

## PIM 2015 CONFERENCE PROGRAM

### **Tuesday 22.09.2015**

Hour

16:00 –18:00 Registration

18:00 –20:00 Welcome reception

### **Wednesday 23.09.2015**

8:30 – 9:00 Conference Opening Ceremony

#### SESSION 1

**Chairman Peter Zavodsky**

---

9:00 – 9:30 <i>Plenary Pl-3</i>	<b>Trine Eggen</b> <i>Integrating nano- and microparticles in practical decontamination processes for water and sediment</i>
9:30 – 10:00 <i>Plenary Pl-14</i>	<b>Etelka Tombacz</b> <i>Theranostic potential of superparamagnetic iron oxide nanoparticles</i>
10:00 – 10:15 <i>Oral T4-7</i>	<b>Jan Zaloga</b> <i>tPA-conjugated Superparamagnetic Iron Oxide Nanoparticles for Targeted Thrombolytic Therapy</i>
10:15 – 10:30 <i>Oral T3-5</i>	<b>Nicoleta Tosa</b> <i>Dynamics of femtosecond laser-induced size tailoring of gold nanoparticles in water</i>
10:30 – 10:45 <i>Oral T4-2</i>	<b>Ciprian Cosar</b> <i>Mixed oxide fuel interaction with graphene based heterostructures for direct energy conversion</i>
10:45 – 11:00 <i>Oral T4-3</i>	<b>Stela Pruneanu</b> <i>Applications of graphene-based composites</i>
11:00 – 11:15 <i>Oral T4-5</i>	<b>Crina Socaci</b> <i>Graphene-based nanomaterials with peroxidase-like activity</i>
11:15 – 11:45	<b>Coffee Break</b>

#### SESSION 2

**Chairman Trine Eggen**

---

11:45 – 12:15 <i>Plenary Pl-9</i>	<b>Hermann Heumann</b> <i>Application of stable isotopes in higher organisms</i>
--------------------------------------	---

---

---

12:15 – 12:45	<b>Olivier Isnard</b>
<i>Plenary Pl-11</i>	<i>Effect of H/D isotopes on the magnetic properties of Fe rich intermetallic compounds</i>
12:45 – 13:00	<b>Michael Hirscher</b>
<i>Oral T1-2</i>	<i>Separation of hydrogen isotopes by MOFs</i>
13:00 – 13:15	<b>Damian Axente</b>
<i>Oral T1-1</i>	<i>The energy consumption for thermo-catalytic reduction of sulfuric acid to sulfur dioxide for its recycling in the <sup>15</sup>N production plant</i>

---

**13:15 – 15:30 Lunch**

### SESSION 3

**Chairman Adrian Bot**

---

15:30 – 16:00	<b>Coca Iordache</b>
<i>Plenary Pl-10</i>	<i>Fuel Cells - Sustainable Energy Solution</i>
16:00 – 16:30	<b>Claudia Zlotea</b>
<i>Plenary Pl-18</i>	<i>Nanosized particles confined into porous scaffolds for energy storage and conversion</i>
16:30 – 16:45	<b>Milan Timko</b>
<i>Oral T4-6</i>	<i>Magnetic and Heating Characteristics of various Oil-Based Magnetic Fluids</i>
16:45 – 17:00	<b>Miruna Petria</b> (Analytic Laboratory)
<i>Oral Sponsor</i>	<i>Principles of Flow Chemistry - from Oxomaritidine to Spirodienal</i>
17:00 – 17:15	<b>Daniel Bile</b>
<i>Oral T3-2</i>	<i>Low-dimensional transport and large thermoelectric power factors in bulk semiconductors by band engineering of highly directional electronic states</i>
17:15 – 17:30	<b>Yasser Acikbas</b>
<i>Oral T4-1</i>	<i>Optical characterization of N,N'-dicyclohexyl-3,4:9,10-perylene bis(dicarboximide) Langmuir-Blodgett film for organic vapor sensing application</i>

---

17:30 – 19:00 **Poster Session**  
*Sections: T1 ; T2 and T3*

**Thursday 24.09.2015**

### SESSION 4

**Chairman Michael Hirscher**

---

8:30 – 9:00	<b>Livius Trache</b>
<i>Plenary Pl-15</i>	<i>"Isotopes and molecules" in present day nuclear physics</i>
9:00 – 9:30	<b>Cristiano Galbiati</b>
<i>Plenary Pl-7</i>	<i>Special isotopes for dark matter and neutrino research</i>

---

---

9:30 – 10:00	<b>Bjorn Hauback</b> <i>Plenary Pl-8</i>	<i>Hydrogen storage in complex hydrides – structural characterization</i>
10:00 – 10:15	<b>Claudiu Filip</b> <i>Oral T2-1</i>	<i>NMR Crystallography: when and why?</i>
10:15 – 10:30	<b>Nicolae Aldea</b> <i>Oral T3-1</i>	<i>Principal Component Analysis Applied to X Ray Absorption Spectroscopy</i>
10:30 – 10:45	<b>Marius Rada</b> <i>Oral T4-4</i>	<i>Local and electronic structure of lithium-lead-germanate glasses investigated by XAS and Raman methods</i>
10:45 – 11:00	<b>Angela Limare</b> <i>Oral T2-3</i>	<i>Microwave-based, internally-heated convection applied to planetary mantles</i>
11:00 – 11:30	<b>Coffee Break</b>	

---

## SESSION 5

**Chairman Ioan Turcu**

---

11:30 – 12:00	<b>Thomas Jung</b> <i>Plenary Pl-12</i>	<i>Supramolecular Architectures at Surfaces: Shaping Structure, Electron and Spin States</i>
12:00 – 12:30	<b>George Froudakis</b> <i>Plenary Pl-5</i>	<i>Developing novel computational techniques for large-scale screening of materials based on Artificial Intelligence algorithms</i>
12:30 – 12:45	<b>Peter Zavodszky</b> <i>Oral T2-4</i>	<i>The role of noncatalytic domains in the regulation of complement proteases</i>
12:45 – 13:00	<b>Lorant Janosi</b> <i>Oral T2-2</i>	<i>Mechanisms of Interaction of Short Cationic Antimicrobial Peptides with Lipid Membrane Models</i>
13:00 – 13:15	<b>Liviu Zarbo</b> <i>Oral T4-8</i>	<i>Spin-Orbit Torques in Semiconductor Ferromagnets</i>
13:15 – 15:30	<b>Lunch</b>	

---

## SESSION 6

**Chairman Alina Magdas**

---

15:30 – 16:00	<b>Federica Camin</b> <i>Plenary Pl-1</i>	<i>Stable Isotope Ratio Analysis for assessing the authenticity of food of animal origin</i>
16:00 – 16:30	<b>Antonio Cobelo Garcia</b> <i>Plenary Pl-2</i>	<i>The Environmental Geochemistry of Platinum: Recent Advances for an Emerging Inorganic Contaminant</i>
16:30 – 16:45	<b>Ignat Florea (Analytik Jena)</b> <i>Oral Sponsor</i>	<i>New perspectives in ICP -OES and ICP -MS with PlasmaQuant PQ 9000 and Plasma Quant MS Elite from Analytik Jena</i>
16:45 – 17:00	<b>Maria Tamasan</b> <i>Oral T3-4</i>	<i>Solar efficient technologies for valorising an archaeological site in the rural area, Romania</i>

---

---

17:00 – 17:15	<b>Lucian Dulau</b>
<i>Oral T3-3</i>	<i>Simulation of a microgrid</i>
17:15 – 17:30	<b>Radu Trusca</b>
<i>Oral T3-6</i>	<i>Application for temperature and humidity monitoring of Data Center environment</i>

---

17:30 – 19:00 **Poster Session**  
*Section: T4*

---

19:30 – 22:00 **Dinner – Hotel Premier Restaurant**

**Friday 25.09.2015**

*Special Session Dedicated to  
International Year of Light*

**Chairman Calin Ur**

---

9:00 – 9:30 **Werner Fuss**  
*Plenary Pl-6 Does laser isotope separation facilitate proliferation?*

---

9:30 – 10:00 **Henryk Fiedorowicz**  
*Plenary Pl-4 Laser plasma sources of soft X-rays and extreme ultraviolet (EUV) for application in technology and science*

---

10:00 – 10:30 **Katalin Varju**  
*Plenary Pl-17 Upscaling attosecond pulse generation for high power laser systems*

---

10:30 – 10:45 **Coffee Break**

**Chairman Valer Tosa**

---

10:45 – 11:15 **Calin Ur**  
*Plenary Pl-16 Frontier Nuclear Physics at ELI-NP*

---

11:15 – 11:45 **Hyung Taek Kim**  
*Plenary Pl-13 Development of multi-GeV electron accelerators with PW laser pulses*

---

11:45 – 12:00 **Conference Closing Ceremony**

---

12:15 – 13:00 **Lunch**

---

***Excursion to Alba Iulia – Alba Carolina Fortress and dinner to Conacul Secuiesc in Apuseni Mountains***

13:15 – Departure from INCDTIM

15:30-17:30 – Visiting the Fortress (guided tour)

19:00-22:00 – Dinner at “Conacul Secuiesc” Restaurant in Coltesti

22:00 – Departure to Cluj

23:00 – Arrival in Cluj