

TOPICS

1. Processing and Characterization
2. Electronic Transport Properties
3. Magnetic Properties
4. Optical and Photoelectric Properties
5. Low-dimensional Structures
6. Functional Materials. Applications

ICPAM-8 PROGRAM

Plenary Sessions

Wednesday, June 4; 9:30 - 10:20

9 ³⁰ -10 ²⁰	Bruce D. Terris PATTERNED NANOMAGNETIC BITS AND DEVICES
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Wednesday, June 4; 10:40 - 12:45

10 ⁴⁰ -11 ²⁰	O.Mentré, M. Kauffmann, G. Ehora, S. Daviero-Minaud, P. Roussel, O. Toulemonde STRUCTURE, DIMENSIONALITY AND MAGNETISM OF NOVEL Co/Fe HALOGENO-OXIDES
11 ²⁰ -12 ⁰⁰	I. Berbezier, A. Ronda, G. Amiard, F. Bassani, L. Favre SELF-ASSEMBLY OF GE NANOCRYSTALS ON NANOSTRUCTURED SUBSTRATES
12 ⁰⁰ -12 ⁴⁵	S. Tascu, O. Alibart, M. de Micheli, P. Baldi, D.B. Ostrowski, S. Tanzilli INTEGRATED OPTICS ON LITHIUM NIOBATE FOR QUANTUM COMMUNICATION

Thursday, June 5; 9:00 - 11:00

9 ⁰⁰ -9 ⁴⁰	Ahmad Umar, Y. B. Hahn METAL OXIDE NANOSTRUCTURES BASED CHEMICAL AND BIOSENSORS
9 ⁴⁰ -10 ²⁰	J. Schoenes and A.-M. Racu METAL HYDRIDES BETWEEN FASCINATING BASIC RESEARCH AND BENEFICIAL HYDROGEN STORAGE

10 ²⁰ -11 ⁰⁰	S Paul MAKING NANO-BITS REMEMBER – USE OF NANO-PARTICLES AND SMALL ORGANIC MOLECULES IN ELECTRICALLY RE-WRITABLE MEMORY DEVICES
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Thursday, June 5; 11:20 - 12:45

11 ²⁰ -12 ⁰⁰	Sorin I. Farcas, I. Bratu, Irina Kacso and Ghe. Borodi STUDY OF NEW NANO-MATERIALS WITH APPLICATION IN GASTROINTESTINAL TRACT DISORDERS
12 ⁰⁰ -12 ⁴⁵	Simion Simon SURFACE PROPERTIES OF AMORPHOUS AND NANO-CRYSTALLINE OXIDE MICROSPHERES

Friday, June 6; 9:00 - 10:20

9 ⁰⁰ -9 ⁴⁰	V. Simon SPECTROSCOPIC STUDIES ON BIOFUNCTIONALISED ALUMINOSILICATE NANO- AND MICROPARTICLES
9 ⁴⁰ -10 ²⁰	F. Iacomi, A. Vasile, C. Loghin, V. Melnig SOME HYBRID COMPOSITES FOR SMART SYSTEMS

ORAL SESSIONS

SECTION I. Processing and Characterization

Wednesday, June 4, 2008; 15:00-17:30

Hall Aula “Gheorghe Asachi”

Chairpersons: S. Tascu, O. Bunoiu

15 ⁰⁰ -15 ²⁰ O-I.1	CONCENTRATION DISTRIBUTION OF Er ³⁺ IONS IN ErF ₃ DOPED CaF ₂ CRYSTALS I. Nicoara, <u>O. Bunoiu</u> , M. Stef, G. Buse West University of Timisoara, Department of Physics, Timisoara, Romania E-mail: bom@physics.uvt.ro
15 ²⁰ -15 ⁴⁰ O-I.2	THE ENVIRONMENTAL SCANNING ELECTRON MICROSCOPY APPLIED TO THE STUDY AND CONSERVATION OF HISTORIC TEXTILE MATERIALS FROM ROMANIAN MEDIEVAL COLLECTIONS <u>Marincaș Octaviana</u> ¹ , Erlach Rudolf ² ¹ Conservation Dept., University of Art Iași, Romania, e-mail omarincas@arteiasi.ro ² University of Applied Arts Vienna, Institute of Art and Technology, Dept. Archaeometry, Dept. Technical Chemistry – Science Visualization, Vienna, Austria, e-mail rudolf.erlach@uni-ak.ac.at
15 ⁴⁰ -16 ⁰⁰ O-I.3	NANOSTRUCTURED MANGANITE WITH CMR EFFECT PROCESSED BY ADVANCED POWDER METALLURGY TECHNOLOGY <u>Oana Gingu</u> ¹ , Mihail Mangra ¹ , Horia Chiriac ² , Gabriela Sima ¹ , Olimpia Ghermec ¹ , Cristian Ghermec ¹ , Sorin Savu ¹ ¹ University of Craiova, Faculty IMST, ginguco@yahoo.com ² National Institute of R&D for Technical Physics, Magnetic Materials and Devices Department, hchiriac@phys-iasi.ro

16 ⁰⁰ -16 ²⁰ O-I.4	NANOSTRUCTURED BIOCOSCOMPOSITES PROCESSED BY POWDER METALURGY Marius Criveanu ¹ , <u>Oana Gingu</u> ¹ , Mihail Mangra ¹ , Sorin Savu ¹ , Adriana Sorcoi ² , Gabriela Sima ¹ ¹ University of Craiova, Faculty IMST, ginguco@yahoo.com ² Technical University of Cluj-Napoca, Faculty Mat. Sci.& Eng., <u>Adriana.Sorcoi@stm.utcluj.ro</u>
16 ²⁰ -16 ⁴⁰ O-I.5	SIGNAL PROCESSING IN EDDY CURRENT NONDESTRUCTIVE EVALUATION; APPLICATION TO ZR-2.5%NB ALLOYS <u>Rozina Steigmann</u> ¹ , Bogdan Serghiac ² , Alina Bruma ² ¹ National Institute of Research and Development for Technical Physics, Iasi, Romania, <u>steigmann@phys-iasi.ro</u> ² A.I.Cuza University, Iasi, Romania
16 ⁴⁰ -17 ⁰⁰ O-I.6	CONTRIBUTIONS TO THE MECHANISM OF THE BRIGGS-RAUSCHER OSCILLATING SYSTEM <u>Rodica Nițoi</u> , Gelu Bourceanu, Gheorghe Nemțoi Department of Chemistry, “Al. I. Cuza” University, 11- Carol I Blvd., 700506 - Iași, Romania
17 ³⁰ -18 ⁰⁰	Cofee Break

Thursday, June 5, 2008; 15:00-17:30

Hall Aula “Gheorghe Asachi”

Chairpersons: P.M. Racolta, O.F. Caltun

15 ⁰⁰ -15 ²⁰ O-I.7	STATUS AND PERSPECTIVES AT THE CYCLOTRON IFIN-HH BUCHAREST FOR MATERIAL ANALYSIS AND CHARACTERIZATION L. Craciun, D. Dudu, E. A. Ivanov, <u>P.M. Racolta</u> , I. Rusen, I. Vata National Institute for Physics and Nuclear Engineering « Horia Hulubei »-IFIN-HH, Magurele
15 ²⁰ -15 ⁴⁰ O-I.8	THE INFLUENCE OF THE SINTERING TEMPERATURE ON THE MAGNETOSTRICTIVE PROPERTIES OF COBALT FERRITES <u>Luminita Boutiuc Hrib</u> ¹ , O. F.Caltun ¹ , Dumitru I. ¹ , Feder M. ² ¹ Faculty of Physics & Carpath Center, “Al.I.Cuza” University, Iasi, Romania ² National Institute of Material Physics P.O. Box MG-7, Bucharest Romania
15 ⁴⁰ -16 ⁰⁰ O-I.9	THE INFLUENCE OF THE THERMAL TREATMENT ON THE MICROSTRUCTURE OF THIN COBALT FERRITE FILMS <u>Georgiana Dascalu</u> , G. Rusu, I. Mihaila, O.F. Caltun, G. Popa Faculty of Physics & Carpath Center, “Al.I.Cuza” University, Iasi, Romania
16 ⁰⁰ -16 ²⁰ O-I.10	SYNTHESIS OF NANOPARTICLES OF Mn _x Co _{1-x} Fe ₂ O ₄ BY COMBUSTION REACTION METHOD AND THEIR MAGNETIC PROPERTIES <u>Tamara Slătineanu</u> ¹ , Luminita Hrib ² , Alexandra Iordan ¹ , M. N. Palamaru ¹ , O. F. Călțun ² ¹ Chemistry Department, “Al.I.Cuza”University, Iassy, Romania, e-mail: raluca_iordan@yahoo.fr ; tami282002@yahoo.com ; palamaru@uaic.ro ; ² Physic Department, “Al.I.Cuza”University, Iassy, Romania

SECTION III. Magnetic Properties

Wednesday, June 4, 2008; 15:00-15:20

Hall Aula Magna “Mihai Eminescu”

Chairpersons: Alexandru Stancu, M.Kasap

15 ⁰⁰ -15 ²⁰ O-III.1	MODELING MAGNETOSTATIC INTERACTIONS IN NANOWIRE SYSTEMS <u>Andrei Diaconu</u> ¹ , Ioan Dumitru ¹ , Alexandru Stancu ¹ ¹ Department of Physics, “Alexandru Ioan Cuza” University, Blvd. Carol I, 11, 700506, Iasi, Romania, andrediaconu@gmail.com
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SECTION IV. Optical and Photoelectric Properties

Wednesday, June 4, 2008; 15:20-16:40

Hall Aula Magna "Mihai Eminescu"

Chairpersons: Alexandru Stancu, M.Kasap

15 ²⁰ -15 ⁴⁰ O-IV.1	PHOTOLUMINESCENCE OF PECVD SiCN:H FILMS <u>V.I. Ivashchenko</u> , L.A. Ivashchenko, O.K. Porada, A.V. Vasin ¹ , I.I. Timofejeva, P.L. Scrynsky and M.V. Ushakov Institute of Problems of Material Science, NAS of Ukraine, 03142 Kyiv, Ukraine, ivash@ipms.kiev.ua ¹ Institute of Semiconductor Physics, NAS of Ukraine, 03026 Kyiv, Ukraine, E-mail: av966@yahoo.com
15 ⁴⁰ -16 ⁰⁰ O-IV.2	ADVANCED ELLIPSOMETRY STUDIES ON ZnO THIN FILMS <u>Aurelian C. Galca</u> ¹ , Valentin Ion ² , Carmen S. Petrone ¹ , Victor Leca ³ , Dieter Kolle ³ , Maria Dinescu ² ¹ National Institute of Materials Physics, Magurele, Romania, ac_galca@infim.ro , petrone@infim.ro ² National Institute for Laser, Plasma and Radiation Physics, Magurele, Romania, valentin.ion@inflpr.ro ; dinescum@nipne.ro ³ Tuebingen University, Tuebingen, Germany, victor.leca@uni-tuebingen.de , koelle@uni-tuebingen.de
16 ⁰⁰ -16 ²⁰ O-IV.3	THE OPTICAL PROPERTIES OF THE FILM AT THE INTERFACE OF HETEROJUNCTION GAS/ Cd _{0.98} Mn _{0.02} Te WITH THIN FILMS <u>I. Caraman</u> , M. Stamate, I. Lazar, V. Nedeff, G. Lazar, D. Rusu The University of Bacau, Calea Marasesti 157, Bacau, 600115, Romania, iucaraman@yahoo.ca
16 ²⁰ -16 ⁴⁰ O-IV.4	PHOTOINDUCED EFFECTS AND HOLOGRAPHIC RECORDING IN AMORPHOUS As _{100-x} Se _x , As ₂ Se ₃ :Sn AND Sb ₂ Se ₃ :Sn FILMS <u>M.S.Iovu</u> , D.V.Harea, E.P.Colomeico, I.A.Cojocar, M.A.Iovu Centre of Optoelectronics of the Institute of Applied Physics, Academy of Sciences of Moldova, Str. Academiei 5, MD-2028 Chisinau, Republic of Moldova

SECTION V. Low-dimensional Structures

Wednesday, June 4, 2008; 16:40-17:40

Hall Aula Magna "Mihai Eminescu"

Chairpersons: A. Casian, M.Kasap

16 ⁴⁰ -17 ⁰⁰ O-V.1	ON THE CONDUCTION MECHANISM OF TiO ₂ THIN FILMS <u>A. Yildiz</u> ¹ , S. Eker ¹ , S. B. Lisesivdin ² , M. Kasap ² , S.Ozcelik ² and D. Mardare ³ ¹ Department of Physics, Faculty of Science and Arts, Ahi Evran University, 40040, Kirsehir, Turkey, yildizab@gmail.com , seker@yahoo.com ² Department of Physics, Faculty of Science and Arts, Gazi University, 06500, Ankara, Turkey, sblisesivdin@gmail.com , mkasap@gazi.edu.tr , sozcelik@gazi.edu.tr ³ Faculty of Physics, Alexandru Ioan Cuza University, 11 Carol I Blvd., 700506-Iasi, Romania, dianam@uaic.ro
17 ⁰⁰ -17 ²⁰ O-V.2	IR ABSORPTION BY FREE CARRIERS IN QUASI-ONE-DIMENSIONAL ORGANIC CRYSTALS <u>A. Casian</u> , V. Dusciac and V. Niciu Department of Computers, Informatics and Microelectronics, Technical University of Moldova, Chisinau, acasian@mail.utm.md
17 ²⁰ -17 ⁴⁰ O-V.3	SOME ELECTRICAL AND OPTICAL PROPERTIES OF ORGANIC POLYMER (PVA) – C60 NANOCOMPOSITES IN THIN FILMS <u>I. Caraman</u> ¹ , G. Lazar ¹ , M. Stamate ¹ , V. Nedeff ¹ , I. Lazar ¹ , P. Lozovanu ² ¹ The University of Bacau, Calea Marasesti 157, Bacau 600115, iucaraman@yahoo.ca ² The State University of Moldova, 60 Mateevici str., Kishinve, p-lozovanu@mail.md
17 ⁴⁰ -18 ⁰⁰	Coffee Break

SECTION VI. Functional Materials. Applications.

Thursday, June 5, 2008; 15:00-17:40

Hall Aula Magna "Mihai Eminescu"

Chairpersons: Liliana Mitoşeriu, F. Brinza

15 ⁰⁰ -15 ²⁰ O-VI.1	THE APPLICATION OF SOLID STATE PHYSICS IN THE STUDY AND CONSERVATION OF HISTORIC TEXTILE MATERIALS <u>Marincaş Octaviana</u> ¹ , Erlach Rudolf ² , Bourceanu Gelu ³ ¹ Conservation Dept., University of Art Iaşi, Romania, e-mail omarincas@arteiasi.ro ² University of Applied Arts Vienna, Institute of Art and Technology, Dept. Archaeometry, Dept. Technical Chemistry – Science Visualization, Vienna, Austria, e-mail rudolf.erlach@uni-ak.ac.at ³ Faculty of Chemistry, Al. I. Cuza University Iaşi, Romania, email gelub@uaic.ro
15 ²⁰ -15 ⁴⁰ O-VI.2	MATHEMATICAL MODELS OF CAVITATION EROSION <u>Constantin Pătrăşcoiu</u> , Faculty of Engineering and Management of the Technological Systems, Drobeta Turnu Severin, University of Craiova. patrascoiu@yahoo.com
15 ⁴⁰ -16 ⁰⁰ O-VI.3	ELECTROSPINNING OF GELATIN-CHITIN COMPOSITE NANOFIBERS <u>Vasile Tura</u> ¹ , Florentina Tofoleanu ¹ , Ionel Mangalagiu ² , Tudorel Balau Mindru ³ , Florin Brinza ¹ , Nicolae Sulitanu ¹ , Ion Sandu ⁴ , Dan Raileanu ⁵ , Cezar Ionescu ⁶ ¹ Faculty of Physics, Al. I. Cuza University of Iasi, Romania, vtura@uaic.ro ² Faculty of Chemistry, Al. I. Cuza University of Iasi, Romania, ionelm@uaic.ro ³ Faculty of Textile and Leather Engineering, Gh. Asachi Technical University of Iasi, Bd. D. Mangeron 53, Iasi, 700050, tbalau@yahoo.co.uk ⁴ Faculty of Orthodox Theology, Al. I. Cuza University of Iasi, Romania, ion.sandu@mail.dntis.ro ⁵ Faculty of Biology, Al. I. Cuza University of Iasi, Romania, dan.raileanu@yahoo.com ⁶ Faculty of Medicine, Gr. T. Popa University of Medicine and Pharmacy, Iasi, Romania, ceraio@yahoo.com
16 ⁰⁰ -16 ²⁰ O-VI.4	ELECTROSPUN GELATIN NANOFIBERS FUNCTIONALIZED WITH SILVER NANOPARTICLES <u>Florentina Tofoleanu</u> ¹ , Tudorel Balau Mindru ² , Florin Brinza ¹ , Nicolae Sulitanu ¹ , Ion Sandu ³ , Dan Raileanu ⁴ , Viorel Floristean ⁵ , Bogdan Hagi ⁵ , Cezar Ionescu ⁶ , Vasile Tura ¹ ¹ Faculty of Physics, Al. I. Cuza University of Iasi, Romania, asja_tina@yahoo.com ² Faculty of Textile and Leather Engineering, Gh. Asachi Technical University of Iasi, Bd. D. Mangeron 53, Iasi, 700050, tbalau@yahoo.co.uk ³ Faculty of Orthodox Theology, Al. I. Cuza University of Iasi, Romania, ion.sandu@mail.dntis.ro ⁴ Faculty of Biology, Al. I. Cuza University of Iasi, Romania, dan.raileanu@yahoo.com ⁵ Faculty of Veterinary Medicine, Ion Ionescu de la Brad University of Agricultural Sciences and Veterinary Medicine, Iasi, Romania, vioflor10@yahoo.com ⁶ Faculty of Medicine, Gr. T. Popa University of Medicine and Pharmacy, Iasi, Romania, ceraio@yahoo.com
16 ²⁰ -16 ⁴⁰ O-VI.5	IN SITU MONITORING OF ZINC-NICKEL ALLOYS ELECTROPLATING PROCESSES WITH EQCM Gheorghe GUTT ¹ , Violeta VASILACHE ¹ , Ion SANDU ² , Traian VASILACHE ³ , Andrei Victor SANDU ⁴ ¹ Stefan cel Mare University of Suceava, e-mail: violetaren@yahoo.com ² Al.I. Cuza University of Iasi, ARHEOINVEST Platform, Laboratory of Scientific Investigation and Cultural Heritage Conservation ³ S.C. Daflog S.R.L Mediaş ,e-mail: traianv@yahoo.com ⁴ Romanian Inventors Forum, RDI Department

16 ⁴⁰ -17 ⁰⁰ O-VI.6	COPOLYMERS ARCHITECTURES CONTAINING DONOR AND ACCEPTOR UNITS FOR BLUE LIGHT-EMITTING DIODES <u>Mariana-Dana Damaceanu</u> , Maria Bruma "Petru Poni" Institute of Macromolecular Chemistry, Aleea Gr. Ghica Voda 41A, Iasi-700487, Romania email: damaceanu@icmpp.ro , mbruma@icmpp.ro
17 ⁰⁰ -17 ²⁰ O-VI.7	NON-LINEAR DIELECTRIC PROPERTIES OF FERROELECTRIC CERAMICS <u>L.P. Curecheriu</u> ¹ , F.M. Tufescu ^{1,2} and L. Mitoseriu ¹ ¹ Departament of Physics, Alexandru Ioan Cuza University, Bv. Carol I 11, 700506 Iasi, Romania, e-mail lavinia_curecheriu@stoner.phys.uaic.ro ² GRADIENT srl., str. dr. Codrescu, 17, Iasi 700495, Romania
17 ³⁰ -18 ⁰⁰	Coffee Break

POSTER SESSIONS

SECTION I. Processing and Characterization

Wednesday, June 4, 2008; 18:00-19:00

Hall of Echoing Steps

P-I.1	ANALYSIS OF INTERFACE STATES AND SERIES RESISTANCE OF Au/SiO ₂ /n-GaAs SCHOTTKY BARRIER DIODES AT ROOM TEMPERATURE <u>Halit Altuntas</u> ¹ , Süleyman Özcelik ² , and Hadas Shtrikman ³ ¹ Physics Department, Faculty of Arts and Sciences, Gazi University, 06500, Ankara, Turkey, ahalit@gazi.edu.tr ² Physics Department, Faculty of Arts and Sciences, Gazi University, 06500, Ankara, Turkey, sozcelik@gazi.edu.tr ³ Braun Submicron Research Center, Department of Condensed Matter, Weizmann Institute of Science 76100, Rehovot, Israel, hadas.shtrikman@weizmann.ac.il
P-I.2	THE BARRIER HEIGHT INHOMOGENEITY IN Au/n-GaAs SCHOTTKY BARRIER DIODES <u>Halit Altuntas</u> ¹ , Hadas Shtrikman ² , and Süleyman Özcelik ³ ¹ Physics Department, Faculty of Arts and Sciences, Gazi University, 06500, Ankara, Turkey, ahalit@gazi.edu.tr ² Braun Submicron Research Center, Department of Condensed Matter, Weizmann Institute of Science 76100, Rehovot, Israel, hadas.shtrikman@weizmann.ac.il ³ Physics Department, Faculty of Arts and Sciences, Gazi University, 06500, Ankara, Turkey, sozcelik@gazi.edu.tr
P-I.3	METHODS OF INTRODUCING SPECIFIC FUNCTIONAL GROUP AT POLYESTER SURFACES <u>Mioara Drobota</u> , Iuliana Stoica, Magdalena Aflori, Virgil Barboiu "Petru Poni" Institute of Macromolecular Chemistry, miamiara@icmpp.ro
P-I.4	SYNTHESIS, STRUCTURAL AND MAGNETIC PROPERTIES OF SOME V DOPED MANGANITES <u>C. Mita</u> ¹ , M.L.Craus ^{2,3} , M. Lozovan ² and N.Cornei ¹ ¹ "Al.I.Cuza" University, Faculty of Chemistry, 11 Carol I Bvd, 700506, Iasi, Romania, cmita@uaic.ro and ncornei@uaic.ro ² National Institute of Research and Development for Technical Physics, 47D.Mangeron Bvd., Iasi, 700050, Romania, loz@phys-iasi.ro ³ Joint Institute for Nuclear Research, Joliot Curie 6, Dubna 141980, Mosk. Region, Russia, mihailiviu@yahoo.com
P-I.5	COMBUSTION SHYNTHESES OF OXIDES COMPOUNDS Ca _{2-x} La _x MnMoO ₆ <u>Elena-Adriana Perianu</u> ¹ , Mircea Nicolae Palamaru ¹ Alexandra Raluca Iordan ¹ and Adelina Carmen Ianculescu ² ¹ Chemistry Department, "Al.I.Cuza" University, Iassy, Romania, e-mail: pandria2002@yahoo.com ; palamaru@uaic.ro ; alex@uaic.ro ² Polytechnics University of Bucharest, 1-7 Gh. Polizu, P.O. Box 12-134, 011061 Bucharest, Romania

P-I.6	<p>RBS CHARACTERISATION OF NANOMETRIC ZRN/TIN AND ZRCN/TICN MULTILAYER USED AS REFLECTORS FOR X-RAY WATER WINDOW. M.Balaceanu², V. Braic², D. Catana¹, D. Dudu, <u>Ofelia Muresan¹</u>, D. Plostinaru¹ 1- Horia Hulubei National Institute for Physics and Engineering – IFIN-HH, Magurele 2- National Institute for OPTOELECTRONICA-INOE 2000, Magurele</p>
P-I.7	<p>CuPc BASED PHOTOVOLTAIC CELLS ON TRANSPARENT ZINC OXIDE FILMS AS ELECTRODES <u>Corneliu Ghica¹</u>, Lucian Ion², George Epurescu³, Leona Nistor⁴, Stefan Antohe⁵, Maria Dinescu⁶ ¹ National Institute of Materials Physics, 105 bis Atomistilor, PO Box MG-7, 077125, Bucharest-Magurele, Romania, e-mail: cghica@infim.ro ² University of Bucharest, Faculty of Physics, PO Box MG-11, RO 077125, Bucharest-Magurele, Romania, e-mail: lucian@solid.fizica.unibuc.ro ³ National Institute of Lasers, Plasmas and Radiations, 409 Atomistilor, PO Box MG-16, RO 77125 Bucharest-Magurele, Romania, e-mail: george@ifin.nipne.ro ⁴ National Institute of Materials Physics, 105 bis Atomistilor, PO Box MG-7, 077125, Bucharest-Magurele, Romania, e-mail: leonis@infim.ro ⁵ University of Bucharest, Faculty of Physics, PO Box MG-11, RO 077125, Bucharest-Magurele, Romania, e-mail: santohe@solid.fizica.unibuc.ro ⁶ National Institute of Lasers, Plasmas and Radiations, 409 Atomistilor, PO Box MG-16, RO 77125 Bucharest-Magurele, Romania, e-mail: dinescum@ifin.nipne.ro</p>
P-I.8	<p>CDBS STUDIES ON ALUMINUM AT NIPNE-HH C. Chiojdeanu, F. Constantin, L. Craciun, C. Ionescu, P.M. Racolta, <u>M. Straticiu</u> National Institute for Physics and Nuclear Engineering « Horia Hulubei »-IFIN-HH, Magurele</p>
P-I.9	<p>SOLID STATE PROPERTIES OF THIN FILMS OF NEW POLY(AZOMETHINE-SULFONE) <u>L. Marin¹</u>, V. Cozan¹, D. Timpu¹, G. I. Rusu², A. Airinei¹ ¹Institute of Macromolecular Chemistry “Petru Poni”, Iasi, Aleea Gr. Ghica Voda 41A, Iasi, 700487, Romania, lmartin@icmpp.ro, vcozan@icmpp.ro, dtimpu@icmpp.ro, airineia@icmpp.ro ²Faculty of Physics, „Al. I. Cuza” University, Iasi, Carol I Bulv. 11, Iasi, 700506, Romania, girusu@uaic.ro</p>
P-I.10	<p>NEW IODIDE COMPLEX COMPOUNDS OF LAYERED PEROVSKITE TYPE FOR POTENTIAL OPTOELECTRONIC APPLICATIONS <u>Lăcrămioara Claudia Chioaru¹</u>, Ioana Jitaru¹, Ecaterina Andronescu², Felicia Iacomi³ ¹ University “Politehnica” Bucharest, Faculty of Applied Chemistry and Material Science, Department of Inorganic Chemistry, Polizu Street, no. 1-7, 011061, 1 District, Bucharest, Romania, e-mail: lchioaru@yahoo.com, ioanajitaru2002@yahoo.com ² University “Politehnica” Bucharest, Faculty of Applied Chemistry and Material Science, Department of Science and Engineering of Oxidic Materials, Polizu Street, no. 1-7, 011061, 1 District, Bucharest, Romania ³ Al.I.Cuza” University, Faculty of Physics, Solid State Physics Department, Bd. Carol I, no. 11, Iasi, 700506, Romania, e-mail: f_iacomi@yahoo.com</p>
P-I.11	<p>INFLUENCE OF LiOH ADDITION ON THE SUPERCONDUCTING PROPERTIES OF Bi_{1.8}Pb_{0.4}Sr_{1.8}Ba_{0.2}Ca₂Cu₃O_x HIGH - TEMPERATURE SUPERCONDUCTING OXIDE <u>V. Mihalache</u>, G. Aldica, V. Sandu National Institute of Materials Physics, P. O. Box MG-7, RO-76900, Bucharest-Magurele, Romania, vmihal@infim.ro</p>
P-I.12	<p>ATMOSPHERIC PRESSURE PLASMA FOR SURFACE MODIFICATION OF POLYMERS IN FILM AND FIBRE FORM <u>C. Borcia</u>, G. Borcia, N. Dumitrascu Plasma Physics Laboratory, Al. I. Cuza University, Iasi, Romania, cborcia@uaic.ro</p>
P-I.13	<p>PLASMA AND UV RADIATION SURFACE MODIFICATION OF POLYMERS N. Dumitrascu, <u>C. Borcia</u>, G. Borcia Plasma Physics Laboratory, Al. I. Cuza University, Iasi, Romania, cborcia@uaic.ro</p>
P-I.14	<p>SYNTHESIS AND CHARACTERISATION NANOCRYSTALLINE Ca₂Cr_xLa_{1-x}WO₆ by combustion method <u>Ioana Aurelia Gorodea¹</u>, M. N. Palamaru¹, Alexandra Raluca Iordan¹, Liviu Leontie², ¹Chemistry Department, “Al.I.Cuza”University, Iassy, Romania, e-mail: gorodea@uaic.ro; alex@uaic.ro; palamaru@uaic.ro; ²Physic Department, “Al.I.Cuza”University, Iassy, Romania lleontie@uaic.ro</p>

P-I.15	<p>PREPARATION AND PROPERTIES OF LiMn_2O_4 SUBSTITUED WITH Co AND Cu <u>Carmen Dorina Aruxandei</u>¹, M. N. Palamaru¹, Alexandra Iordan¹, G. Nemțoi¹, L. Leontie² ¹Chemistry Department, "Al.I.Cuza"University, Iassy, Romania, carlont@yahoo.com ; alex@uaic.ro ; palamaru@uaic.ro ; nemtoi@uaic.ro ²Physic Department, "Al.I.Cuza"University, Iassy, Romania lleontie@uaic.ro</p>
P-I.16	<p>COMPARATIVE STUDY OF FTIR SPECTRA FOR SOME ACETIC ACID DERIVATIVES <u>Ion Hurjui</u>¹, Dana Dorohoi², Valeriu Rusu¹, A. Antochi³ ¹Faculty of Medicine, "Gr. T. Popa" University of Medicine and Pharmacy, Biophysical and Medical Physics Dept, 16 University Street, Iasi, 700115, Romania, ihurjui@Biofiz.umfiasi.ro ²Faculty of Physics, "Al. I. Cuza" University, Bd. Carol I, Nr. 11A, Iasi, 700506, Romania, ddorohoi@uaic.ro ³Faculty of Chemical Engineering, "Gh. Asachi" Technical University, Iasi</p>
P-I.17	<p>SEEING AT THE NANOSCALE: ATOMIC FORCE MICROSCOPY (AFM) <u>L. Craciun</u>, I.A. Ghita, C. Ionescu, P.M. Racolta, M. Stratciuc, A. Vasilescu "Horia Hulubei" National Institute for Physics and Nuclear Engineering, e-mail: cliviu@nipne.ro</p>
P-I.18	<p>INCIPIENT STRUCTURAL AND OPTICAL ANALYSIS OF THERMALLY OXIDIZED BISMUTH THIN FILMS <u>S. Condurache-Bota</u>¹, G. I. Rusu², N. Tigau¹, C. Gheorghies¹ ¹ Dunarea de Jos University of Galati, Romania, sbotacond@yahoo.com ² Al. I. Cuza University of Iasi, Romania, girusu@uaic.ro ¹ Dunarea de Jos University of Galati, Romania, ntigau@ugal.ro ¹ Dunarea de Jos University of Galati, Romania, cgheorg@ugal.ro</p>
P-I.19	<p>INFLUENCE OF YTTRIUM ADDITIONS ON STRUCTURAL BEHAVIOUR OF $\text{Cu}_{50}\text{Zr}_{50-x}\text{Y}_x$ METALLIC GLASSES ($x = 5, 10, 15, 20, 25$) <u>Iuliana-Valentina STASI</u>^{1,2}, Gabriel NEDELCU¹, Constantin GHEORGHIES¹, Nobert MATTERN² and Jurgen ECKERT² ¹Faculty of Mechanical Engineering, "Dunărea de Jos" University, Galați, R-800008, Romania ²Leibnitz Institute for Solid State and Materials Research Dresden, Helmholtzstrasse 20, Dresden, D-01069, Germany</p>
P-I.20	<p>CORROSION STUDY OF ZnFe/HYDROXYAPATITE NANOCOMPOSITE SYSTEM IN SIMULATED BODY FLUID A.M. Cantaragiu¹, D. Thiemig², S. Schachscha³, A. Pich³, G. Carac¹, A. Bund², C. Gheorghies¹ ¹Dunarea de Jos University of Galati, Department of Mechanics, Romania, ²Physical Chemistry, Technical University of Dresden, Germany ³Macromolecular Chemistry and Textile Chemistry, Technical University of Dresden, Germany</p>
P-I.21	<p>INFRARED AND RAMAN SPECTROSCOPIC STUDY OF Sn-CONTAINING Zn/Al-LAYERED DOUBLE HYDROXIDES <u>Elena M. Seftel</u>^{1,2}, Eveline Popovici¹, Myrjam Mertens³, Pegie Cool², Etienne F. Vansant² ¹Department of Physical and Theoretical Chemistry and Materials Chemistry, "Al. I. Cuza" University of Iasi, Bvd. Carol I, no 11, 700506, Romania, e-mail: seftel_elena@yahoo.com ²Laboratory of Adsorption and Catalysis, University of Antwerpen (CDE), Universiteitsplein 1, 2610 Wilrijk, Antwerpen, Belgium ³VITO Flemish Institute for Technological Research, Boeretang 200, B-2400, Belgium</p>
P-I.22	<p>SYNTHESIS AND CHARACTERIZATION OF TITANIUM SILICALITE-1 <u>Aurelia Vasile</u> "Al.I.Cuza" University of Iasi, Faculty of Chemistry, Laboratory of Materials Chemistry aurelia@uaic.ro</p>

P-I.23	<p>SURFACE MAGNETIC ANISOTROPY INVESTIGATION IN GCAW WITH DIFFERENT DIMENSIONS BY FERROMAGNETIC RESONANCE MEASUREMENTS</p> <p>¹H. Chiriac¹, G. Ababei^{1,2}</p> <p>¹Nat. Inst. of Res. & Dev. for Techn. Phys., 47 Mangeron Blvd, <u>Iasi</u>, RO-700050</p> <p>², „Al.I.Cuza” University, 11 Carol I Blvd, Iasi, RO-700506</p>
P-I.24	<p>GROWTH AND CHARACTERIZATION OF POLYCRYSTALLINE COBALT OXIDE THIN FILMS</p> <p>Romana Draşovean, Nicolae Țigău</p> <p>Faculty of Science, “Dunarea de Jos” University, Galati, R-800201, Romania</p>
P-I.25	<p>COMPUTATIONAL APPROACH OF HEAT TRANSFER COEFFICIENT ASSESSMENT</p> <p>G. Murariu, V. Vacarus,</p> <p>Department of Physics, Faculty of Sciences, “Dunarea de Jos” University, Domneasca Street, Nr. 47, Galati, 800008, Romania</p>
P-I.26	<p>A MATHEMATICAL ADVANCE FOR THE TEMPERATURE DEPENDENCE OF COBALT-SALTS/PEG SYSTEMS SPECTRA</p> <p>G. Murariu,</p> <p>Department of Physics, Faculty of Sciences, “Dunarea de Jos” University, Domneasca Street, Nr. 47, Galati, 800008, Romania</p>
P-I.27	<p>STUDIES ON THE INFLUENCE OF K CONTENT ON THE STRUCTURE AND PROPERTIES OF SOME ZEOLITE MATERIALS</p> <p><u>Claudia Tabacaru</u>¹, Aurelia Vasile², Felicia Iacomi¹</p> <p>¹Faculty of Physics, Al.I.Cuza University, Iasi, Romania</p> <p>²Faculty of Chemistry, Al.I.Cuza University, Iasi, Romania</p> <p>E-mail: claudiatbacaru@yahoo.com</p>
P-I.28	<p>STRUCTURAL ANALYSIS OF SOME MAGNETRON SPUTTERING DEPOSITED THIN-FILMS FOR SOLAR CELLS</p> <p><u>Petronela Garoi</u>¹, Mihaela Filipescu¹, Silvia M. Hodorogea², Beatrice G. Sbârcea², and R. Medianu¹</p> <p>¹ National Institute for Lasers, Plasma and Radiation Physics, Atomîştilor 409, PO Box MG-36, Măgurele 077125, Ilfov, Romania</p> <p>² ICPE-CA, Splaiul Unirii 313, Sector 3 74204, Bucharest, Romania</p>
P-I.29	<p>EFFECT OF HEATING RATE ONTO STRUCTURAL AND OPTICAL CHARACTERISTICS OF THERMALLY OXIDIZED ZnO THIN FILMS</p> <p>Petronela Râmbu¹, G.G. Rusu¹, P.Gorley², S.V. Bilichuk</p> <p>¹Faculty of Physics, “Al. I. Cuza” University, 11 Carol I Blvd, Iasi, RO-700506, Romania</p> <p>²Yuri Fedkovych Chernivtsi National University, 2 Kotsyubynsky str., Chernivtsi, 58012, Ukraine</p>
P-I.30	<p>EFFECT OF SUBSTRAT NATURE AND UV IRRADIATION ON THE STRUCTURE AND GAS SENSITIVITY OF NiO THIN FILMS</p> <p><u>C. Baban</u>, N. Iftimie, G. Calin, R. Apetrei, D. Luca, F. Iacomi</p> <p>Al.I. Cuza University, Faculty of Physics, 11 Carol I Blvd., 700506, Iasi Romania, iacomi@uaic.ro</p>
P-I.31	<p>NON-VOLATILE MEMORY DEVICE- USING A BLEND BETWEEN POLYMER AND FERROELECTRIC NANOPARTICLES</p> <p><u>Iulia Salaoru</u>¹ and Shashi Paul²</p> <p>^{1,2}Emerging Technologies Research Centre, De Montfort University, Hawthorn Building, The Gateway, Leicester, LE1 9BH, United Kingdom</p> <p>¹ isalaoru@dmu.ac.uk, ² pshashi@dmu.ac.uk</p>
P-I.32	<p>DISCREET NANOSTRUCTURES OBTAINED USING ARC DISCHARGE METHOD</p> <p><u>Felicia Carmen Dascălu</u>, Gabriela Calin, F. Brinză and N. Suliţanu</p> <p>Faculty of Physics, “Al. I. Cuza” University, Iasi, Romania</p> <p>e-mail: dascalu_carmen_felicia@yahoo.com</p>
P-I.33	<p>ON THE PREPARATION AND STRUCTURAL PROPERTIES of Fe-S NANOCRYSTALLINE THIN FILMS</p> <p>Nicolae Sulitanu, <u>Florin Brinză</u>, Valentin Nica</p> <p>Department of Physics, “Al. I. Cuza” University, Iasi, Romania</p> <p>e-mai: valentin.nica@uaic.ro</p>

P-I.34	THE PHOTOCROSSLINKING OF TWO QUATERNARY SALTS BASED ON POLY(4-VINYLPYRIDINE) Mihaela Avadanei, Magda Aflori, Cornelia Luca, Virgil Barboiu “Petru Poni” Institute of Macromolecular Chemistry, Iasi, mavadanei@icmpp.ro
P-I.35	SPECTRAL ANALYSIS OF THE EFFECT OF UV RADIATION ON POLY(4-VINYLPYRIDINE) AND ITS MODEL COMPOUND Mihaela Avadanei, Magda Aflori, Cornelia Luca, Virgil Barboiu “Petru Poni” Institute of Macromolecular Chemistry, Iasi, mavadanei@icmpp.ro
P-I.36	CHARACTERIZATION OF CARBON AND TUNGSTEN THIN FILMS DEPOSITED BY MAGNETRON SPUTTERING <u>Vasile Tiron</u> , Andrei Vasile Nastuta, Bogdan George Rusu and Gheorghe Popa Faculty of Physics, “Al. I. Cuza” University, Iasi, 700506, Romania, vtiron@plasma.uaic.ro

SECTION II. Electronic Transport Properties

Wednesday, June 4, 2008; 18:00-19:00

Hall of Echoing Steps

P-II.1	POLYCRYSTALLINE SPINEL FERRITES AS HUMIDITY SENSOR FOR ENVIRONMENT HUMIDITY MONITORING <u>F. Tudorache</u> ¹ , N. Rezlescu ¹ , E. Rezlescu ¹ , C. Doroftei ^{1,2} and P. D. Popa ¹ ¹ National Institute of Research and Development for Technical Physics, 47 D. Mangeron Blvd, Iași, Romania, florin@phys-iasi.ro ² Faculty of Physics, “Al. I. Cuza” University, Carol I Blvd, 7000506, Iasi, Romania
P-II.2	GAS SENSITIVITY OF NANOCRYSTALLINE MAGNESIUM FERRITE PREPARED BY SELF-COMBUSTION METHOD <u>C. Doroftei</u> ^{1,2} , E. Rezlescu ² , N. Rezlescu ² , F. Tudorache ² and P. D. Popa ² ¹ Faculty of Physics, A.I. Cuza University, Carol I Boulevard, 7000506 Iasi, Romania ² Institute of Technical Physics, Bd. D. Mangeron 47, 700050 Iasi, Romania. docorneliu@yahoo.com
P-II.3	CORRELATION BETWEEN SPIN-STATE OF Co AND MAGNETORESISTANCE IN $\text{La}_{0.54}\text{Ho}_{0.11}\text{Sr}_{0.35}\text{Mn}_{1-x}\text{Co}_x\text{O}_3$ MANGANITES Mihail-Liviu Craus ^{1,2} , Nicoleta Cornei ³ , <u>Mihai Lozovan</u> ¹ , Olivier Mentre ⁴ and Carmen Miță ¹ ¹ National Institute of R&D for Technical Physics, Iassy, Romania, e-mail: mihailiviu@yahoo.com ; loz@phys-iasi.ro ² Joint Institute of Nuclear Research, Dubna, Russia ³ Chemistry Department, “Al.I.Cuza” University, Iassy, Romania, e-mail: ncornei@uaic.ro ; cmita@uaic.ro ⁴ Ecole Nationale Supérieure de Chimie Lille, UCCS, Lille, France, e-mail : olivier.mentre@ensc-lille.fr
P-II.4	ELECTRICAL AND OPTICAL PROPERTIES OF GaSe-Bi ₂ O ₃ JUNCTION INTERFACE <u>Elmira Cuculescu</u> ¹ , Liviu Leontie ² , Mihail Caraman ³ , Efim Aramă ⁴ ¹ Moldova State University, 60 A Mateevici Str., Chișinău, MD-2009, Republic of Moldova; e-mail: elmira@usm.md ² Al.I. Cuza University, 11 Carol I Boulevard, R-700506 Iasi, Romania; e-mail: leontie@uaic.ro ³ University of Bacău, 157 Calea Mărășești, R-600115 Bacău, Romania; e-mail: mihailcaraman@yahoo.com ⁴ State Medical and Pharmaceutical University “Nicolae Testemițanu”, 165 Ștefan cel Mare și Sfânt Bd., Chișinău, MD-2004, Republic of Moldova
P-II.5	ELECTRONIC TRANSPORT PROPERTIES OF SOME POLYSULFONE-POLYDIMETHYLSILOXANE COPOLYMERS IN THIN FILMS <u>M.Rusu</u> ¹ , I.Căplănuș ² , A.Airinei ³ , V.Hamciuc ³ , G.G.Rusu ¹ , P.Râmbu ¹ , M.Diciu ⁴ , G.I.Rusu ¹ ¹ Faculty of Physics „Al.I.Cuza” University, 11 Carol I Blvd, RO-700506, Iasi, Romania ² Faculty of Physics, University of Bucharest, R-76900, Bucharest, Romania ³ „P.Poni” Institute of Macromolecular Chemistry, Aleea Grigore Ghica Voda, 41 A, RO-700487, Iasi, Romania ⁴ „Traian” Technical College, 203 Traian Blvd, 800186, Galati, Romania

P-II.6	ELECTRICAL PROPERTIES OF n-GaP/n-ZnO:Co HETEROSTRUCTURES *P.M. Gorley, **G.G. Rusu, *I.G. Orletsky, *V.M. Frasunyak, **P. Rambu *Yuri Fedkovych Chernivtsi National University, 2 Kotsyubynsky Street, 58012 Chernivtsi, E-mail: semicon@chnu.cv.ua **Al .I. Cuza University, Faculty of Physics, Carol I, No 11, Ro-700506, Iasi, Romania
P-II.7	LOW-TEMPERATURE PHOTOLUMINESCENCE OF CdTe:Ge,Sn,Pb SEMI-INSULATING CRYSTALS <u>Petro GORLEY</u> , Orest PARFENYUK, Marija ILASHCHUK, and Konstantin ULIANITSKY Yuri Fedkovych Chernivtsi National University, 2 Kotsyubynsky str., Chernivtsi, 58012, Ukraine, e-mail: semicon@chnu.cv.ua
P-II.8	ON THE OPTICAL AND ELECTRICAL CHARACTERISTICS OF THERMALLY OXIDIZED CdO THIN FILMS <u>C. Danţuş</u> , G.G. Rusu, M. Rusu „Al. I. Cuza” University, 11 Carol I Blvd, RO-700506, Iasi, Romania
P-II.9	THE ELECTRICAL CONDUCTANCE QUANTIFICATION IN NANOSTRUCTURES: A THEORETICAL APPROACH I. Casian-Botez ¹ , <u>M. Agop</u> ² , P. Nica ³ ¹ Faculty of Electronics and Telecommunication, Technical “Gh. Asachi” University, Iasi, Romania, irinel_casian@yahoo.com ² Department of Physics, Technical “Gh. Asachi” University, Iasi, Romania, m.agop@yahoo.com ³ Department of Physics, Technical “Gh. Asachi” University, Iasi, Romania, pnica@ch.tuiasi.ro

SECTION III. Magnetic Properties

Thursday, June 5, 2008; 18:00-19:00

Hall of Echoing Steps

P-III.1	A THERMAL AFTEREFFECT MODEL FOR ESTIMATING THE FLUCTUATION FIELD <u>Cristian Rotarescu</u> ¹ , Alexandru Stancu ¹ , ¹ Department of Solid States and Theoretical Physics & CARPATH, Alexandru Ioan Cuza University, 700506 Iasi, Romania cristirotarescu@yahoo.com
P-III.2	STRUCTURE AND MAGNETIC PROPERTIES OF $\text{La}_{0.54}(\text{Ho},\text{Sm})_{0.11}\text{Ca}_{0.35-x}\text{Na}_x\text{Mn}_{0.97}\text{Cu}_{0.03}\text{O}_3$ MANGANITES <u>Nicoleta Cornei</u> ¹ , Mihail-Liviu Craus ^{2,3} , Carmen Miţă ¹ and Mihai Lozovan ² ¹ Chemistry Department, “Al.I.Cuza”University, Iassy, Romania, e-mail: ncornei@uaic.ro ; cmita@uaic.ro ² National Institute of R&D for Technical Physics, Iassy, Romania, e-mail: mihailiviu@yahoo.com ; loz@phys-iasi.ro ³ Joint Institute of Nuclear Research, Dubna, Russia
P-III.3	STRUCTURAL, ELECTRICAL AND MAGNETIC CHARACTERISATION OF THE DOUBLE PEROVSKITES $\text{Sr}_2\text{Cr}_{(1-x)}\text{W}_{(1-x)}\text{O}_6$ <u>Ioana Aurelia Gorodea</u> ¹ , Mircea Nicolae Palamaru ¹ and Alexandra Raluca Iordan ¹ ¹ Chemistry Department, “Al.I.Cuza”University, Iassy, Romania, e-mail: gorodea@uaic.ro ; palamaru@uaic.ro ; alex@uaic.ro ;
P-III.4	RELAXATION AND SIZE EFFECTS IN SPIN TRANSITION COMPOUNDS STUDIED WITH AN ISING-LIKE MODEL <u>Alexandra Dobrinescu</u> ¹ , Cristian Enachescu ² , Alexandru Stancu ³ Department of Physics, Alexandru Ioan Cuza University, Iasi ¹ adobrinescu@stoner.phys.uaic.ro ² cristian.enachescu@uaic.ro ³ alstancu@uaic.ro

P-III.5	<p>STUDY OF THE OPTIMUM CONCENTRATION OF FERROMAGNETIC NANOPARTICLES SUITABLE FOR VARIOUS TUMORAL TISSUES' THERAPY USING MFH</p> <p><u>Mariana Pavel</u>^{1,2}, Alexandru Stancu¹, George Gradinariu^{1,2}</p> <p>¹Physics Department, "Alexandru Ioan Cuza" University, Iasi, 700506, RO, alstancu@uaic.ro</p> <p>²"Gr. T. Popa" University of Medicine and Pharmacy, Iasi, 700506, RO, everblue182004@yahoo.com</p>
P-III.6	<p>INFLUENCE OF MAGNETOSTATIC INTERACTION FOR SWITCHING TOGGLE MODE MRAM DEVICES</p> <p><u>Andrei-Valentin Plamadă</u>¹, Alexandru Stancu²</p> <p>¹Department of Physics & CARPATH, Alexandru Ioan Cuza University, andrei_plamada@yahoo.co.uk</p> <p>²Department of Physics & CARPATH, Alexandru Ioan Cuza University, alstancu@uaic.ro</p>
P-III.7	<p>THE RELAXATION EFFECTS IN THE PREISACH NEEL MODEL WITH LINEAR AND NON-LINEAR ENERGY BARRIER</p> <p><u>Ilie Bodale</u>, ¹Alexandru Stancu</p> <p>¹"Alexandru Ioan Cuza" University, Department of Physics & CARPATH, 700506, Iasi, Romania, ilbodale@stoner.phys.uaic.ro, http://stoner.phys.uaic.ro/carpath.html</p>
P-III.8	<p>STUDY OF SWITCHING REGION FOR A TOGGLE MRAM CELL</p> <p><u>Cristina Stefania Olariu</u>¹, Alexandru Stancu¹,</p> <p>¹"Alexandru Ioan Cuza" University, Department of Physics, Blvd. Carol I, 11, Iasi, 700506, Romania</p> <p>ooocristina@yahoo.com, alstancu@uaic.ro</p>
P-III.9	<p>THE INFLUENCE OF THE THICKNESSES LAYERS AND ANNEALING CONDITIONS ON THE HARD MAGNETIC PROPERTIES OF NANOCOMPOSITE [NdFeBNbCu/FeBSi]_{xn} FILMS</p> <p>H. Chiriac, M. Grigoras, N. Lupu and <u>M. Urse</u></p> <p>National Institute of Research & Development for Technical Physics, 47 Mangeron Blvd., 700050 Iasi, Romania</p>
P-III.10	<p>FLUX PINNING IN THE POLYCRYSTALLINE Bi_{1.8}Pb_{0.4}Sr₂Ca_{2-x}Y_xCu₃O_y MULTIPHASE SYSTEMS</p> <p>I.G. Deac¹, A. V. Pop¹, <u>V. Mihalache</u>²</p> <p>¹Faculty of Physics, University Babes-Bolyai, 3400 Cluj-Napoca, Romania, ideac@phys.ubbcluj.ro</p> <p>²National Institute of Materials Physics, P. O. Box MG-7, RO-76900, Bucharest-Magurele, Romania, vmihal@infim.ro</p>
P-III.11	<p>EFFECT OF THE ELECTROLYTICAL BATH pH ON THE MORPHOLOGY AND MAGNETIC PROPERTIES OF Co-Ni-N GRANULAR FILMS</p> <p><u>Cristina Sirbu</u>, Andrei Năstuță, Violeta Georgescu</p> <p>Faculty of Physics "Al. I. Cuza" University, Iași 700506, Romania</p>
P-III.12	<p>MAGNETO-OPTICAL PROPERTIES OF COFESIB AND COSIB AMORPHOUS GLASS-COATED MICROWIRES</p> <p><u>M.Lostun</u>^{1,2} H. Chiriac¹</p> <p>¹Nat. Inst. of Res. & Dev. for Techn. Phys., 47 Mangeron Blvd, Iasi, RO-700050</p> <p>²„Al.I.Cuza” University, 11 Carol I Blvd, Iasi, RO-700506</p>
P-III.13	<p>MAGNETIZATION AND MAGNETOTRANSPORT PROCESSES IN SOFT MAGNETIC NiFe/Cu MULTILAYERED THIN FILMS</p> <p><u>P. Pascariu</u>^(1,2), H. Chiriac⁽¹⁾, N. Lupu⁽¹⁾, S. Corodeanu^(1,2)</p> <p>⁽¹⁾National Institute of Research and Development for Technical Physics, Iasi, Romania</p> <p>⁽²⁾"Alexandru Ioan Cuza" University, Faculty of Physics, Iasi, Romania</p>
P-III.14	<p>MAGNETIC PROPERTIES OF ELECTRODEPOSITED Bi-Fe THIN FILMS</p> <p><u>Mihail Frăsilă</u>, Ovidiu Chiscan and Violeta Georgescu</p> <p>Faculty of Physics, "Al. I. Cuza" University, Iasi -700506, Romania</p>
P-III.15	<p>MORPHOLOGY AND TUNNELLING MAGNETORESISTANCE IN GRANULAR Co-Ni-N THIN FILMS</p> <p><u>Cristina Sirbu</u>, Andrei-Victor Sandu, Sorin.Iulian Tănase and Violeta Georgescu</p> <p>Faculty of Physics "Al. I. Cuza" University, Iași 700506, Romania</p>

SECTION IV. Low-dimensional Structures

Thursday, June 5, 2008; 18:00-19:00

Hall of Echoing Steps

P-IV.1	FT-IR and UV-VIS ANALYSIS OF THE HYDROXYPROPYL CELLULOSE/VANILLIN AND HYDROXYPROPYL CELLULOSE/PROCAINE BLENDS Oana Harpa ¹ , Gina Bumbu Gabriela ² , Cornelia Vasile ² , Valentin Pohoata ¹ , Bogdan Munteanu ¹ ¹ "Al. I. Cuza" University, Faculty of Physics, Iasi, Romania ² "P. Poni" Institute of Macromolecular Chemistry, Iasi
P-IV.2	OPTICAL PROPERTIES OF NEW Eu ³⁺ (TTA) ₃ -SBMA AND EU ³⁺ (TTA) ₃ PHEN-SBMA COMPOSITES <u>M.S.Iovu</u> , A. M.Andriesh, S.A.Buzurniuc, V.I.Verlan, C.I. Turta ^a , V.E. Zubarev ^a , M.I.Caraman ^b Centre of Optoelectronics of the Institute of Applied Physics, ASM, Str. Academiei 5, MD-2028 Chisinau, Republic of Moldova ^a Institute of Chemistry, ASM ^b Moldova State University
P-IV.3	OPTICAL AND PHOTOELECTRICAL PROPERTIES OF InSe(Mn) Thin Films <u>Igor Evtodiev</u> ¹ , Liviu Leontie ² , Iuliana Caraman ³ ¹ Moldova State University, 60 A Mateevici Str., Chisinau, MD-2009, Republic of Moldova; e-mail: ievtodiev@yahoo.com ² Al.I. Cuza University, 11 Carol I Boulevard, R-700506 Iasi, Romania; e-mail: lleontie@uaic.ro ; ³ University of Bacau, 157 Calea Marasesti, R-600115 Bacau, Romania; e-mail: iuliana.caraman@ub.ro
P-IV.4	DETERMINATION OF OPTICAL PARAMETERS OF THE TiO ₂ THIN FILMS WITH KRAMERS-KRONIG TRANSFORMATION S. Eker ¹ , A. Yildiz ¹ , M. Kasap ² , S. Ozcelik ² and D. Mardare ³ ¹ Ahi Evran University, Faculty of Science and Arts, Department of Physics 40100 Kirsehir, Turkey, ekersitki@yahoo.com , yildizab@gmail.com ² Gazi University, Faculty of Science and Arts, Department of Physics, 06500, Ankara Turkey, mkasap@gazi.edu.tr , sozcelik@gazi.edu.tr ³ Alexandru Ioan Cuza University Faculty of Physics 11 Carol I Blvd., 700506-Iasi Romania, dianam@uaic.ro
P-IV.5	EXCITONIC PROCESSES AT THE Bi ₂ O ₃ -InSe JUNCTION INTERFACE <u>Igor Evtodiev</u> ¹ , Liviu Leontie ² , Mihail Caraman ³ ¹ Moldova State University, 60 A Mateevici Str., Chişinău, MD-2009, Republic of Moldova; e-mail: ievtodiev@yahoo.com ² Al.I. Cuza University, 11 Carol I Boulevard, R-700506 Iasi, Romania; e-mail: lleontie@uaic.ro ; ³ University of Bacău, 157 Calea Mărăşeşti, R-600115 Bacău, Romania; e-mail: mihailcaraman@yahoo.com
P-IV.6	STUDY OF THE GENERATION-RECOMBINATION MECHANISM OF NONEQUILIBRIUM CHARGE CARRIERS IN THE Bi ₂ O ₃ -Ga ₂ S ₃ STRUCTURES <u>Liviu Leontie</u> ¹ , Leonid Palachi ² , Valeriu Muşinschi ² , Mihail Caraman ³ , Efim Aramă ⁴ ¹ Al.I. Cuza University, 11 Carol I Boulevard, R-700506 Iasi, Romania; e-mail: lleontie@uaic.ro ² Free International University of Moldova, 52 Vlaicu Pârcalab street, Chişinău, MD-2012, Republic of Moldova ³ University of Bacău, 157 Calea Mărăşeşti, R-600115 Bacău, Romania; e-mail: mihailcaraman@yahoo.com ⁴ State Medical and Pharmaceutical University "Nicolae Testemiţanu", 165 Ştefan cel Mare şi Sfânt Bd., Chişinău, MD-2004, Republic of Moldova
P-IV.7	OPTICAL AND PHOTOELECTRICAL PROPERTIES OF CdS-C60-POLYMER NANOCOMPOSITE I.Caraman ¹ , I.Lazar ¹ , <u>G.Lazar</u> ¹ , M.Stamate ¹ , P.Loizovanu ² , S.Robu ² ¹ Bacau University, Calea Marasesti 157, Bacau ² Moldova State University, Str. Mateevici 60, Chisinau
P-IV.8	NONLINEAR OPTICAL PROPERTIES FOR C60 SOLUTIONS I.Caraman ¹ , I.Lazar ¹ , <u>G.Lazar</u> ¹ , M.Stamate ¹ , I.Rusu ¹ , D.Rusu ¹ ¹ Bacau University, Calea Marasesti 157, Bacau

P-IV.9	<p>ROLE OF ITO AND PEDOT:PSS IN STABILITY/DEGRADATION OF POLYMER : FULLERENE BULK HETEROJUNCTIONS SOLAR CELLS</p> <p>Mihaela Girtan¹, G.G.Rusu² ¹Angers University, 2, bd. Lavoisier,49045, Angers, France, mihaela.girtan@univ-angers.fr ²Al.I. Cuza University of Iasi, Bd. Carol I No.11, 700506, Iasi Romania</p>
P-IV.10	<p>INFLUENCE OF THE PREPARATION CONDITIONS ON THE OPTICAL PROPERTIES OF ZnO THIN FILMS</p> <p><u>Petronela Râmbu</u>, G.B.Rusu, G.I.Rusu Faculty of Physics, "Al. I. Cuza" University, 11 Carol I Blvd, Iasi, RO-700506, Romania <u>alicia_petronela@yahoo.com</u></p>
P-IV.11	<p>OPTICAL ABSORPTION AND LUMINESCENCE PROPERTIES OF Ga_{0.017}Ge_{0.25}As_{0.083}S_{0.65} GLASSES DOPED WITH Pr³⁺ AND Sm³⁺</p> <p><u>Elena Lupan</u> Centre of Optoelectronics, Institute of Applied Physics, Academy of Sciences of Moldova 1 Academiei str., Chisinau MD-2028, Republic of Moldova</p>
P-IV.12	<p>NEW LANTHANIDE CHELATES AS POTENTIAL TIME-RESOLVED FLUORESCENT REAGENTS</p> <p>M. Stanescu^a, I. Jitaru^b, L.Alexandrescu^b, <u>O. Oprea</u>^b ^a "Aurel Vlaicu" University, Bd.Revolutiei, 81, 2900 Arad, ROMANIA ^b University POLITEHNICA Bucharest, Faculty of Chemistry, Inorganic Chemistry Department, o.oprea@oxy.pub.ro</p>
P-IV.13	<p>INTERFEROMETRIC METHOD FOR BIREFRINGENCE DETERMINATION WITH A POLARIZING MICROSCOPE</p> <p>Leonaș Dumitrașcu, Irina Dumitrașcu, Dana-Ortansa Dorohoi and <u>M. Toma</u> Faculty of Physics, "Al. I. Cuza" University, 11 Carol I Blvd., Iași –RO-700056, România</p>
P-IV.14	<p>THE DEPOSITION PARAMETERS INFLUENCE ON THE OPTICAL PROPERTIES OF COBALT OXIDE FILMS</p> <p>Romana Drașovean, Nicolae Țigău Faculty of Science, "Dunarea de Jos" University, Galati, R-800201, Romania</p>
P-IV.15	<p>STRUCTURAL, MORPHOLOGICAL AND OPTICAL PROPERTIES OF ANTIMONY TRIOXIDE THIN FILMS</p> <p>N. Tigau¹, G. I. Rusu², C.Gheorghies¹, S. Condurache-Bota¹ ¹Faculty of Science, "Dunarea de Jos" University, Galati, R-6200, Romania ²Faculty of Physics, "Alexandru Ioan Cuza" University, Iasi, R-6600, Romania</p>
P-IV.16	<p>OPTICAL CHARACTERISTICS OF SPUTTERED ZnO THIN FILMS</p> <p>C. Baban¹, I. I. Rusu², G. I. Rusu¹ ¹Al. I. Cuza University, Faculty of Physics, 11 Carol I Blvd., 700506, Iasi Romania, e-mail: baban@uaic.ro ²Bacau University, Calea Marasesti 157, 606115 Bacau, Romania</p>
P-IV.17	<p>STRUCTURAL CHARACTERIZATION AND OPTICAL PROPERTIES OF POLYCRYSTALLINE CDS THIN FILMS</p> <p>C. Baban, Adina Petcu, L. Petcu, I. Salaoru, Petronela Rambu, G. Prodan, V. Ciupina, G. I. Rusu "Al. I. Cuza" University, Blvd. Carol I, 11, Iasi 700506 "Ovidius" University, Mamaia Avenue No 124, Constanta, 900527</p>

SECTION V. Low-dimensional Structures

Friday, June 6, 2008; 11:20-13:00

Hall of Echoing Steps

P-V.1	<p>RECENT ADVANCES IN AQUEOUS MAGNETIC FLUID RESEARCH M.Răcuciu¹, D.E. Creangă² ¹ “Lucian Blaga” University, Faculty of Science, Dr.Ratiu Street, No.5-7, Sibiu, Romania ² “Al. I. Cuza” University, Iasi, Faculty of Physics, 11A Blvd. Copou, Romania, e-mail: dorinacreanga@yahoo.com</p>
P-V.2	<p>EFFECT OF PHASE COMPOSITION AND ROUGHNESS ON PHOTOINDUCED HYDROPHILICITY OF TITANIUM OXIDE THIN FILMS Diana Mardare¹, Dumitru Luca¹, A. Yıldız² and M. Kasap³ ¹ Faculty of Physics, Al. I. Cuza University, 11, Carol I Blvd. 700506 - Iasi, Romania, dianam@uaic.ro ² Department of Physics, Ahi Evran University, Kırşehir, Turkey ³ Department of Physics, Faculty of Science and Arts, University of Gazi, Teknikokular, 06500 Ankara, Turkey</p>
P-V.3	<p>PHYSICAL-CHEMICAL CHARACTERIZATION OF MAGENTITE NANOPARTICLES OBTAINED BY ELECTROCHEMICAL SYNTHESIS Laura Obreja¹, Alina Manole¹, Daniel Herea², Horia Chiriac², Viorel Melnig¹ ¹ Faculty of Physics, “Al.I. Cuza” University, Carol I, No. 11A, 700506, Iasi, Romania; lauraobreja@yahoo.com ² National Institute of Research and Development for Technical Physics, Mangeron, No. 47, 700050, Iasi, Romania</p>
P-V.4	<p>ON SOME PEROVSKITES TYPE MAGNETIC MATERIALS PROPERTIES AND STRUCTURE CORRELATION BY USING COMPUTER SIMULATION METHODS S.-H. Mohorianu, F.-V. Rusu, M.Lozoneanu ¹ National Institute of research and Development for Technical Physics –IFT Iasi, 47 Mangeron Blvd. 700050, Iasi, Romania, E-mail: sergiu@phys-iasi.ro Email: loz@phys-iasi.ro</p>
P-V.5	<p>STRUCTURE AND ELECTRO-OPTICAL PROPERTIES OF SbSn:CdS THIN FILMS F. IACOMI¹, M. PURICA², E. BUDIANU², I.SANDU³ ¹ Al.I. Cuza University, Faculty of Physics, 11 Carol I Blvd., 700506, Iasi Romania, iacomi@uaic.ro ² National R&D Institute for Microtechnologies, P.O.Box 38-160, 72225, Bucharest, Romania, MunizerP@IMT.RO ³ Al.I.Cuza University, Interdisciplinary Laboratory for Scientific Investigation, 11 Carol I Blvd., 700506, Iasi Romania, ion.sandu@mail.dntis.ro</p>
P-V.6	<p>SYNTHESIS AND CHARACTERIZATION OF COBALT - BORON, NICKEL - BORON AND COBALT - NICKEL – BORON NANOPARTICLES H. Chiriac¹, A. E. Moga¹, N. Lupu¹, C. Gherasim^{1,2} ¹ National Institute of Research and Development for Technical Physics, 700050 Iasi, ² „Al.I.Cuza” University, 700506 Iasi, Romania</p>
P-V.7	<p>PREPARATION AND CHARACTERIZATION OF CO, FE AND CO-FE MAGNETIC NANOPARTICLES H. Chiriac¹, A. E. Moga¹, C. Gherasim^{1,2} ¹ National Institute of Research and Development for Technical Physics, 700050 Iasi, ² „Al.I.Cuza” University, 700506 Iasi, Romania</p>
P-V.8	<p>EFFECT OF Co DOPING ON ELECTRICAL AND OPTICAL PROPERTIES OF NiO THIN FILMS P.Pascariu, M.Poiana, L.Vlad, F.Prihor, A. Macarie, V.Buta, A.Guzu, E.Sandu, R. Nascu, A.Lazar, F.Iacomi Al.I. Cuza University, Faculty of Physics, 11 Carol I Blvd., 7005006, Iasi Romania, iacomi@uaic.ro</p>
P-V.9	<p>NUCLEATION MECHANISM OF Fe AND Co CLUSTERS INSIDE OF MEMBRANES NANOPORES Cristina Carmen Hriban¹, Florin Brinza¹, Nicolae Sulitanu¹ ¹ “Al.I.Cuza” University, Faculty of Physics, Iasi, Romania, fbrinza@uaic.ro</p>
P-V.10	<p>AN POSSIBLE MODEL FOR NUCLEATION AND GROWTH OF Fe-Co ALLOY NANOCLUSTERS Cristina Carmen Hriban¹, Florin Brinza¹, Valentin Nica¹, Nicolae Sulitanu¹ ¹ “Al.I.Cuza” Univeristy, Faculty of Physics, Iasi, Romania, fbrinza@uaic.ro</p>

P-V.11	SYNTHESIS AND CHARACTERIZATION OF FeO(OH)/Fe ₂ O ₃ NANOPARTICLES ENCAPSULATED IN ZEOLITE MATRIX <u>Radu Bosînceanu</u> , Nicolae Sulițanu Department of Physics, "Al. I. Cuza" University, Iasi, Romania e-mail: r1bosinceanu@yahoo.com
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SECTION VI. Functional Materials. Applications

Friday, June 6, 2008; 11:20-13:00

Hall of Echoing Steps

P-VI.1	pH AND ELECTRIC - INDUCED MODULATION OF MAGAININ 2 ACTIVITY IN RECONSTITUTED LIPID MEMBRANES ¹ <u>Loredana Mereuta</u> and Tudor Luchian 'Al. I. Cuza' University, Faculty of Physics, Laboratory of Biophysics & Medical Physics, Bvd. Carol I, No. 11, Iasi, R-700506, Romania, ¹ loredana.mereuta @uaic.ro
P-VI.2	SINGLE MOLECULE INVESTIGATION OF INTERACTION BETWEEN β-LACTAM ANTIBIOTIC AND THE OmpF PORIN <u>Alina Asandei</u> ¹ , Tudor Luchian 'Alexandru I. Cuza' University, Faculty of Physics, Laboratory of Biophysics and Medical Physics, Blvd. Carol I no. 11, Iasi, Romania (¹ alinaa_76@yahoo.com)
P-VI.3	RAFTS-INDUCED MODULATION OF TRANSPORT AND KINETIC PROPERTIES OF CERTAIN ANTIMICROBIAL PEPTIDES <u>Roxana Chiriac</u> ¹ and Tudor Luchian 'Alexandru I. Cuza' University, Faculty of Physics, Laboratory of Biophysics and Medical Physics, Blvd. Carol I no. 11, Iasi, Romania (¹ roxana.andronache@yahoo.com)
P-VI.4	STRUCTURAL CHARACTERISATION OF Mg/Zn-Al TYPE HYDROTALCITES USED FOR Cr(VI) SORPTION FROM WASTEWATER <u>Laura Cochechi</u> ¹ , Rodica Pode ¹ , Paul Barvinschi ² , Eveline Popovici ³ , Eliza Leonte-Pena ⁴ ¹ "Politehnica" University of Timisoara, Faculty of Industrial Chemistry and Environmental Engineering, 2 Victoriei Sq., 300006 Timisoara, laura.cochechi@chim.upt.ro , rodicapode@yahoo.com ² West University of Timisoara, Faculty of Physics, 4 Parvan Blvd., 300223 Timisoara, pc_barvi@yahoo.fr ³ "Al. I. Cuza" University of Iasi, Faculty of Chemistry, 11 Carol I Blvd., 700506 Iasi, epfree2007@yahoo.com ⁴ National Research and Development Institute for Industrial Ecology – ECOIND, 90-92 Panduri Road, 050663, Bucharest, eliza.leonte@gmail.com
P-VI.5	DEVELOPMENT OF SEMICONDUCTOR MATRIX WITH WHITE LIGHT EMISSION FOR APPLICATION IN ILLUMINATE SYSTEMS <u>Vasilica Schiopu</u> ¹ , Ileana Cernica ¹ , Florian Pistritu ¹ , Andrei Ghiu ¹ , Alina Matei ¹ ¹ National Institute for Research and Development in Microtechnologies, IMT Bucharest
P-VI.6	STUDY OF SINGLE PHASE MULTIFERROIC CERAMICS WITH MAGNETOELECTRIC COUPLING <u>F. Prihor</u> ¹ , P. Postolache ¹ , A. Ianculescu ² and L. Mitoseriu ¹ ¹ Dept. of Solid State and Theoretical Physics, Al. I. Cuza Univ., Bv. Carol I no. 11, Iasi 700506, Romania, felicipria@yahoo.com ² Polytechnics University of Bucharest, 1-7 Gh. Polizu, P.O. Box 12-134, 011061 Bucharest, Romania
P-VI.7	COMPOSITION AND GRAIN SIZE-DRIVEN FERROELECTRIC-RELAXOR CROSSOVER IN Ba(Zr,Ti)O ₃ CERAMICS <u>C. Ciomaga</u> ¹ , L. Mitoseriu ¹ , V. Buscaglia ² and P. Nanni ^{2,3} ¹ Dept. of Physics, Al.I. Cuza Univ., Bv. Carol I no. 11, Iasi 700506, ROMANIA ² IENI-CNR, Via de Marini no. 6, Genoa I-16149, ITALY ³ Dept. Process & Chem. Eng., Genoa Univ., P.le Kennedy, I-16129 Genoa, ITALY

P-VI.8	<p>FUNCTIONAL PROPERTIES OF Ba(Zr,Ti)O₃ CERAMICS WITH RADIAL POROSITY GRADIENT PREPARED BY ALTERNATIVE METHODS A. Ianculescu¹, <u>R.C. Frunza</u>², L. Curecheriu², L. Mitoseriu² and F.M. Tufescu^{2,3} ²Polytechnics Univ. of Bucharest, 1-7 Gh. Polizu, P.O. Box 12-134, 011061 Bucharest, Romania ¹Department of Physics, Al. I. Cuza University, 11 Bv. Carol I, 700506 Iasi, Romania ³ GRADIENT srl., str. dr. Codrescu, 17, Iasi 700495, Romania</p>
P-VI.9	<p>THE STUDY OF 2D AND 3D PHYSICO-CHEMICAL PROPERTIES MODIFICATION OF SOME POLYMER MEMBRANES OBTAINED FROM POLYHYDROXY- URETHANE AND POLY VINYL ALCOHOL WHEN THESE ARE TREATED WITH UV RADIATION Nechifor Cristina-Delia¹, Ciobanu Liana Cătălina¹, Dorohoi Dana- Ortansa¹, Ciobanu Constantin² ¹“Al.I.Cuza” University, Faculty of Physics, Iasi, cd13_nechifor@yahoo.com ² Institute of Macromolecular Chemistry “P.Poni”, Iasi,</p>
P-VI.10	<p>STABILITY OF THE HYDROPHILIC BEHAVIOR OF ENZYMES ACTIVATED GREEN POLYURETHANE Ciobanu Liana Cătălina¹, Nechifor Cristina-Delia¹, Ignat Maurușă², Dorohoi Dana¹, Ciobanu Constantin² ¹“Al.I.Cuza” University, Faculty of Physics, Iasi, catalinaxy15@yahoo.com ² Institute of Macromolecular Chemistry “P.Poni”, Iasi,</p>
P-VI.11	<p>THE RESPONSE OF PSEUDOMONAS CELLS TO VARIOUS IRON OXIDE FORMS D. Creanga¹, A. Poiata² ¹“Al. I. Cuza” University, Faculty of Physics, 11A Blvd.Copou, Iasi, Romania, e-mail: dorinacreanga@yahoo.com ²“Gr. T. Popa” University, Faculty of Pharmacy, 17 University Street, Iasi, Romania</p>
P-VI.12	<p>BIOCHEMICAL INVESTIGATION ON THE FERROFLUID INFLUENCE IN CELLULOLYTIC FUNGI - A BIOTECHNOLOGICAL ISSUE Al. Manoliu¹, Z. Olteanu², L. Oprica², D.E. Creanga³ ¹ Institute of Biological Research, Iasi, Romania ² Univ. Al. I. Cuza, Iasi, Faculty of Biology, Romania ³ Univ. Al. I. Cuza Iasi, Faculty of Physics, 11A Blvd. Copou, Romania, e-mail: dorinacreanga@yahoo.com</p>
P-VI.13	<p>PARACETAMOL NANOCONTAINERS OBTAINED IN CATIONIC POLYMER-SURFACTANT SELF-ASSEMBLING MATRICES Ana Gârlea¹, <u>Dana Pricop</u>¹, Viorel Melnig¹, Marcel I. Popa² ¹Faculty of Physics, “Al. I. Cuza” University, Carol I, Nr. 11A, 700506, Iasi ²Faculty of Chemistry, “Gh. Asachi” University, D. Mangeron, nr. 71 A, 700050, Iasi</p>
P-VI.14	<p>SURFACE CHARACTERIZATION OF BIOPOLYURETHANES BASED ON CELLULOSE DERIVATIVES Doina Macocinschi¹, <u>Daniela Filip</u>¹, Maria Butnaru² ¹ “Petru Poni” Institute of Macromolecular Chemistry 700487, Iasi, Romania ² “Gr. T. Popa” University of Medicine and Pharmacy, Faculty of Medical Bioengineering, 700115, Iasi, Romania</p>
P-VI.15	<p>AQUEOUS DISPERSIONS AND GEL RHEOLOGY OF POLY(AMIDHYDROXYURETHANE) <u>Claudia Vacareanu</u>¹, Viorel I. Melnig*, Constanta Ibanescu†, Marcel I. Popa† ¹ Faculty of Physics, “Al.I. Cuza” University, Carol I, No. 11A, 700506, Iasi, Romania; claudia_vacareanu@yahoo.com ² National Institute of Research and Development for Technical Physics, Mangeron, No. 47, 700050, Iasi, Romania; mipopa@ch.tuiasi.co</p>
P-VI.16	<p>POLYURETHANES AND POLYURETHANE-UREAS WITH NANO- AND MICRO-SIZED SELF-ASSEMBLED STRUCTURES <u>Daniela Filip</u>, Doina Macocinschi, Aurelia Ioanid and Stelian Vlad “Petru Poni” Institute of Macromolecular Chemistry, Aleea Gr. Ghica Voda 41 A, 700487, Iasi, Romania</p>
P-VI.17	<p>INTERACTION OF OPHTHALMIC SOLUTIONS WITH POLYMERIC SURFACES <u>Andreea Ungureanu</u>, Delia Spridon, Florentina Tofoleanu, Nicoleta Dumitrascu Faculty of Physics, “Al. I. Cuza” University, 700506 Iasi, dspridon@plasma.uaic.ro</p>

P-VI.18	ANALYSIS OF POLYMERS DEGRADATION PROCESS <u>Ionica Burghelea</u> , Delia Spridon, Nicoleta Dumitrascu, Gabriela Borcia Faculty of Physics, "Al. I. Cuza" University, 700506 Iasi, dspridon@plasma.uaic.ro
P-VI.19	PROTONS EXCHANGING PROPERTIES COMPOSITE POLYMERIC MEMBRANES Elisabeta Pasculete ¹ , Radu Marin ² , Lili Pasare ³ , ¹ PH Eng., CCMMM, e-mail: macromol@itcnet.ro ² PH. Eng., S.C. OVM-ICCPET S.A., e-mail: pasculete@ovm-iccpet.ro ³ PH Eng., CCMMM, e-mail: macromol@itcnet.ro
P-VI.20	TORSION INFLUENCE ON THE INVERSE WIEDEMANN EFFECT IN AMORPHOUS MAGNETIC WIRES Maria Neagu ¹ , <u>M. Dobromir</u> ¹ , V. Pohoata ¹ , H. Chiriac ² , Firuta Borza ² , H. C. Chiriac ³ ¹ "Al. I. Cuza" University, Faculty of Physics, 11 Carol I Blvd., Iasi, Romania ² National Institute of R & D for Technical Physics, 47 Mangeron Blvd., Iasi, Romania ³ "Gh. Asachi" Technical University, 53A Mangeron Blvd., Iasi, Romania
P-VI.21	ALTERNATIVE TECHNOLOGY TO OBTAIN POLYMER-METAL COMPOSITE MATERIALS <u>Florin Brinza</u> ¹ , Nicolae Sulitanu ¹ ¹ "Al.I.Cuza" University, Faculty of Physics, Iasi, Romania, fbrinza@uaic.ro
P-VI.22	ONE STEP PREPARATION AND SURFACE ACTIVATION OF MAGNETIC IRON OXIDE NANOPARTICLES FOR BIO-MEDICAL APPLICATIONS D.D. Herea and H. Chiriac National Institute of R&D for Technical Physics, 47 Mangeron Avenue, 700050, Iasi, Romania, dherea@phys-iasi.ro
P-VI.23	GOOD SENSITIVE MIXED OXIDE SENSORS FOR ETHANOL VAPOUR DETECTION <u>N. Iftimie</u> ¹ , L. Vlad ² , F. Prihor ² M. Poiana ² , P. Pascariu ² F. Iacomi ² , N. Rezlescu ¹ ¹ National Institute of R & D for Technical Physics, 47 D. Mangeron Blvd, Iasi, 700050, Romania ² Faculty of Physics, Al.I.Cuza University, 11 Carol I Blvd,Iasi 700506, Romania
P-VI.24	IN VITRO EXPERIMENTAL MODEL FOR SIMULATING MAGNETIC EMBOLIZATION OF A POLYETHYLENE BRANCH FOR BIOMEDICAL APPLICATIONS H. Chiriac , <u>L. I. Buruiana</u> and D. D. Herea National Institute of R&D for Technical Physics, 47 Mangeron Avenue, 700050, Iasi, Romania, lburuiana@phys-iasi.ro
P-VI.25	SILICONES-METAL OXIDES COMPOSITES M. Cazacu ¹ , <u>F. Iacomi</u> ² , H. Chiriac ³ ¹ Petru Poni" Institute of Macromolecular Chemistry Iasi, Aleea Gr. Ghica Voda 41A, 700487, Romania ² Faculty of Physics, Al.I.Cuza University, 11 Carol I Blvd,Iasi 700506, Romania ³ National Institute of Research and Development for Technical Physics 47 Mangeron Blvd., P.O. Box 833, P.O. 3, RO-700050 Iasi, Romania
P-VI.26	MAGNETIC RESONANCE STUDIES ON POLYCONDENSATION POLYMERS CONTAINING TITANOCENE <u>F. Iacomi</u> ¹ , F. Turcu ³ , V. Simon ³ , A. Vlad ² , C. Racles ² , A.M.Iurascu ¹ , M. Cazacu ² and H. Chiriac ³ ¹ Faculty of Physics, Al.I.Cuza University, 11 Carol I Blvd,Iasi 700506, Romania ² Petru Poni" Institute of Macromolecular Chemistry Iasi, Aleea Gr. Ghica Voda 41A, 700487, Romania ³ National Institute of Research and Development for Technical Physics 47 Mangeron Blvd., P.O. Box 833, P.O. 3RO-700050 Iasi, Romania
P-VI.27	STRUCTURE AND MAGNETIC PROPERTIES OF Mn-ITO THIN FILMS F. Iacomi ¹ , C. Baban ¹ , G.G. Rusu ¹ , A. Lazar ¹ , M. Irimia ¹ , C. Scarlat ² , H. Schmidt ² ¹ Faculty of Physics, Al.I.Cuza University, 11 Carol I Blvd,Iasi 700506, Romania ² Forschungszentrum Dresden-Rossendorf e.V., Bautzner Landstraße 128, 01328 Dresden, Germany

P-VI.28	REVERSE MICELLE TECHNIQUE FOR Fe-Co NANOCCLUSERS SYNTHESIS <u>Valentin Nica</u> , Nicolae Sulitanu and Florin Brinza Department of Physics,"Al. I. Cuza" University, Iasi, Romania e-mai:valentin.nica@uaic.ro
P-VI.29	THE MODIFICATION OF TEXTILE FABRICS SURFACES BY PHYSICAL AND CHEMICAL TREATMENTS Carmen Loghin, Camelia Mihailescu, Rodica Muresan, Augustin Muresan, Mariana Ursache "Gheorghe Asachi" Technical University of Iasi, Romania, cloghin@tex.tuiasi.ro
P-VI.30	PRODUCTION AND CHARACTERIZATION OF CORE SPUN YARNS WITH GLASS-COATED METALLIC WIRE Valeria Gribincea, Carmen Loghin, Mariana Ichim "Gheorghe Asachi" Technical University of Iasi, Romania, cloghin@tex.tuiasi.ro