



Dies Academici Festivi Universitatis Iasiensis 2022
162th University "Alexandru Ioan Cuza" Anniversary
60th Faculty of Physics Anniversary

International Workshop on Advanced Materials and Applications
Chair: Liliana Mitoseriu, e-mail: lmtr@uaic.ro

**Organized in the frame of PN-III-P1-1.1-TE-2019-1689 and PN-III-P1-1.1-TE-2019-1929
UEFISCDI Romanian grants**

Location: Dielectrics, Ferroelectrics and Multiferroics lab, 28.10.2022, h 14.00 (hybrid)

Link Webex meeting for online presentations: <https://uaic.webex.com/meet/lmtr>

28 October 2022

14.00-14.30 Donatella Giuranno, Rada Novakovic, Institute of Condensed Matter Chemistry and Technologies for Energy, National Research Council (CNR-ICMATE), Genoa, Italy (**invited talk**)

- ***ISRU-approach for designing and fabricating successfully composite materials for space applications (25+5 min.)***

14.30-14.45 Lavinia Petronela Curecheriu, Faculty of Physics, Alexandru Ioan Cuza University of Iasi, Romania

- ***Electrocaloric effect in lead-free ferroelectric ceramics (10+5 min.)***

14.45-15.15 Marie Hélène Chambrier, Faculté des Sciences Jean Perrin, Université d'Artois, Lens, France (**invited talk**)

- ***Thin film stabilization by pulsed laser deposition of a new ferroelectric: alpha-Pr₂WO₆ polymorph (25+5 min.)***

15.15-15.30 Leontin Padurariu, Faculty of Physics, Alexandru Ioan Cuza University of Iasi, Romania

- ***Dynamic finite element method for describing effective dielectric properties in composite systems (10+5 min.)***

15.30-16.00 Dominika Zabiegaj^{ab}, Daniela Plach^{ab}, ^aDept. of Mechanical & Construction Eng., Faculty of Eng. & Environment, Northumbria University, Newcastle upon Tyne, United Kingdom, ^bNanotechnology Centre, VŠB–Technical University of Ostrava, Czech Republic (**invited talk**)

- ***Synthesis of the Vermiculite and Activated Carbon Hybrid foams for the selective treatment of the post industrial water (25+5 min.)***

16.00-16.15 Coffee break

16.15-16.45 Martino Aldrigo, National Institute for Research & Development in Microtechnologies Bucharest, Romania (**invited talk**)

- ***From NANO to MACRO: How to translate advanced NANO materials into MACRO-scale systems for microwave/millimetre-wave applications (25+5 min.)***

16.45-17.00 Cristina Elena Ciomaga, Department of Exact and Natural Sciences, Institute of Interdisciplinary Research, Alexandru Ioan Cuza University of Iasi, Romania

- ***The influence of porosity on the structural and electrical properties of ferroelectric ceramics (10+5 min.)***

17.00-17.15 Vlad A. Lukacs, Lavinia P. Curecheriu, George Stoian, Cristina E. Ciomaga, Leontin Padurariu, Liliana Mitoseriu, Faculty of Physics, Alexandru Ioan Cuza University of Iasi, Romania

- ***Size effects on the functional properties of Zr-substituted BaTiO₃ ceramics (10+5 min.)***

17.15-17.45 Roxana Elena Patru, Catalina-Andreea Stanciu, Georgia Boni, Nadejda Horchidan, Lavinia Petronela Curecheriu, Vasile-Adrian Surdu, Bogdan Vasile, Roxana Trusca, Liliana Mitoseriu, Adelina-Carmen Ianculescu, Ioana Pintilie, and Lucian Pintilie, National Institute of Materials Physics, Magurele, Romania (**invited talk**)

- ***Size-effects in fine-grained (Ba,Sr)TiO₃ ceramics: preparation and functional properties (25+5 min.)***

17.45-18.00 Felicia Gheorghiu, Nadejda Horchidan, Cristina Elena Ciomaga, Department of Exact and Natural Sciences, Institute of Interdisciplinary Research, Alexandru Ioan Cuza University of Iasi, Romania

- ***Porous (Ba, Ca)(Ti, Zr)O₃ ceramics using MWCNT templates for piezoelectric applications (10+5min.)***

18.00-18.15 Radu Stefan Stirbu, Leontin Padurariu and Liliana Mitoseriu, Faculty of Physics, Alexandru Ioan Cuza University of Iasi, Romania

- ***Modeling the ferro/piezoelectric hysteresis in porous ceramics by finite element calculations (10+5 min.)***

18.15-18.30 Mariam Osman, Cristina Elena Ciomaga, Liliana Mitoseriu, Faculty of Physics, Alexandru Ioan Cuza University of Iasi, Romania

- ***Preparation and electrical properties of BaTiO₃ - based porous ceramics (10+5 min.)***

18.30 Liliana Mitoseriu, Faculty of Physics, Alexandru Ioan Cuza University of Iasi, Romania
Concluding remarks.

29 October

- ***Searching for new topics for further projects in ferroelectrics – Group brainstorming.***

29-30 October 2022

- ***Group Excursion.***