

**ANMM' 2015**  
**-- Technical Program --**

<i>MONDAY</i> September 21, 2015	
12:45 – 13:00	<b>OPENING SESSION</b>
<b>Chair: Manuel VÁZQUEZ</b>	
13:00 – 14:00	<p><b>PL.1</b>  <b>2015 IEEE Magnetics Distinguished Lecturer</b>  <b>R.P. COWBURN</b>  <i>Department of Physics, Cavendish Laboratory, University of Cambridge, Cambridge, UK</i>  <b>PERPENDICULAR MAGNETIC ANISOTROPY: FROM ULTRALOW POWER SPINSTRONICS TO CANCER THERAPY</b></p>
14:00 – 14:40	<p><b>I.1</b>  <b>S. CARDOSO<sup>1,2</sup>, J. VALADEIRO<sup>1</sup>, M. SILVA<sup>1</sup>, J. AMARAL<sup>1</sup>, J. GASPAR<sup>3</sup>, R. FERREIRA<sup>3</sup>, P.P. FREITAS<sup>1,3</sup></b>  <sup>1</sup><i>INESC-MN, Lisbon, Portugal</i>  <sup>2</sup><i>Instituto Superior Técnico (IST), Lisbon, Portugal</i>  <sup>3</sup><i>INL – International Iberian Nanotechnology Laboratory, Braga</i>  <b>MAGNETORESISTIVE SENSORS WITH PicoTESLA SENSITIVITY FOR BIOMEDICAL APPLICATIONS</b></p>
14:40 – 15:10	<b>COFFE BREAK</b>
15:10 – 15:50	<p><b>I.2</b>  <b>T. STOBIECKI</b>  <i>Department of Electronics, AGH University of Science and Technology, Krakow, POLAND</i>  <b>MAGNETIC TUNNEL JUNCTIONS FOR SPINTRONICS APPLICATIONS</b></p>
15:50 - 16:30	<p><b>I.3</b>  <b>O.G. DRAGOȘ-PÎNZARU, A. GHEMEȘ, H. CHIRIAC, N. LUPU, M. GRIGORAȘ, B. STADLER<sup>2</sup>, I. TABAKOVIC<sup>1,2</sup></b>  <sup>1</sup><i>National Institute of R&amp;D for Technical Physics, 47 Mangeron Boulevard, Iasi, RO-700050, Romania</i>  <sup>2</sup><i>ECE Department, University of Minnesota, Minneapolis, USA</i>  <b>ANOMALOUS ELECTRODEPOSITION OF NiFe AND CoFe NANOWIRES AND CONTROL OF COMPOSITION AND MAGNETIC PROPERTIES</b></p>
16:30 – 17:30	<p><b>PL.2</b>  <b>2015 IEEE Magnetics Distinguished Lecturer</b>  <b>L. SCHULTZ</b>  <i>Institute of Metallic Materials, Leibniz Institute of Solid State and Materials Research (IFW) Dresden, GERMANY</i>  <i>Institute of Materials Science, TU Dresden; evico GmbH Dresden, GERMANY</i>  <b>INTERACTION OF FERROMAGNETIC AND SUPERCONDUCTING PERMANENT MAGNETS: SUPERCONDUCTING LEVITATION</b></p>
18:00 – 21:00	<b>WELCOME PARTY</b>

**TUESDAY**

September 22, 2015

**NANOSENS Satellite Meeting**

**Chair: Hariharan SRIKANTH**

9:00 – 10:00	<b>PL.3</b> <b>2015 IEEE MAGNETICS DISTINGUISHED LECTURER</b> <b>B. STADLER</b> <i>University of Minnesota, Associate Professor, Electrical and Computer Engineering, Minneapolis, USA</i> MAGNETIC NANOWIRES: REVOLUTIONIZING HARD DRIVES, RAM, AND CANCER TREATMENT
10:00 – 10:40	<b>I.4</b> <b>A.GABAY<sup>1</sup>, O. KOYLU-ALKAN<sup>1</sup>, J. M. BARANDIARAN<sup>2,3</sup>, D. SALAZAR<sup>2</sup>, G. C. HADJIPANAYIS<sup>1</sup></b> <sup>1</sup> <i>Department of Physics and Astronomy, University of Delaware, Newark, DE, USA</i> <sup>2</sup> <i>BCMaterials, Technology Park of Biscay E-48160 Derio, Spain</i> <sup>3</sup> <i>Dept. Electricity &amp; Electronics, Univ. Basque Country (UPV/EHU), Bilbao, Spain</i> SYNTHESIS OF SUBMICRON R-Co AND R-Fe-B PARTICLES BY THE MECHANOCHEMICAL PROCESS
10:40 – 11:20	<b>I.5</b> <b>L. CLIME<sup>1</sup>, L. MALIC<sup>1</sup>, D. BRASSARD<sup>1</sup>, X. ZHANG<sup>1</sup>, N. CORNEAU<sup>2</sup>, T. VERES<sup>1</sup></b> <sup>1</sup> <i>Life Sciences Division, National Research Council of Canada, Boucherville, QC, CANADA</i> <sup>2</sup> <i>Bureau of Microbial Hazards, Health Canada, Ottawa, ON, CANADA</i> INTEGRATION AND APPLICATIONS OF HIGH GRADIENT MAGNETIC SEPARATORS IN LAB-ON-A-CHIP DEVICES
11:20 – 11:50	<b>COFFEE BREAK</b>
11:50 – 12:30	<b>I.6</b> <b>O. KAZAKOVA</b> <i>National Physical Laboratory, Teddington, UK</i> DOMAIN-WALL BASED MAGNETIC NANOSENSORS
12:30 – 13:10	<b>I.7</b> <b>T. UCHIYAMA<sup>1</sup>, S. NAKAYAMA<sup>2</sup></b> <sup>1</sup> <i>Graduate School of Engineering, Nagoya University, Furo-cho, Chikusa-ku, Nagoya, JAPAN</i> <sup>2</sup> <i>Graduate School of Medicine, tsurumai, showa-ku, Nagoya University, Nagoya, JAPAN</i> DEVELOPMENT OF pT RESOLUTION MAGNETOIMPEDANCE SENSOR TOWARDS MEDICAL USE
13:10 – 15:00	<b>LUNCH</b>
<b>Chair: Olga KAZAKOVA</b>	
15:00 – 15:40	<b>I.8</b> <b>H. SRIKANTH</b> <i>Department of Physics, University of South Florida, Tampa, Florida, USA</i> FUNCTIONAL MAGNETIC NANOPARTICLES FOR TUNABLE RF AND BIOMEDICAL APPLICATIONS
15:40 – 16:20	<b>I.9</b> <b>S. ASTILEAN, M. POTARA, T. SIMON, C. FARCAU, S. BOCA-FARCAU, A. GABUDEAN, M. FOCSAN, C. LEORDEAN, S. SUARASAN, D. MANIU, M. BAIA</b>

	<p><i>Babes-Bolyai University, Faculty of Physic and Interdisciplinary Research Institute in Bio-Nano-Science, Cluj-Napoca, ROMANIA</i></p> <p>PLASMONIC NANOPLATFORMS WITH MULTIPLE FUNCTIONALITIES - FROM BIOSENSING TO CELL IMAGING AND THERAPY-</p>
16:20 – 17:00	<p><b>I.10</b>  <b>J. PARK<sup>1</sup>, M. REDDY<sup>2</sup>, E.ESTRINE<sup>2</sup>, B. STADLER<sup>2</sup>, A. FLATAU<sup>1</sup></b>  <sup>1</sup><i>Department of Aerospace Engineering, University of Maryland, College Park, USA</i>  <sup>2</sup><i>Department of Electrical and Computer Engineering, University of Minnesota, Minneapolis, USA</i>  MAGNETOSTRICTIVE MULTILAYERED FE-GA/CU NANOWIRE</p>
17:00 – 17:30	<b>COFFE BREAK</b>
17:30 – 18:10	<p><b>I.11</b>  <b>D.A. ALLWOOD<sup>1</sup>, J. WOOD<sup>1</sup>, C. I. OSEGHLE<sup>2</sup>, O. CESPEDES<sup>3</sup>, M. GRELL<sup>4</sup></b>  <sup>1</sup><i>Department Materials Science and Engineering, University of Sheffield, Sheffield, UK</i>  <sup>2</sup><i>Department Chemical &amp; Biological Engineering, University of Sheffield, Sheffield, UK</i>  <sup>3</sup><i>Department of Physics &amp; Astronomy, University of Leeds, Leeds, UK</i>  <sup>4</sup><i>Department of Physics &amp; Astronomy, University of Sheffield, Sheffield, UK</i>  VOLTAGE CONTROL OF MAGNETIC PROPERTIES OF SOFT MAGNETIC FILMS</p>
18:10 – 18:50	<p><b>I.12</b>  <b>S. McVITIE, M. KRAJNAK, D. McGROUTHER</b>  <i>Scottish Universities Physics Alliance, School of Physics and Astronomy, University of Glasgow, Glasgow, UK</i>  LORENTZ MICROSCOPY OF NANOSTRUCTURED MAGNETIC MATERIALS</p>
18:50 - 20:00	<b>POSTER SESSION</b>
20:00 - 22:00	<b>DINNER</b>

**WEDNESDAY**  
September 23, 2015

**Chair: Dan ALLWOOD**

9:00 – 9:40	<p><b>I.13</b> <b>R. RAMOS<sup>1,2,3</sup>, T. KIKKAWA<sup>3,4</sup>, M. H. AGUIRRE<sup>1,5,6</sup>, I. LUCAS<sup>1,7</sup>, A. ANADÓN<sup>1,5</sup>, T. OYAKE<sup>8</sup>, K. UCHIDA<sup>4,9</sup>, H. ADACHI<sup>3,10</sup>, J. SHIOMI<sup>8</sup>, P. A. ALGARABEL<sup>5,11</sup>, L. MORELLÓN<sup>1,5</sup>, S. MAEKAWA<sup>3,10</sup>, E. SAITOH<sup>2,3,4,10</sup>, <u>M. R. IBARRA</u><sup>1,5,6</sup></b></p> <p><sup>1</sup><i>Institute of Nanoscience - Aragón, University of Zaragoza, Zaragoza, SPAIN</i> <sup>2</sup><i>WPI Advanced Institute for Materials Research, Tohoku University, Sendai, JAPAN</i> <sup>3</sup><i>Spin Quantum Rectification Project, ERATO, Japan Science and Technology Agency, Sendai, JAPAN</i> <sup>4</sup><i>Institute for Materials Research, Tohoku University, Sendai, JAPAN</i> <sup>5</sup><i>Department of Physics Condensed Matter, University of Zaragoza, Zaragoza, SPAIN</i> <sup>6</sup><i>Laboratory of Advanced Microscopy, University of Zaragoza, Zaragoza, SPAIN</i> <sup>7</sup><i>ARAID Foundation, Zaragoza, SPAIN</i> <sup>8</sup><i>Department of Mechanical Engineering, University of Tokyo, Tokyo, JAPAN</i> <sup>9</sup><i>PRESTO, Japan Science and Technology Agency, Saitama, JAPAN</i> <sup>10</sup><i>Advanced Science Research Center, Japan Atomic Energy Agency, Tokai, JAPAN</i> <sup>11</sup><i>Institute Material Science Aragón, CSIC - University Zaragoza, Zaragoza, SPAIN</i> ENHANCEMENT OF THE SPIN SEEBECK EFFECT IN MAGNETIC MULTILAYERS: ROLE OF THE Fe<sub>3</sub>O<sub>4</sub>/Pt INTERFACES</p>
9:40 – 10:20	<p><b>I.14</b> <b>H. KATO<sup>1</sup>, S. MARYAM<sup>2</sup></b></p> <p><sup>1</sup><i>Institute for Materials Research, Tohoku University, Sendai, JAPAN</i> <sup>2</sup><i>Department of Materials Science, Graduate School of Engineering, Tohoku University, Sendai, JAPAN</i> ON PROCESSING CONDITION FOR METALLIC GLASS WITH LOW VISCOUS WORKABILITY</p>
10:20 – 11:00	<p><b>I.15</b> <b>K. MOURA, L. A. S. DE OLIVEIRA, F. BERÓN, P. F. S. ROSA, P. G. PAGLIUSO, M. V. P. DOS SANTOS, <u>K. R. PIROTA</u></b></p> <p><i>Gleb Wataghin Physics Institute, UNICAMP, Campinas, Brazil</i> INFLUENCE OF DIMENSIONALITY ON THE MAGNETIC PHASE TRANSITIONS OF INTERMETALLIC NANOSTRUCTURED NANOWIRES</p>
11:00 – 11:30	<p><b>COFFE BREAK</b></p>
11:30 – 12:10	<p><b>I.16</b> <b>D. ATKINSON<sup>1</sup>, M. TOKAC<sup>1</sup>, A. GANGULY<sup>2</sup>, J.A. KING<sup>1</sup>, S. AZZAWI<sup>1</sup>, S.A. BUNYAEV<sup>3</sup>, G. N. KAKAZEI<sup>3</sup>, D.S. SCHMOOL<sup>4</sup>, J. SINHA<sup>2</sup>, A. BARMAN<sup>2</sup>, <u>A.T. HINDMARCH</u><sup>1</sup></b></p> <p><sup>1</sup><i>Department of Physics, Durham University, Durham, UK</i> <sup>2</sup><i>SN Bose National Centre for Basic Sciences, Salt Lake, Kolkata, INDIA</i> <sup>3</sup><i>IFIMUP and IN, Departamento de Física e Astronomia, Universidade do Porto, PORTUGAL</i> <sup>4</sup><i>Laboratoire PROMES CNRS UPR 8521 University of Perpignan Via Domitia, FRANCE</i> INTERFACIAL CONTRIBUTIONS TO DAMPING AND SPIN-MIXING CONDUCTANCE IN MAGNETIC/NON-MAGNETIC BILAYER FILMS</p>
12:10 – 12:50	<p><b>I.17</b> <b><u>M. VAZQUEZ</u>, C. BRAN, A. ASENJO, R.P. DEL REAL, E.M. PALMERO, E. BERGANZA, Y. IVANOV, O. CHUBYKALO-FESENKO</b></p> <p><i>Institute of Materials Science of Madrid, CSIC, Madrid, SPAIN</i> MAGNETIZATION REVERSAL OF Co AND Co-BASED CYLINDRICAL NANOWIRES</p>

12:50 – 13:30	<b>I.18</b> <b>A. STANCU</b> <i>Alexandru Ioan Cuza University, Faculty of Physics, Iasi, ROMANIA</i> FORC DIAGRAM METHOD AS QUANTITATIVE MAGNETIC CHARACTERIZATION TOOL
13:30 – 15:00	<b>LUNCH</b>
<b>Chair: Ivan SKORVANEK</b>	
15:00 – 15:40	<b>I.19</b> <b>A. TALAAT<sup>1</sup>, M. IPATOV<sup>1</sup>, V. ZHUKOVA<sup>1</sup>, V.M. PRIDA<sup>2</sup>, B. HERNANDO<sup>2</sup>, A. ZHUKOV<sup>3</sup>, J. GONZÁLEZ<sup>1</sup></b> <sup>1</sup> <i>Department Materials Physics, University of the Basque Country, San Sebastian, SPAIN</i> <sup>2</sup> <i>Department Physics, Faculty of Sciences, University of Oviedo, Oviedo, SPAIN</i> <sup>3</sup> <i>Department Materials Physics, University of the Basque Country, San Sebastian, SPAIN and IHERBASQUE Foundation, Bilbao, SPAIN</i> HIGH FREQUENCY MAGNETOIMPEDANCE IN Co-BASED AMORPHOUS RIBBONS
15:40 – 16:00	<b>O.1</b> <b>D. CIMPOESU, I. DUMITRU, A. STANCU</b> <i>Department of Physics, "Alexandru Ioan Cuza" University of Iasi, Iasi, ROMANIA</i> DYNAMIC FORC MEASUREMENTS IN MAGNETIC WIRES
16:00 – 16:40	<b>I.20</b> <b>A. ZHUKOV<sup>1,2,3</sup>, M. IPATOV<sup>1,2</sup>, A. TALAAT<sup>1,2</sup>, J.M. BLANCO<sup>2</sup> M. CHURYUKANOVA<sup>4</sup>, J. GONZALEZ<sup>1</sup>, V. ZHUKOVA<sup>1,2</sup></b> <sup>1</sup> <i>Dpto. de Fís. Mater., Basque Country Univesity, San Sebastián, SPAIN</i> <sup>2</sup> <i>Dpto. de Física Aplicada, EUPDS, Basque Country Univesity San Sebastian, SPAIN</i> <sup>3</sup> <i>IKERBASQUE, Basque Foundation for Science, Bilbao, SPAIN</i> <sup>4</sup> <i>National University of Science and Technology «MISIS», Moscow, RUSSIA</i> ENGINEERING OF MAGNETIC PROPERTIES AND GIANT MAGNETOIMPEDANCE EFFECT OF AMORPHOUS AND NANOCRYSTALLINE MICROWIRES
16:40 – 17:10	<b>COFFEE BREAK</b>
17:10 – 17:50	<b>I.21</b> <b>R. VARGA<sup>1,2</sup>, R. SABOL<sup>2</sup>, P. KLEIN</b> <sup>1</sup> <i>Inst. Phys., Fac. Sci., UPJS, Kosice, SLOVAKIA</i> <sup>2</sup> <i>RVmagnetics s.r.o., Kosice, SLOVAKIA</i> APPLICATION OF BISTABLE MICROWIRES AS MICROSENSORS
17:50 – 18:30	<b>I.22</b> <b>C. DOLABDJIAN<sup>1</sup>, E. PORTALIER<sup>1</sup>, B. DUFAY<sup>1</sup>, N. TEYSSEDOU<sup>2</sup>, D. SEDDAOUI<sup>2</sup>, A. YELON<sup>2</sup>, D. MENARD<sup>2</sup></b> <sup>1</sup> <i>Normandie Univ., FRANCE; UCBN, GREYC, Caen, FRANCE; CNRS, UMR 6072, Caen, FRANCE</i> <sup>2</sup> <i>Department of Engineering Physics, Polytechnique Montréal, Montreal, CANADA</i> LOW FREQUENCY NOISE IN GIANT MAGNETOIMPEDANCE OVERVIEW & PERSPECTIVES
20:00 - 23:00	<b>CONFERENCE DINNER</b>

**THURSDAY**  
September 24, 2015

**Chair: Alexandru STANCU**

9:00 – 9:40	<b>I.23</b> <b>C. POLAK, G. HERZER</b> <i>Vacuumschmelze GmbH &amp; Co. KG, Hanau, GERMANY</i> NANOCRYSTALLINE MATERIALS FOR HIGH FREQUENCY APPLICATIONS: INDUCTORS AND WIRELESS CHARGING SYSTEMS
9:40 – 10:20	<b>I.24</b> <b>P. SHARMA, X. LIANG, Y. ZHANG, K. TAKENAKA, A. D. SETYAWAN, N. NISHIYAMA, A. MAKINO</b> <i>Research and Development Center for Ultra High Efficiency Nano-crystalline Soft Magnetic Materials, Institute for Materials Research, Tohoku University, Sendai, JAPAN</i> RECENT PROGRESS IN BASIC SCIENCE OF HIGH B <sub>s</sub> AND LOW CORE LOSS NANOMET <sup>®</sup> ALLOYS
10:20 – 11:00	<b>I.25</b> <b>N. NISHIYAMA, K. TAKENAKA, A. D SETYAWAN, P. SHARMA, A. MAKINO</b> <i>Research and Development Center for Ultra High Efficiency Nano-crystalline Soft Magnetic Materials, Institute for Materials Research, Tohoku University, Sendai, JAPAN</i> ON THE CUTTING EDGE PROCESSING FOR COMMERCIALIZATION OF SOFT-MAGNETIC ALLOY “NANOMET <sup>®</sup> ”
11:00 – 11:30	<b>COFFEE BREAK</b>
11:30 – 12:10	<b>I.26</b> <b>L. PADURARIU, L. CURECHERIU, C. CIOMAGA, L. MITOSERIU</b> <i>Department of Physics, Alexandru Ioan Cuza University, Iasi, ROMANIA</i> TAYLORING PROPERTIES IN FERROELECTRIC-BASED COMPOSITES BY LOCAL FIELD ENGINEERING
12:10 – 12:50	<b>I.27</b> <b>I. ŠKORVÁNEK<sup>1</sup>, J. MARCIN<sup>1</sup>, L. GONZÁLEZ-LEGARRETA<sup>1</sup>, F. ANDREJKA<sup>1</sup>, M. VARGA<sup>1</sup>, I. MATKO<sup>2</sup>, P. ŠVEC<sup>2</sup></b> <i><sup>1</sup>Institute of Experimental Physics, Slovak Academy of Sciences, Košice, SLOVAKIA</i> <i><sup>2</sup>Institute of Physics, Slovak Academy of Sciences, Bratislava, SLOVAKIA</i> AMORPHOUS AND NANOCRYSTALLINE BILAYER RIBBONS FOR MAGNETIC SENSORS
12:50 – 13:30	<b>I.28</b> <b>P. GORRIA</b> <i>Department of Physics &amp; IUTA, EPI, University of Oviedo, Gijón, SPAIN</i> MAGNETO-VOLUME ANOMALIES AND INVAR EFFECT IN AMORPHOUS AND NANOCRYSTALLINE Fe-RICH ALLOYS
13:30 – 14:10	<b>I.29</b> <b>J.A. DE TORO<sup>1</sup>, D.P. MARQUES<sup>1</sup>, P. MUÑIZ<sup>1</sup>, V. SKUMRYEV<sup>2,3</sup>, J. SORT<sup>2,3</sup>, D. GIVORD<sup>4,5,6</sup>, J. NOGUÉS<sup>3,7</sup></b> <i><sup>1</sup>Instituto Regional de Investigación Científica Aplicada (IRICA) and Departamento de Física Aplicada, Universidad de Castilla-La Mancha, Ciudad Real, SPAIN</i> <i><sup>2</sup>Departament de Física, Universitat Autònoma de Barcelona, Bellaterra, Barcelona, SPAIN</i> <i><sup>3</sup>Institució Catalana de Recerca i Estudis Avançats (ICREA), Barcelona, SPAIN</i> <i><sup>4</sup>Univ. Grenoble Alpes, Institut NEEL, Grenoble, FRANCE</i> <i><sup>5</sup>CNRS, Institut NEEL, Grenoble, FRANCE</i> <i><sup>6</sup>Instituto de Física, Universidade Federal do Rio de Janeiro, Rio de Janeiro RJ, BRASIL</i> <i><sup>7</sup>ICN2–Institut Catala de Nanociència i Nanotecnologia, Campus UAB, Bellaterra, Barcelona, SPAIN</i> HIGH TEMPERATURE MAGNETIC STABILIZATION OF COBALT

	NANOPARTICLES BY AN ANTIFERROMAGNETIC PROXIMITY EFFECT
14:10 – 15:30	LUNCH
15:30 - 18:30	NIRDTP Tour
20:00 - 22:00	DINNER

## POSTER SESSION

<b>P.1.</b>	<p><b>N. IFTIMIE<sup>1</sup>, D. FAKTOROVA<sup>2</sup>, M. PÁPEŽOVÁ<sup>2</sup>, R. STEIGMANN<sup>1,3</sup>, A. SAVIN<sup>1</sup></b>  <sup>1</sup>National Institute of R&amp;D for Technical Physics, Iasi, ROMANIA  <sup>2</sup>Department of Measurement and Applied Electrical Engineering, University of Žilina, Žilina, SLOVAK REPUBLIC  <sup>3</sup>Faculty of Physics, Alexandru Ioan Cuza University, Iasi, ROMANIA            STUDY OF ZnO THIN FILM AS METALLIC STRIP GRATING STRUCTURE FOR SENSITIVE CHOLESTEROL BIOSENSOR</p>
<b>P.2.</b>	<p><b>C. PADURARIU<sup>1</sup>, L. PADURARIU<sup>1</sup>, L. CURECHERIU<sup>1</sup>, C. GALASSI<sup>2</sup>, L. MITOSERIU<sup>1</sup></b>  <sup>1</sup>Dielectrics, ferroelectrics &amp; Multiferroics Group, Dept. of Physics, "Al. I. Cuza" University, Iasi, ROMANIA  <sup>2</sup>CNR-ISTEC, Faenza, ITALY            THE ROLE OF PORE INTERCONNECTIVITY ON THE ELECTRICAL PROPERTIES OF PZTN POROUS CERAMICS</p>
<b>P.3.</b>	<p><b>E.V. GAFTON<sup>1</sup>, G. BULAI<sup>1</sup>, I. DUMITRU<sup>1</sup>, B. P. RAO<sup>2</sup>, O. F. CALTUN<sup>1</sup></b>  <sup>1</sup>Faculty of Physics, Alexandru Ioan Cuza University, Iasi, ROMANIA  <sup>2</sup>Andhra University, Department of Physics, INDIA            PULSED LASER DEPOSITION OF CU DOPED COBALT FERRITE THIN FILMS</p>
<b>P.4.</b>	<p><b>V. DOBREA<sup>1</sup>, M.-L. CRAUS<sup>2</sup></b>  <sup>1</sup> National Institute of R &amp; D for Technical Physics - IFT Iasi, ROMANIA  <sup>2</sup> Joint Institute of Nuclear Research, Dubna, RUSSIA            SYNTHESIS AND CHARACTERIZATION OF MnFe(P<sub>1-x</sub>As<sub>x</sub>) ALLOYS WITH NEAR ROOM TEMPERATURE MAGNETOCALORIC EFFECT</p>
<b>P.5.</b>	<p><b>I. ASTEFANOAEI<sup>1</sup>, I. DUMITRU<sup>1</sup>, H. CHIRIAC<sup>2</sup>, A. STANCU<sup>1</sup></b>  <sup>1</sup>Faculty of Physics, Alexandru Ioan Cuza University, Iasi, ROMANIA  <sup>2</sup>National Institute of Research &amp; Development for Technical Physics, Iasi, ROMANIA            THE TEMPERATURE ANALYSIS IN THE MAGNETIC HYPERThERMIA WITH LOW CURIE TEMPERATURE PARTICLES</p>
<b>P.6.</b>	<p><b>V. A. LUKACS, M. AIRIMIOAEI</b>            Dielectrics, Ferroelectrics &amp; Multiferroics Group, Faculty of Physics, Al. I. Cuza University, Iasi, ROMANIA            SYNTHESIS AND PROPERTIES OF ONE DIMENSIONAL BIOTEMPLATED NiO MICROSTRUCTURES</p>
<b>P.7.</b>	<p><b>C. VIRLAN<sup>1</sup>, G. BULAI<sup>2</sup>, O. F. CALTUN<sup>2</sup>, R. HEMPELMANN<sup>3</sup>, A. PUI<sup>1</sup></b>  <sup>1</sup>Department of Inorganic Chemistry; Faculty of Chemistry, "Al. I. Cuza" University, Iasi, ROMANIA  <sup>2</sup>Department of Physics and Carpath Center, Faculty of Physics, "Al. I. Cuza" University, Iasi, ROMANIA  <sup>3</sup>Department of Physical Chemistry, University of Saarland, Saarbrucken, GERMANY            RARW EARTH DOPED CO FERRITE FOR TECHNOLOGICAL APPLICATIONS</p>
<b>P.8.</b>	<p><b>T.F. MARINCA<sup>1</sup>, H.F. CHICINAȘ<sup>1</sup>, B.V. NEAMȚU<sup>1</sup>, O. ISNARD<sup>2,3</sup>, P. PASCUTA<sup>4</sup>, N. LUPU<sup>5</sup>, G. STOIAN<sup>5</sup>, I. CHICINAȘ<sup>1</sup></b>  <sup>1</sup>Materials Science and Engineering Department, Technical University of Cluj-Napoca, Cluj-Napoca, ROMANIA  <sup>2</sup>Université Grenoble Alpes, Inst NEEL, Grenoble, FRANCE  <sup>3</sup>CNRS, Institut NEEL, Grenoble, FRANCE  <sup>4</sup>Physics and Chemistry Department, Technical University of Cluj-Napoca, Cluj-Napoca, ROMANIA  <sup>5</sup>National Institute of Research &amp; Development for Technical Physics, Iasi, ROMANIA            MECHANOSYNTHESIS OF OLEIC ACID COATED Fe<sub>3</sub>O<sub>4</sub> NANOPARTICLES. STRUCTURAL, THERMAL AND MAGNETIC CHARACTERISTICS</p>
<b>P.9.</b>	<p><b>T.F. MARINCA<sup>1</sup>, H.F. CHICINAȘ<sup>1</sup>, B.V. NEAMȚU<sup>1</sup>, O. ISNARD<sup>2,3</sup>, I. CHICINAȘ<sup>1</sup></b>  <sup>1</sup>Materials Science and Engineering Department, Technical University of Cluj-Napoca, Cluj-Napoca, ROMANIA</p>

	<p><sup>2</sup>Université Grenoble Alpes, Inst NEEL, Grenoble, FRANCE  <sup>3</sup>CNRS, Institut NEEL, Grenoble, FRANCE  Fe<sub>3</sub>O<sub>4</sub>/Ni<sub>3</sub>Fe NANOCOMPOSITE POWDER OBTAINED BY MECHANOSYNTHESIS-ANNEALING ROUTE</p>
<b>P.10.</b>	<p><b>B.V. NEAMȚU<sup>1</sup>, H.F. CHICINAȘ<sup>1</sup>, T.F. MARINCA<sup>1</sup>, O. ISNARD<sup>2,3</sup>, O. PANĂ<sup>4</sup>, I. CHICINAȘ<sup>1</sup></b>  <sup>1</sup>Materials Science and Engineering Department, Technical University of Cluj-Napoca, Cluj-Napoca, ROMANIA  <sup>2</sup>Université Grenoble Alpes, Institut NEEL, Grenoble, FRANCE  <sup>3</sup>CNRS, Institut NEEL, Grenoble, FRANCE  <sup>4</sup>National Institute for Research and Development of Isotopic and Molecular Technologies, Cluj-Napoca, ROMANIA  AMORPHISATION OF Fe-BASED ALLOY VIA WET MECHANICAL ALLOYING ASSISTED BY PCA DECOMPOSITION</p>
<b>P.11.</b>	<p><b>M.-L. CRAUS<sup>1,2</sup>, A. ISLAMOVIĆ<sup>1</sup>, V.A. TURCHENKO<sup>1,3</sup>, S. MOHORIĂNU<sup>2</sup></b>  <sup>1</sup>Joint Institute for Nuclear Research, Dubna, RUSSIA  <sup>2</sup>National Institute of Research and Development for Technical Physics, Iasi, ROMANIA  <sup>3</sup>Donetsk Institute of Physics and Technology named after A.A. Galkin of the NAS of Ukraine, Donetsk., UKRAINE  SPIN GLASS STATE INFLUENCE ON THE TRANSPORT PHENOMENA IN La<sub>0.54</sub>Ho<sub>0.11</sub>Sr<sub>0.35</sub>Mn<sub>1-x</sub>Cr<sub>x</sub>O<sub>3</sub> MANGANITES</p>
<b>P.12.</b>	<p><b>S. MOHORIĂNU<sup>1</sup>, M.-L. CRAUS<sup>1,2</sup></b>  <sup>1</sup>Joint Institute for Nuclear Research, Dubna, RUSSIA  <sup>2</sup>National Institute of Research and Development for Technical Physics, Iasi, ROMANIA  SIMULATION STUDY OF GLASSY MAGNETIC BEHAVIOUR FOR A PEROVSKITE-LIKE COBALTITES CLASS</p>
<b>P.13.</b>	<p><b>B. DHANA LAKSHMI<sup>1</sup>, O.F. CALTUN<sup>2</sup>, I. DUMITRU<sup>2</sup>, B. PARVATHEESWARA RAO<sup>1</sup>, P.S.V. SUBBA RAO<sup>1</sup></b>  <sup>1</sup>Department of Physics, Andhra University, Visakhapatnam, INDIA  <sup>2</sup>A.I. Cuza University, Iasi, ROMANIA  SYNTHESIS AND CHARACTERIZATION OF MULTIFERROIC Mn DOPED BiFeO<sub>3</sub></p>
<b>P.14.</b>	<p><b>M. URSE, M. GRIGORAS, N. LUPU, F. BORZA, H. CHIRIAC</b>  National Institute of Research and Development for Technical Physics, Iasi, ROMANIA  EFFECT OF THE BUFFER LAYER AND INTERLAYER ON THE PERPENDICULAR MAGNETIC ANISOTROPY OF Nd-Fe-B SINGLE AND MULTILAYER FILMS</p>
<b>P.15.</b>	<p><b>M. GRIGORAS, M. LOSTUN, H. CHIRIAC N. LUPU</b>  National Institute of Research and Development for Technical Physics, Iasi, ROMANIA  EFFECT OF SOFT CONTENT ON MAGNETIC PROPERTIES OF MnBi-BASED HARD/SOFT COMPOSITE MAGNETS</p>
<b>P.16.</b>	<p><b>M. KUHN<sup>1</sup>, M. MARSILIUS<sup>2</sup>, T. STRACHE<sup>2</sup>, K. DURST<sup>1</sup>, C. POLAK<sup>2</sup>, G. HERZER<sup>2</sup></b>  <sup>1</sup>Department of Materials Science, TU Darmstadt, Darmstadt, GERMANY  <sup>2</sup>Vacuumschmelze GmbH Co KG, Hanau, GERMANY  MAGNETOSTRICTION OF NANOCRYSTALLINE Fe<sub>81.2</sub>Co<sub>4</sub>Si<sub>0.5</sub>B<sub>9.5</sub>P<sub>4</sub>Cu<sub>0.8</sub></p>
<b>P.17.</b>	<p><b>M. AIRIMIOAIE<sup>1</sup>, M.N. PALAMARU<sup>2</sup>, A.R. IORDAN<sup>2</sup>, L. MITOSERIU<sup>1</sup></b>  <sup>1</sup>Dielectrics, Ferroelectrics &amp; Multiferroics Group, Faculty of Physics, Al.I. Cuza University, Iasi, ROMANIA  <sup>2</sup>Faculty of Chemistry, Al.I. Cuza University, Iasi, ROMANIA  THE STUDY OF THE CHELATING/COMBUSTION AGENT INFLUENCE ON THE FUNCTIONAL PROPERTIES OF COBALT FERRITES</p>
<b>P.18.</b>	<p><b>I. CHICINAȘ<sup>1</sup>, T.F. MARINCA<sup>1</sup>, F. POPA<sup>1</sup>, B.V. NEAMȚU<sup>1</sup>, O. ISNARD<sup>2,3</sup>, V. POP<sup>4</sup></b>  <sup>1</sup>Materials Sciences and Engineering Department, Technical University of Cluj-Napoca, Cluj-Napoca, ROMANIA  <sup>2</sup>Université Grenoble Alpes, Institut NÉEL, Grenoble, FRANCE  <sup>3</sup>CNRS, Institut NÉEL, Grenoble, FRANCE  <sup>4</sup>Faculty of Physics, Babes-Bolyai University, Cluj-Napoca, ROMANIA  PSEUDO CORE-SHELL POWDERS LIKE PERMALLOY/RHOMETAL TYPE</p>

<b>P.19.</b>	<b>C. LEFTER<sup>1,2</sup>, I. RUSU<sup>1</sup>, S. TRICARD<sup>2</sup>, H. PENG<sup>2</sup>, L. SALMON<sup>2</sup>, G. MOLNÁR<sup>2</sup>, A. BOUSSEKSOU<sup>2</sup>, A. ROTARU</b> <i><sup>1</sup>Faculty of Electrical Engineering and Computer Science &amp; MANSiD, Stefan cel Mare University, Suceava, ROMANIA</i> <i><sup>2</sup>LCC, CNRS UPR-8241 and Université de Toulouse UPS, INP, Toulouse, FRANCE</i> SPIN CROSSOVER MATERIALS FOR NANO-ELECTRONIC AND SPINTRONIC DEVICES
<b>P.20.</b>	<b>O.G. DRAGOȘ-PÎNZARU<sup>1</sup>, A. ASENJO<sup>2</sup>, M. VÁZQUEZ<sup>2</sup>, M. LOSTUN<sup>1</sup>, N. LUPU<sup>1</sup>, H. CHIRIAC<sup>1</sup></b> <i><sup>1</sup>National Institute of Research and Development for Technical Physics, Iasi, ROMANIA</i> <i><sup>2</sup>Instituto de Ciencia de Materiales de Madrid, ICMM-CSIC, Madrid, SPAIN</i> SYNTHESIS AND CHARACTERIZATION OF Co NANODOTS ARRAYS
<b>P.21.</b>	<b>A. GHEMES, O. G. DRAGOȘ-PÎNZARU, G. STOIAN, N. LUPU, H. CHIRIAC</b> <i>National Institute of Research and Development for Technical Physics, Iasi, ROMANIA</i> ELECTRODEPOSITION OF DIAMETER CONTROLLED CoFe NANOWIRES INTO PATTERNED ALUMINA TEMPLATES
<b>P.22.</b>	<b>M. GĂBURICI, N. LUPU, H. CHIRIAC</b> <i>National Institute of Research and Development for Technical Physics, Iasi, ROMANIA</i> REMOVAL OF AZO-DYES FROM WASTE WATERS USING MAGNETIC FERRITES
<b>P.23.</b>	<b>G. STOIAN, N. LUPU, H. CHIRIAC</b> <i>National Institute of Research and Development for Technical Physics, Iasi, ROMANIA</i> FOCUSED ION BEAM MILLING STRATEGIES FOR MICROWIRES ANALYSIS AND MICRO-FABRICATION
<b>P.24.</b>	<b>M. LOSTUN, N. LUPU, H. CHIRIAC</b> <i>National Institute of Research and Development for Technical Physics, Iasi, ROMANIA</i> EFFECT OF HIGH-ENERGY BALL MILLING ON THE STRUCTURE AND MAGNETIC PROPERTIES OF Fe-Nb-Cr-B GLASSY SUBMICRON POWDERS
<b>P.25.</b>	<b>C. DANCEANU<sup>1,2</sup>, E. RADU<sup>1</sup>, L. LĂBUȘCĂ<sup>1</sup>, N. LUPU<sup>1</sup>, H. CHIRIAC<sup>1</sup></b> <i><sup>1</sup>National Institute of Research and Development for Technical Physics, Iasi, ROMANIA</i> <i><sup>2</sup>Faculty of Physics, Alexandru Ioan Cuza University, Iasi, ROMANIA</i> VISUALIZATION OF INTERACTIONS BETWEEN Fe-Cr-Nb-B MAGNETIC NANOPARTICLES AND CANCER CELLS BY UHR-SEM
<b>P.26.</b>	<b>C. DANCEANU<sup>1,2</sup>, N. LUPU<sup>1</sup>, H. CHIRIAC<sup>1</sup></b> <i><sup>1</sup>National Institute of Research and Development for Technical Physics, Iasi, ROMANIA</i> <i><sup>2</sup>Faculty of Physics, Alexandru Ioan Cuza University, Iasi, ROMANIA</i> ON THE TEMPERATURE DISTRIBUTION IN TISSUE PHANTOM TUMOR IN THE PRESENCE OF Fe-Cr-Nb-B MAGNETIC NANOPARTICLES FOR SELF-REGULATED HYPERTHERMIA APPLICATIONS
<b>P.27.</b>	<b>E. RADU<sup>1</sup>, G. STOIAN<sup>1</sup>, C. DANCEANU<sup>1,2</sup>, N. LUPU<sup>1</sup>, H. CHIRIAC<sup>1</sup></b> <i><sup>1</sup>National Institute of Research &amp; Development for Technical Physics, Iasi, ROMANIA</i> <i><sup>2</sup>Faculty of Physics, Alexandru Ioan Cuza University, Iasi, ROMANIA</i> PREPARATION AND CHARACTERIZATION OF A FERROFLUID BASED ON LOW CURIE Fe-Cr-Nb-B MAGNETIC PARTICLES
<b>P.28.</b>	<b>A.C. JITARIU<sup>1,2</sup>, H. GORIPATI<sup>1</sup>, C. GHEMES<sup>1</sup>, N. LUPU<sup>1</sup>, H. CHIRIAC<sup>1</sup>, C. DUARTE<sup>3</sup>, S. CARDOSO<sup>3</sup></b> <i><sup>1</sup>National Institute of Research and Development for Technical Physics, Iasi, ROMANIA</i> <i><sup>2</sup>Alexandru Ioan Cuza University, Iasi, ROMANIA</i> <i><sup>3</sup>INESC-Microsystems and Nanotechnology, Lisbon, PORTUGAL</i> MICROFLUIDIC DEVICE FOR THE DETECTION OF Fe-Cr-Nb-B NANOPARTICLES USED IN HYPERTHERMIA APPLICATIONS
<b>P.29.</b>	<b>D.D. HEREA, H. CHIRIAC, N. LUPU</b> <i><sup>1</sup>National Institute of Research and Development for Technical Physics, Iasi, ROMANIA</i> TOWARDS SIMPLE SMALL-THROUGH-BIG IMMUNOASSAY: POLYMER MICROBEADS AS TAGS FOR OPTICAL DETECTION IN VISIBLE SPECTRUM
<b>P.30.</b>	<b>C. ROTĂRESCU, T.-A. OVARI, N. LUPU, H. CHIRIAC</b> <i>National Institute of Research and Development for Technical Physics, Iasi, ROMANIA</i> MICROMAGNETIC SIMULATIONS OF CYLINDRICAL MAGNETIC NANOWIRES WITH

	ZERO MAGNETOSTRICTION
P.31.	<b>G. ABABEI<sup>1</sup>, G. STOIAN<sup>1</sup>, N. LUPU<sup>1</sup>, S. MCVITIE<sup>2</sup>, H. CHIRIAC<sup>1</sup></b> <sup>1</sup> National Institute of Research and Development for Technical Physics, Iasi, ROMANIA <sup>2</sup> SUPA School of Physics and Astronomy, University of Glasgow, Glasgow, UK INVESTIGATION OF THE METAL-GLASS INTERFACE IN GLASS-COATED MICROWIRES BY UHR-TEM
P.32.	<b>H. CHIRIAC<sup>1</sup>, C. HLENSCHI<sup>1</sup>, S. CORODEANU<sup>1</sup>, M. GRECU<sup>1,2</sup>, T.A. ÓVÁRI<sup>1</sup>, N. LUPU<sup>1</sup></b> <sup>1</sup> National Institute of Research and Development for Technical Physics, Iasi, ROMANIA <sup>2</sup> Electrophysiology Department, Cardiovascular Diseases Institute, Iasi, ROMANIA MAGNETOELASTIC SENSOR FOR PULSE WAVES DETECTION
P.33.	<b>H. CHIRIAC, S. CORODEANU, N. LUPU, T.-A. ÓVÁRI</b> National Institute of Research and Development for Technical Physics, Iasi, ROMANIA CURRENT CONTROLLED DOMAIN WALL VELOCITY IN AMORPHOUS MICROWIRES
P.34.	<b>H. CHIRIAC, S. CORODEANU, A. DONAC, T.A. ÓVÁRI, N. LUPU</b> National Institute of Research and Development for Technical Physics, Iasi, ROMANIA MAGNETIC PROPERTIES AND GMI RESPONSE IN FINEMET COLD DRAWN MICROWIRES
P.35.	<b>M. TIBU, M. LOSTUN, D. A. ALLWOOD, N. LUPU, T.-A. ÓVÁRI, H. CHIRIAC</b> National Institute of Research and Development for Technical Physics, Iasi, ROMANIA INVESTIGATION OF DOMAIN WALLS NUCLEATION AND MOTION IN SUBMICRON AMORPHOUS WIRES
P.36.	<b>A. ATITOAIE, T.-A. ÓVÁRI, N. LUPU, H. CHIRIAC</b> National Institute of Research and Development for Technical Physics, Iasi, ROMANIA MODELING OF MAGNETIC AND MECHANICAL PROPERTIES OF THIN CO-BASED AMORPHOUS WIRES USED IN ACOUSTIC MEDICAL APPLICATIONS
P.37.	<b>F. BORZA, S. CORODEANU, T.-A. OVARI, H.CHIRIAC</b> National Institute of Research and Development for Technical Physics, Iasi, ROMANIA STRESS INFLUENCE ON THE MAGNETIC PROPERTIES OF MULTILAYER MICROWIRES
P.38.	<b>C.S. OLARIU, G. ABABEI, N. LUPU, H. CHIRIAC</b> National Institute of Research and Development for Technical Physics, Iasi, ROMANIA INFLUENCE OF THE INTERWIRE DISTANCE ON LEFT-HANDED PROPERTIES OF Fe-BASED MICROWIRE METASTRUCTURES
P.39.	<b>L. BUDEANU<sup>1,2</sup>, M. NEAGU<sup>2</sup>, I.-L. VELICU<sup>2</sup>, H. CHIRIAC<sup>1</sup>, N. LUPU<sup>1</sup></b> <sup>1</sup> National Institute of Research and Development for Technical Physics, Iasi, ROMANIA <sup>2</sup> Faculty of Physics, Alexandru Ioan Cuza University, Iasi, Romania THE EFFECT OF BALL MILLING PROCESS ON MAGNETIC AND STRUCTURAL PROPERTIES OF Fe <sub>73.5</sub> Cu <sub>1</sub> Nb <sub>3</sub> Si <sub>15.5</sub> B <sub>7</sub> POWDERS
P.40.	<b>G. ABABEI, C.S. OLARIU, I. MURGULESCU, N. LUPU, H. CHIRIAC</b> National Institute of Research and Development for Technical Physics, Iasi, ROMANIA STRUCTURAL AND HIGH FREQUENCY MAGNETIC PROPERTIES OF BALL MILLED CoFe-BASED PARTICLES
P.41.	<b>L. WHITMORE, G. ABABEI, L. BUDEANU, N. LUPU, H. CHIRIAC</b> National Institute of Research & Development for Technical Physics (NIRDTP), 47 Mangeron Boulevard, Iasi, ROMANIA MICROSTRUCTURAL INVESTIGATION OF Fe <sub>79.7-x</sub> Ti <sub>x</sub> B <sub>20</sub> Nb <sub>0.3</sub> MAGNETIC RIBBONS