and Implications for Built Heritage Conservation**

Vasile PELIN COSTACHI<sup>1</sup>, Silvia GAROFALIDE<sup>1</sup>, Viorica VASILACHE<sup>2</sup>, Silviu GURLUI<sup>1,3</sup>



<sup>1</sup>RECENT AIR Center (RA-05), Laboratory of Applied Meteorology and Climatology, Alexandru Ioan Cuza University of Iași, Romania

<sup>2</sup>ARHEOINVEST Center, Alexandru Ioan Cuza University of Iași, Romania

<sup>3</sup>Laboratory of Atmospheric Optics, Spectrometry and Laser LOASL, Faculty of Physics, Alexandru Ioan Cuza University of Iași, Romania

12<sup>45</sup>-13<sup>00</sup>

## Random Number Generator Using Femtosecond LASER Pulse in Magnetic Nanowires

Razvan ABABEI<sup>1</sup>

<sup>1</sup>RECENT AIR Center, “Alexandru Ioan Cuza” University of Iasi, 11 Carol I, 700506 Iasi, Romania

## Dining Room

13<sup>00</sup>-14<sup>30</sup>

## Lunch

## Museum Hall

14<sup>30</sup>-15<sup>00</sup>

## SESSION III

**Chairs: Assoc. Prof. Dan Cristian LESENCIUC  
Assoc. Prof. Valentin POHOATA**

14<sup>30</sup>-14<sup>45</sup>

## First-principles Magnetic Properties in f-Element Systems: Toward the NewMag Code

Dumitru-Claudiu SERGENTU<sup>1,2</sup>, Ionel HUMELNICU<sup>1</sup> and Rémi MAURICE<sup>3</sup>

<sup>1</sup>Faculty of Chemistry, “Alexandru Ioan Cuza” University of Iasi, 11 Carol I, 700506 Iasi, Romania

<sup>2</sup>RECENT AIR Center (RA-03), “Alexandru Ioan Cuza” University of Iasi, 11 Carol I, 700506 Iasi, Romania

<sup>3</sup>CNRS ISCR Univ Rennes – UMR 6226, 263 Av Général Leclerc, 35000 Rennes, France

14<sup>45</sup>-15<sup>00</sup>

## Synoptic Drivers of High-Impact Winter Hazards in the Black Sea Region

Robert HRITAC<sup>1</sup>, Iuliana-Gabriela BREABAN<sup>2</sup>, Lucian SFICA<sup>2</sup>, Pavel ICHIM<sup>2</sup>

<sup>1</sup>RECENT AIR Center (RA-08) Interdisciplinary Research Laboratory for the Mountain Environment, Alexandru Ioan Cuza University of Iasi, Romania

<sup>2</sup>Department of Geography, Faculty of Geography and Geology, Alexandru Ioan Cuza University of Iasi, Romania

## Recent Air Laboratories Hallway

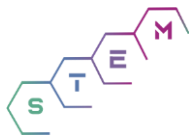
15<sup>00</sup>-16<sup>00</sup>

## Poster Session & Coffee Break

16<sup>00</sup>-17<sup>00</sup>

## Discussions

- How do we motivate students to pursue STEM careers?
- What do they expect from a research center to facilitate their activity?



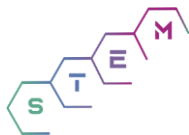
- What are the biggest institutional barriers to STEM (funding, infrastructure, regulations)?

18<sup>00</sup>-20<sup>00</sup>

**Dinner**







## **RARE 2025 Program**

### **Day 4, Sunday, October 05 2025**

**“Prof. Dr. Ioan Borcea” Marine Biological Station Agigea  
Nicolae Titulescu 163, 907018 Agigea, Constanta, Romania**

#### **Pavilion building & Museum Hall**

09<sup>00</sup>-10<sup>30</sup>

**The conclusions of the activity – Drafting the preliminary report, presenting the preliminary conclusions**

#### **Interdisciplinary research**

- **Green and sustainable technologies.**
- **Digital innovation and artificial intelligence.**
- **STEM education and innovative teaching methodologies.**
- **The impact of research on community and public policy.**

#### **Modern methodologies in interdisciplinary STEM research**

- **Methods of integrating data from different disciplines.**
- **Examples of methodologies applied in complex STEM projects.**
- **Recommendations for young researchers.**

#### **From research to community impact**

- **How do we translate research into practice?**
- **How can prototypes be financed and implemented?**
- **What is the role of collaborative networks?**

10<sup>30</sup>-11<sup>00</sup>

**Conclusion and closing remarks**

- **Concrete steps in the short, medium, long term.**
- **Proposal for the establishment of an interinstitutional STEM working group.**





## Poster Contributions

### **PC-01      Macroplastics in Bird Nests: A Growing Environmental Concern**

Vitalie AJDER<sup>1</sup>, Laura TOPALA<sup>2,3</sup>, Viorel-Dumitru GAVRIL<sup>4</sup>,  
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### **PC-02      The Role of Constitutional Jurisprudence in Safeguarding Environmental Protection**

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### **PC-03      Good Laboratory Practice in Instrumental Chromatography (LLPCHEM01- LLLPCHEM02- LLLPCHEM03)**

Cecilia ARSENE<sup>1,2</sup>, Romeo-Iulian OLARIU<sup>1,2</sup>,

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### **PC-04      Using Data from Climate Scenarios to Project the Streamflow Drought Index**

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### **PC-05      Underground Insights: Non-invasive Geophysical Investigation of Water and Soil (LLPGEO-04 - LLLPGEO-05 - LLLPGEO-06)**

Daniel BOICU<sup>1,2</sup>, Ionut-Costel CODRU<sup>1,2</sup>, Andrei ENEA<sup>2</sup>, Lilian  
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## **PC-06      Why Should We Have More Science Communication Events**

Florina-Georgiana CABA<sup>1,2</sup>, Maria-Magdalena DASCALU<sup>3</sup>

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## **PC-07      Trityl- and Hexafluoroisopropylidene-Based Bolyimide Blends for Gas Separation Membranes**

Adriana-Petronela CHIRIAC<sup>1</sup>, Catalin-Paul CONSTANTIN<sup>1</sup>, Mariana-Dana DAMACEANU<sup>1</sup>

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## **PC-08      Efficient Synthesis of Unsymmetrical 7,7'-Biindolizines**

Roxana CIORTEANU<sup>1,2</sup>, Catalina Ionica CIOBANU<sup>3</sup>, Ionel I. MANGALAGIU<sup>2</sup>, Ramona DANAC<sup>2</sup>

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## **PC-09      The Cutting-edge Pulsed Laser Technology Used for the Valorization of Renewable Natural Materials into Innovative Functional Products for Applications in Medicine and the Environment. Experiment and Numerical Simulation**

Alexandru COCEAN<sup>1</sup>, Georgiana COCEAN<sup>2,3</sup>, Silvia GAROFALIDE<sup>1,2</sup>, Nicanor CIMPOESU<sup>2,4</sup>, Daniel ALEXA<sup>5,6</sup>, Iuliana COCEAN<sup>1</sup>, Silviu GURLUI<sup>1,2</sup>

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**PC-10      IR Spectroscopy (FTIR, micro-FTIR) in the Assessment of the Pollutants in Water. Measurements Assisted by Numerical Simulation of the Spectra in Gaussian 6 Software**

Alexandru COCEAN<sup>1</sup>, Iuliana COCEAN<sup>1</sup>, Silviu GURLUI<sup>1,2</sup>

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**PC-11      Mapping the World from Above: Drones in Geographic Research (LLPGEO01 - LLPGE002 - LLPGE003)**

Ionut-Costel CODRU<sup>1,2</sup>, Andrei ENEA<sup>2</sup>, Daniel BOICU<sup>1,2</sup>

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**PC-12      The Drone, as a Core Instrument in Modern Geospatial Research**

Andrei ENEA<sup>1</sup>, Lilian NIACSU<sup>1</sup>, Ionut Costel CODRU<sup>2</sup>

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**PC-13      The Diversity of Longhorn Beetles (Coleoptera: Cerambycidae) from Natura 2000 Site Dealul Mare – Harlau**

Lucian HANCEANU<sup>1,2</sup>, Petronela-Diana HRISCU<sup>3</sup>

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<sup>3</sup>*Natural History Museum of Iasi, Alexandru Ioan Cuza University of Iasi, Romania*

**PC-14      Molecular Fingerprints of Airborne Bioaerosols Revealed by MALDI-MS**

Cristina IANCU<sup>1,2</sup>, Cornelia NITA<sup>2</sup>, Alina Giorgiana NEGRU<sup>2</sup>, Romeo Iulian OLARIU<sup>1,2</sup>, Cecilia ARSENE<sup>1,2</sup>

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## **PC-15      Impact of Sample Preparation Techniques on XRF Analysis Results**

Cristian Vasilica SECU<sup>1</sup>, Cristian Dan LESENCIU<sup>1</sup>, Andrei URZICĂ<sup>2</sup>

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## **PC-16      User-friendly Software Tools for Data Processing and Tracking Atmospheric Pollution Sources (LLPCHEM08)**

Alina-Giorgiana NEGRU<sup>1</sup>, Romeo-Iulian OLARIU<sup>1,2</sup>, Cecilia ARSENE<sup>1,2</sup>

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## **PC-17      From Basic to Advanced Sample Preparation Techniques for Modern Laboratory Methods in Metal Analysis (LLLCHEM04 - LLLCHEM05 - LLLCHEM06)**

Romeo-Iulian OLARIU<sup>1,2,3</sup>, Laurentiu-Valentin SOROAGA<sup>1,2,3</sup>, Cecilia ARSENE<sup>1,2,3</sup>

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## **PC-18      Monitoring of Invasive Insect Species Using Modern Technologies**

Alexandru-Mihai PINTILIOAIE<sup>1,2</sup>, Denis SPASENI<sup>2</sup>, Petronel SPASENI<sup>2</sup>, Paul-Cristian DINCA<sup>1</sup>, Ana JURJESCU<sup>3</sup>, Emanuel-Stefan BALTAG<sup>4</sup>

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**PC-19 Study of Heavy Metal Biosorption Using Yeast-Nanoconjugate Complexes Based on Gold Nanoparticles**

Silvia GAROFALIDE<sup>1,3</sup>, Daniela A. PRICOP<sup>2,3</sup>, Alexandru COCEAN<sup>1,3</sup>, Sebastian E. PRICOP<sup>3</sup>, Bogdanel S. MUNTEANU<sup>3</sup>, Nicanor CIMPOESU<sup>4</sup>, Vasile PELIN<sup>1,2</sup>, Iuliana COCEAN<sup>3</sup>, Nicolae LEOPOLD<sup>5</sup>, Stefania D. IANCU<sup>5</sup> and Silviu GURLUI<sup>1,2,3</sup>

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**PC-20 The Identification of Uncertainty-Related Critical Steps in the Inorganic Elements Content Determination (LLLCHEM07)**

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**PC-21 LiDAR, Radar, and SAR Integration for 2D Flood Modeling of Storm Boris in SE Romania**

Andrei URZICA<sup>1</sup>, Alin MIHU-PINTILIE<sup>2</sup>, Cristian Constantin STOLERIU<sup>3</sup>, Cristian Dan LESENCIUC<sup>3</sup>

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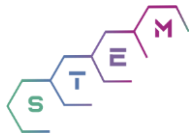
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**PC-22 Proper Elements of Resonant Systems. Applications to Satellites and Space Debris**

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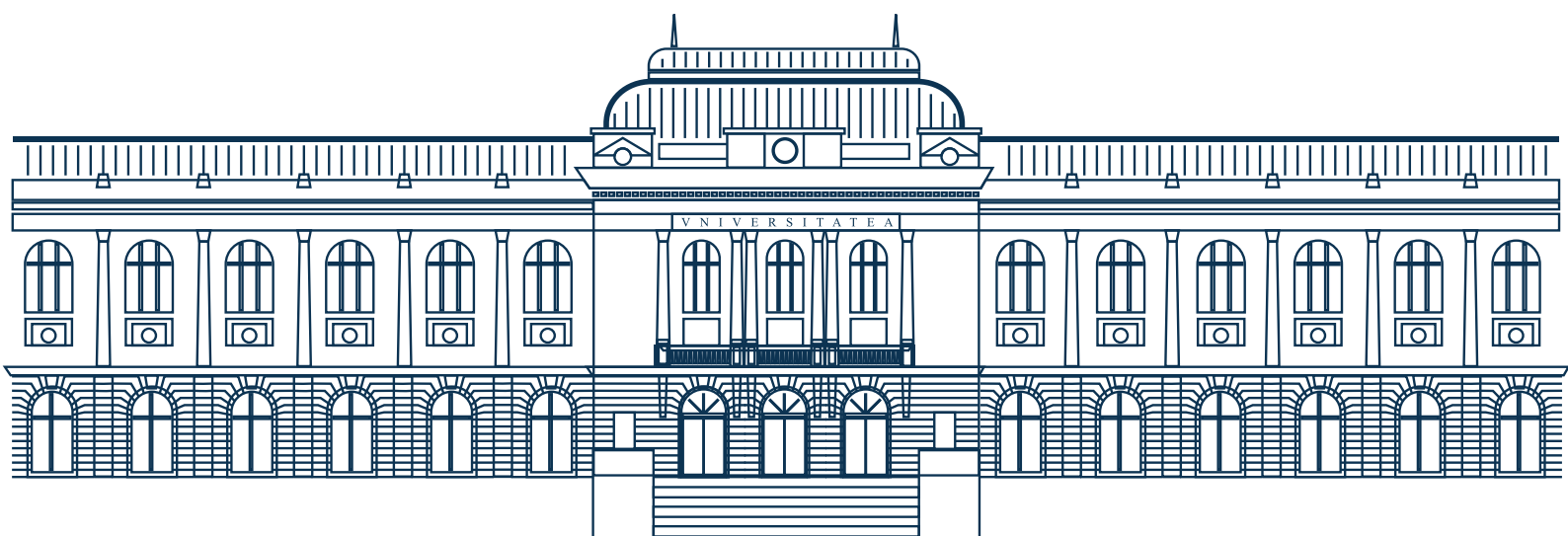
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