

## PIM 2023 CONFERENCE PROGRAM

**Tuesday**                      **19.09.2023**

10:00 – 11:30                      Registration  
11:30 – 11:40                      Conference Opening Ceremony

### SESSION 1

**Chairman**                      **Liviu Movileanu; Claudiu Filip**

11:40 – 12:10 <b>Plenary Pl-2</b>	<b>Steven Brown</b> <i>Solid-state NMR of pharmaceuticals and plant cell walls</i>
12:10 – 12:40 <b>Plenary Pl-6</b>	<b>Angela Limare</b> <i>Experimental study of stratospheric vortices generated by wildfires</i>
12:40 – 13:00 <b>Keynote K-2</b>	<b>Humberto Cabrera</b> <i>Common-path photothermal interferometer for measuring low absorbance</i>
13:00 – 13:15 <b>Oral T3-1</b>	<b>Ioan Ardelean</b> <i>Optimizing the properties of cement composites for 3D printing via NMR relaxometry</i>
13:15 – 13:30 <b>Oral T4-10</b>	<b>Mihai Rusu</b> <i><sup>1</sup>H NMR and complementary studies on cement based composites for additive manufacturing</i>
<b>13:30 – 15:00</b>	<b>LUNCH</b>

### SESSION 2

**Chairman**                      **Francois Guyon; Dana Toloman**

15:00 – 15:30 <b>Plenary Pl-11</b>	<b>Giorgia de Guido</b> <i>Optimization of <sup>13</sup>C enrichment by carbon monoxide cryogenic distillation</i>
15:30 – 15:45 <b>Oral T2-2</b>	<b>Ede Bodoki</b> <i>Advances in electrochemically-assisted SERS sensing</i>
15:45 – 16:00 <b>Oral T4-11</b>	<b>Crina Socaci</b> <i>Visible light photocatalytic activity of TiO<sub>2</sub>/graphene-based composites</i>
16:00 – 16:15 <b>Oral T4-3</b>	<b>Monica Dan</b> <i>CO<sub>2</sub> methanation on doped mesoporous silica structures</i>
16:15 – 16:30 <b>Oral T4-5</b>	<b>Iolanda Ganea</b> <i>Innovative Nanostructured Polymers Based on Renewable Resources for Heavy Metals Removal from Mining Wastewaters</i>
<b>16:30 – 16:45</b>	<b>Coffee break</b>
16:45 – 17:00 <b>Oral T3-2</b>	<b>Cristian Morari</b> <i>Vibrational contributions to electrochemical potential of MOF electrodes</i>
17:00 – 17:15 <b>Oral T3-3</b>	<b>Vasile Surducan</b> <i>Power supply sharing for energy accumulation home appliances, good and bad - preliminary data</i>

17:15 – 17:30 <b>Oral T3-4</b>	<b>Cristian Tudoran</b> <i>Let's help improve public health: meet our innovative cold plasma disinfection systems</i>
17:30 – 17:45 <b>Oral T3-6</b>	<b>Jing Zhang</b> <i>The Development of simultaneous XAS and XRD measurements for monitoring the dynamics of complex systems</i>
<b>17:45 – 19:00</b>	<b>POSTER SESSION 1</b> <i>Sections T1, T2, T3-1...T3-9</i>
<b>19:00 – 22:00</b>	<b>Welcome Cocktail</b>

**Wednesday 20.09.2023**

### SESSION 3

**Chairman Andre Matagne, Alina Magdas**

09:00 – 09:30 <b>Plenary Pl-1</b>	<b>Luana Bontempo</b> <i>Advancements in compound-specific analysis for the verification of food authenticity</i>
09:30 – 10:00 <b>Plenary Pl-5</b>	<b>François Guyon</b> <i>Stable isotopes and chemometrics in food authentication: applications in antifraud laboratories</i>
10:00 – 10:30 <b>Plenary Pl-12</b>	<b>Jorge Spangenberg</b> <i>Climate change or banning herbicides will not let our glass empty! Insights from molecules and isotopes</i>
10:30 – 10:45 <b>Oral T1-1</b>	<b>Silviu Badea</b> <i>HBCD degradation by sulfidized microscale Fe<sub>0</sub> and its determination by UHPLC-Q-Orbitrap HRMS coupled with isotope dilution analysis</i>
10:45 – 11:00 <b>Oral T1-2</b>	<b>Maria David</b> <i>ATR-FTIR and FT-Raman spectroscopy associated with chemometrics for honey authenticity control</i>
11:00 – 11:15 <b>Oral T1-3</b>	<b>Ariana Hategan</b> <i>Applications of Artificial Intelligence in recognizing the origin of wine based on 1H-NMR spectroscopy</i>
<b>11:15 – 11:40</b>	<b>Coffee Break</b>

### SESSION 4

**Chairman Rebeca Martinez Vasquez; Ioan Turcu**

11:40 – 12:10 <b>Plenary Pl-9</b>	<b>André Matagne</b> <i>Functional and structural characterization of Bone Morphogenetic Protein 2 and the antagonist Noggin</i>
12:10 – 12:40 <b>Plenary Pl-4</b>	<b>Monica Florescu</b> <i>New hybrid protein nanostructures for specific targeting in colon tumor cells</i>
12:40 – 13:00 <b>Keynote K-3</b>	<b>Liviu Movileanu</b> <i>Bioinspired Nanopore Sensors Using Antibody Mimetic Technologies</i>
13:00 – 10:15 <b>Oral T2-3</b>	<b>Paula Bulieris</b> <i>Expression, purification and characterization of FlgL protein from Campylobacter jejuni</i>

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13:15 – 13:30 <b>Oral T4-13</b>	<b>Daria Stoia</b> <i>Novel smart wound patch: the next generation of wound dressing</i>
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<b>13:30 – 15:00</b>	<b>LUNCH</b>
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### SESSION 5

<b>Chairman</b>	<b>Renaud Vallee; Valer Tosa</b>
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15:00 – 15:30 <b>Plenary Pl-8</b>	<b>Rebeca Martinez Vaquez</b> <i>Femtosecond Laser Micromachining for Lab on a Chip Applications</i>
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15:30 – 15:45 <b>Oral T4-15</b>	<b>Nicoleta Tosa</b> <i>Hemisphere-void patterned gold electrodes for (EC-)SERS applications using colloidal template-directed electrodeposition</i>
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15:45 – 16:00 <b>Oral T2-1</b>	<b>Attila Bende</b> <i>Polydopamine photochemical behavior under UV irradiation</i>
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16:00 – 16:15 <b>Oral T4-12</b>	<b>Doru Sticlet</b> <i>Correlations at exceptional points in the spectra of non-Hermitian quantum systems</i>
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16:15 – 16:30 <b>Oral T3-5</b>	<b>Liviu Zarbo</b> <i>Building better superconducting qubits</i>
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<b>16:30 – 16:45</b>	<b>Coffee Break</b>
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16:45 – 17:00 <b>Oral T4-7</b>	<b>Pier-Gianni Medaglia</b> <i>Implementation of waste vegetable-derived carbon nano-platelets on laser-treated metallic electrodes for supercapacitors</i>
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17:00 – 17:15 <b>Oral T2-4</b>	<b>Radu Fehete</b> <i>The perspectives of numerical neuroevolution of artificial neural networks with applications to Fourier and Laplace-like spectroscopy</i>
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17:15 – 17:30 <b>Oral T4-8</b>	<b>Amalia Mesaros</b> <i>Chemical growth of GaFexOy thin films – unravelling the effect induced by the processing parameters on the final stoichiometry</i>
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17:30 – 17:45 <b>Oral T4-1</b>	<b>Sandor Bernad</b> <i>Hemodynamic effects on particle targeting in the arterial bifurcation for a different type of functionalized magneto-responsive nanoparticles</i>
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<b>17:45 – 19:00</b>	<b>Poster Session 2</b> <i>Section T3-10...T3-24, T4</i>
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<b>19:00 – 22:00</b>	<b>Gala Dinner</b>
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<b><u>Thursday</u></b>	<b>21.09.2023</b>
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<b>09:00 – 22:00</b>	<b>Social Program: Excursion to Sighisoara</b>
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**Friday**                      **22.09.2023****SESSION 6****Chairman**                      **Emre Erdem; Alexandrina Nan**

9:00 – 9:30 <b>Plenary Pl-10</b>	<b>Dorina Opris</b> <i>Polar polymers in actuators, sensors, and generators</i>
9:30 – 10:00 <b>Plenary Pl-13</b>	<b>Andras Tompos</b> <i>New results in the development proton exchange membrane fuel cell components</i>
10:00 – 10:30 <b>Plenary Pl-7</b>	<b>Carlo Lucarelli</b> <i>Nano-structured materials for catalytic applications</i>
10:30 – 10:45 <b>Oral T4-14</b>	<b>Emilia Talas</b> <i>Composite type of electrocatalyst supports for polymer electrolyte membrane fuel cells (PEMFCs) from novel carbonaceous materials</i>
10:45 – 11:00 <b>Oral T4-2</b>	<b>Irina Borbath</b> <i>Design of mixed oxide nanostructured coatings on carbon backbones in composites used as a support for Pt electrocatalysts</i>
11:00 – 11:15 <b>Oral T4-9</b>	<b>Irina Petreanu</b> <i>Hybrid proton exchange membrane based on polysulfone and nanostructured silica</i>
<b>11:15 – 11:40</b>	<b>Coffee Break</b>

**SESSION 7****Chairman**                      **Carlo Lucarelli; Loredana Soran**

11:40 – 12:10 <b>Plenary Pl-3</b>	<b>Emre Erdem</b> <i>Identification of point defects via EPR spectroscopy and elucidating their roles in supercapacitor devices</i>
12:10 – 12:40 <b>Plenary Pl-14</b>	<b>Renaud Vallee</b> <i>Plasmon-enhanced fluorescence of emitters: from organic molecules to upconversion nanoparticles</i>
12:40 – 13:00 <b>Keynote K-1</b>	<b>Stefano Bellucci</b> <i>Advanced 2D materials: an innovation arena for nanoelectronics, molecular sensing, optical properties, cationic pollutant removal from aqueous solutions</i>
13:00 – 13:15 <b>Oral T4-4</b>	<b>Chiara Feoli</b> <i>Ultra-small IONPs based phantom study for non-invasive MRI</i>
13:15 – 13:30 <b>Oral T4-6</b>	<b>Jasneet Kaur</b> <i>Interactions of Antimonene nanosheets with living cells: focus on the photothermal effect</i>
13:30 – 13:45	<b>Closing ceremony</b>
13:45 – 15:15	<b>LUNCH</b>