

Final Programme**Monday April 22**

8.30	Registration	
9.10	Opening remarks A. Bellosi (Director of ISTEC)	
Design and processing of 2D and 3D ferroelectric and multiferroelectric composites		
9.20	Invited talk Ferroelectric and multiferroic micro- and nanostructures from core-shell particles V. Buscaglia	11
9.50	Synthesis and functional properties of ferroelectric-carbon nanotube composites by Spark Plasma Sintering C. E. Ciomaga , A. M. Neagu, C. Galassi and L. Mitoseriu	01
10.10	3D imaging by X-ray micro tomography of ferroelectric composite materials and numerical modelling of their properties J. Lesseur , C. Elissalde, C. Estournès, G. Chevallier, D. Bernard	02
10.30	Magnetoelectric Properties of BiScO ₃ -PbTiO ₃ /NiFe ₂ O ₄ Ceramic Composites H. Amorín , R. del Campo, P. Ramos, I. Martínez, E. Vila, M. Dollé, Y. Romaguera, J. Pérez de la Cruz, A. Castro, M. Algueró	03
10.50	Nanostructuring Fe ₃ O ₄ -TiO ₂ composites by Colloidal Approach Coupled with Spray-drying A. L. Costa, A. Spegini, B. Ballarin, M. C. Cassani, D. Gardini	04
11.10	Coffee break	
11.30	Invited talk Polymer based magnetoelectric materials: present status, application and challenges P. Martins and S. Lanceros-Méndez	12
12.00	Lead Zirconate Titanate – Acrylate Composites Fabricated by Inkjet Printing D. Kuščer , M. Pajic, O. Noshchenko, U. Šebenik	05
12.20	Electrophoretic deposition of lead zirconate titanate on conductive and semiconductive substrates: deposition parameters for the control of film morphology C. Baldisserri , D. Gardini, C. Capiani, C. Galassi	06

12.40	New functional properties driven by interface reactions in core-shell structures <u>L.P. Curecheriu</u> , M. T. Buscaglia, V. Buscaglia, L. Mitoseriu	07
13.00	Lunch	
14.00	<i>Invited talk</i> First-principles approach to multiferroics and magnetoelectrics <u>S. Picozzi</u>	13
14.30 16.00	POSTER SESSION and coffee break	

16.00 Visit to the town of Ravenna

20.00 -22.00 Official Dinner

Tuesday April 23

Characterizations		
9.00	About ballistic transport in hybrid electronic devices <u>M. Cercez</u>	08
9.20	Thermo-Raman spectroscopy study of phase transitions in barium and strontium titanate nanostructures <u>A. Gajović</u> , M. Plodinec, J. Šipušić, M. Čeh	09
9.40	Broadband dielectric spectroscopy of 0.6BaTiO ₃ -0.4Ni _{0.5} Zn _{0.5} Fe ₂ O ₄ composite ceramics A. Sakanas, <u>R. Grigalaitis</u> , J. Banys, L. Mitoseriu, V. Buscaglia	10
10.00	The role of the local electric field inhomogeneity on the electrical properties of ferroelectric composites <u>L. Padurariu</u> , L. Curecheriu, M. Pop, C. Galassi, V. Buscaglia and L. Mitoseriu	11
10.20	Phase diagrams and interaction between polar and antiferrodistortive modes in the PZT and NBT-BT systems <u>F. Cordero</u> , F. Craciun, F. Trequattrini and C. Galassi	12
10.40	Comparison between hard/soft PZT composite materials with different degree of mixing <u>N. Horchidan</u> , C. Galassi, M. Pop, H. Ursic, C. Capianni, B. Malic, L. Mitoseriu	13

10.50	Coffee break	
Magnetoelectric effect in ceramics and composites		
11.30	Invited talk Controlled extrinsic room temperature magnetoelectric effect in granular nanocomposites for engineering novel microwave devices <u>C. Brosseau</u>	I 4
12.00	Characterization of a novel M-type Ba-Sr hexaferrite for UHF patch antenna miniaturization <u>M. Aldrigo</u> , D. Masotti, A. Costanzo, C. Baldisserri, C. Galassi	O 14
12.20	Some thermodynamic aspects of preparation of dense and phase pure Eu(Ba,Sr)TiO ₃ ceramics <u>K. Maca</u> , M. Kachlik', P. Vanek, D. Gautam	O 15
12.40	Multiferroic properties of (Sm, Fe)-doped PbTiO ₃ perovskite ceramics <u>F. Craciun</u> , E. Dimitriu, M. Grigoras, N. Lupu and M. Cernea	O 16
13.00	Lunch	
Thin Films		
14.00	Invited talk Combined effect of depletion charges and interfaces on polarization stability and electrical domains in ferroelectric thin films <u>B. Mýšýrlýoðlu</u>	I 5
14.30	2D Self-Organisations Of Co@CoO Core-Shell and CoO Hollow NCs. (S)TEM, HAADF And EELS Studies <u>I. Lisiecki</u>	O 17
14.50	Thin film multiferroic nanocomposites by a novel approach J. Ricote, H. Amorín, M. Torres, A. Alberca, N. Nemes, O. Iglesias-Freire, M. Jaafar, S. Holgado, M. Cervera, J. Piqueras, A. Asenjo, M. García-Hernández, <u>M. Alguero</u>	O 18
15.10	Closing remarks	
16.00 17.00	Visit to the Laboratories ISTECS	

POSTERS



- P 1** Influence of the lengthscale cation mixing degree on the dielectric and ferroelectric properties of BaZr_xTi_{1-x}O₃ ceramics
L. P. Curecheriu, V. Musteata, M. T. Buscaglia, V. Buscaglia, L. Mitoseriu
- P 2** Exploration of Single-phase Layered Perovskites as Candidate Magnetoelectrics
E. Peeters, C. De Dobbelaere, H. Damm, K. Schellens, N. Pavlovic, A. Hardy and M. K. Van Bael
- P 3** Temperature-dependent Raman analysis of the ferroelectric-antiferroelectric crossover in La-doped lead zirconate titanate ceramics
M. Deluca, C. Galassi, H. Taniguchi, and L. Mitoseriu
- P 4** Multiferroic nanocomposite films from aqueous solutions
N. Pavlovic, C. De Dobbelaere, J. D'Haen, A. Hardy, M.K. Van Bael
- P 5** Microstructural and dielectric properties of epoxy resin-PZT thin film composites
V. Pascariu, A. Neagu, P. Nanni and L. Mitoseriu
- P 6** PLD Deposition and Characterization of Heteroepitaxial SrTiO₃ Thin films
S. Bagdzevicius, J. Banyas, N. Setter
- P 7** Measurement of Dielectric Permittivity and Magnetic Permeability of Barium-Strontium Hexaferrite in Microwave Frequency Range
S. Rudys, R. Grigalaitis, J. Banyas, C. Baldisserri, C. Galassi
- P 8** The role of porosity on the ferroelectric properties of PZTN ceramics: experiment and modeling
F. Gheorghiu, **L. Padurariu**, M. Pop, C. E. Ciomaga, C. Capiani, C. Galassi and L. Mitoseriu
- P 9** Structural, microstructural and electrical analyses of PZTNb/CoFe₂O₄ multilayer composites prepared by electrophoretic deposition
C. E. Ciomaga, C. Baldisserri, C. Galassi and L. Mitoseriu
- P 10** Processing of lead zirconate titanate ceramics derived from poly(methyl methacrylate) template
T. Bakarič, D. Kuščer, B. Malič
- P 11** Shape control of photoreduced silver nanostructures on ferroelectric templates
N. C. Carville, **S. Tobin**, L. Balobaid, M. Manzo, K. Gallo, S. Damm, J. H. Rice, and B. J. Rodriguez

- P 12** Synthesis and Properties of NiFe_2O_4 and $\text{Ni}_{0.5}\text{Zn}_{0.5}\text{Fe}_2\text{O}_4$ Prepared by Auto-combustion Method
M.M. Vijatović Petrović, A. Džunuzović, J. D. Bobić, L. Curecheriu, J. Koruza, B. D. Stojanović
- P 13** Synthesis and characterisation of barium and strontium titanate nanostructures
M. Plodinec, A. Gajović, M. D. Sikirić, J. Šipušić, M. Čeh
- P 14** Composite ferrite/titanate thin films obtained by chemical solution deposition technique
B. Bajac, B. Mojić, J. Vukmirović, Z. Cvejic, S. Rakic, A. Kukovecz, K.P. Giannakopoulos, V.V. Srdić
- P 15** Barium ferrite doped- $\text{SrFe}_{12}\text{O}_{19}$: sol-gel synthesis and electro-magnetic characterization
M. Cernea, C. Baldisserri, A. G. Ibanescu, R. Negrea C. Capiani, C. Galassi