



CONFERENCE PROGRAMME

2nd International Conference on Emerging Technologies in Materials Engineering EmergeMAT
6-8 November 2019 – Romania, Bucharest, Caro Hotel, 164A Barbu Vacarescu St., sector 2

06.11.2019 (WED) DAY 1 – ENERHIGH Final Conference	
09.00 – 09.30	Registration / Poster setup
09.30 – 09.45	Opening & Welcome
PLENARY SESSION (<i>Eminescu Conference Hall</i>) <i>Chair: Roxana Mioara Piticescu, IMNR (RO)</i>	
09.45 – 11.15	<p>Roxana Apreutesei, Ministry of Research and Innovation (RO), PROJECT SIPOCA 393 - CHALLENGES IN IMPLEMENTATION. INNOVATION MANAGEMENT SYSTEM</p> <p>Sanda Hilgen, Ministry of Research and Innovation – OIC (RO), OPERATIONAL PROGRAM COMPETITIVENESS 2014-2020</p> <p>Tudor Prisecaru, UPB (RO), SURFACE ENGINEERING</p> <p>Flaviana Rotaru, ROHEALTH (RO), ROHEALTH - HEALTH AND BIOECONOMY CLUSTER</p>
11.15 – 11.45	Coffee break
11.45 – 13.15	<p>Roxana Mioara Piticescu, Radu Robert Piticescu, Adrian Mihail Motoc, IMNR (RO), ROADMAP SPIRE 2050</p> <p>Gabriela Pârvu, Ministry of Economy (RO), INDUSTRIAL POLICIES IN ROMANIA</p> <p>Andreea Paul, INACO (RO), ECONOMY OF THE FUTURE – CURRENT ECONOMIC CHALLENGES</p> <p>Vladimir. V. Popov, Evgeny Strokin, Amnon Katz-Demyanetz, Andrey Koptuyug, Daniel Safranchik, Menachem Bamberger, TECHNION (IL), DEVELOPMENT OF FUNCTIONAL MATERIALS BY POWDER BED FUSION</p>
13.15 – 14.15	Lunch break
PARALLEL SESSIONS	
Section 1. Thermal energy storage (<i>Eminescu Conference Hall</i>) <i>Chair: Maria Dolores Romero Sanchez, Applynano Solutions (ES)</i>	

PERFORM-MAT (1PFE/2018)
Increased performance and competencies of INCDMNR-IMNR in the field of emerging technologies in materials engineering based on non-ferrous metal



Project financed by the Ministry of Research and Innovation in Romania

CRM-EXTREME (CA 15102)
Solutions for Critical Raw Materials under Extreme Conditions
COST is supported by the EU Framework Programme Horizon 2020



ENERHIGH (ID P_37_776; ctr. 93/2016)
Innovative methods for enhancing high temperature thermal energy storage properties of phase change materials
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14.15 – 15.45

Maria Dolores Romero-Sanchez, Radu Robert Piticescu, Ciprian Neagoe, Ioan Albert Tudor, Cristina Florentina Ciobota **IMNR / Applynano Solutions** (RO / ES), MICRO-ENCAPSULATION OF INORGANIC PCMs MATERIALS FOR HIGH TEMPERATURE APPLICATIONS

Markus Meyer, Andre Lindemann, **NETZSCH** (DE), MEASUREMENT OF THE THERMOPHYSICAL PROPERTIES OF PHASE CHANGE MATERIALS USING LASER FLASH METHOD

Ciprian Neagoe, Ioan Albert Tudor, Cristina Florentina Ciobota, Cristian Bogdănescu, Paul Stanciu, Maria Magdalena Stoiciu, Radu Robert Piticescu, Maria Dolores Romero-Sanchez **IMNR / Applynano Solutions** (RO / ES), STORING THERMAL ENERGY IN SMALL PACKAGES: ADDITIVE PROPERTY OF PHASE CHANGE ENERGY STORAGE IN ZINC OXIDE MICRO-ENCAPSULATED SODIUM NITRATE

Ioan Albert Tudor, Cristian Predescu, Roxana Mioara Piticescu, Radu Robert Piticescu, Maria Dolores Romero-Sanchez, **IMNR / UPB / Applynano Solutions** (RO / ES), INFLUENCE OF DOPANTS ON THE THERMAL PROPERTIES OF NANOSTRUCTURED COMPLEX OXIDES FOR GREEN ENERGY APPLICATIONS

Section 2. Additive manufacturing (Rebreanu Conference Hall)

Chair: Vladimir V. Popov, TECHNION (IL)

14.15 – 15.45

Diana Chioibașu, Andrei Popescu, **CETAL-INFLPR** (RO), PROTOTYPE ORTHOPAEDIC PROSTHESES 3D PRINTED BY LASER MELTING DEPOSITION (LMD)

Mihaela Raluca Condruz, Gheorghe Matache, Alexandru Paraschiv, **COMOTI** (RO), CHARACTERIZATION OF IN 625 RECYCLED METAL POWDER USED FOR SELECTIVE LASER MELTING

Roxana Mioara Piticescu, **Laura Mădălina Cursaru**, Paul Stanciu, Ana Maria Mocioiu, **IMNR** (RO), INNOVATIVE 3D PRINTING TECHNOLOGIES FOR HYBRID NANOSTRUCTURED MATERIALS PROCESSING

Gheorghe Matache, Mihai Vlăduț, Alexandru Paraschiv, Raluca Mihaela Condruz, **COMOTI** (RO), EDGE AND CORNER EFFECTS IN SELECTIVE LASER MELTING OF IN 625 ALLOY

Andrei Popescu, Diana Chioibașu, **CETAL-INFLPR** (RO), PROTOTYPE CRANIAL MESH PROSTHESES FABRICATED BY SELECTIVE LASER MELTING (SLM)

Wojciech J. Saletra, Edward Cartwright, Liang Wu, Andrew J. Cobley, **Univ. Coventry** (UK), COMPARISON OF CHEMICAL AND ELECTROCHEMICAL POLISHING AS A SURFACE FINISHING METHOD OF AM BUILT 316 STAINLESS STEEL



	Antonietta Rizzo , A.R. Terrizzi, Maurizio Fersini, Antonio Licciulli, ENEA / UNISALENTO / SALENTEC (IT), TRIBOLOGICAL STUDY OF INJECTION MOLDED ZTA FOR ORTHOPEDIC IMPLANTS
15.45 – 16.00	Coffee break
	Round Table (Rebreanu Conference Hall)
16.00 – 17.00	CHALLENGES IN THE MANAGEMENT OF KNOWLEDGE TRANSFER POC-G PROJECTS <i>Chair: Daniela Dumitrescu, IMNR (RO)</i>
	Poster presentations (Q&A) / Networking / Conclusions / Discussions (Eminescu Conference Hall) <i>Chair: Radu Robert Piticescu, IMNR (RO)</i>
16.00 – 17.00	<ol style="list-style-type: none"> 1) George Barjoveanu, Carmen Teodosiu, Andra Predescu, Ecaterina Matei, Cristian Predescu, TU Iasi / UPB (RO), ENVIRONMENTAL ASSESSMENT OF FeO₃@TiO₂ NANOPARTICLES SYNTHESIS 2) Cristina Ioana Bănică, Denisa Vonica, Beatrice Șerban, Lidia Licu, Mihai Tudor Olaru, Florentin Stoiciu, Viorel Bădiliță, IMNR (RO), THE DESIGN OF A NEW LOW WEIGHT HIGH ENTROPY ALLOY 3) Cristina Florentina Ciobota, Ioan Albert Tudor, Simona Elena Bejan, Anca Elena Slobozeanu, Radu Robert Piticescu, Laura Eugenia Bărbulescu, Dumitru Valentin Drăguț, IMNR (RO), HYDROTHERMAL SYNTHESIS OF MULTICOMPONENT RARE EARTH OXIDES 4) A.C. Costache, C. Curuțiu, Gabriel Moagăr-Poladian, C. Obreja, Oana Tutunaru, Antonio Rădoi, IMT / UPB (RO), WASTE FROM POLYMER SELECTIVE LASER SINTERING AND ITS IMPACT ON ENVIRONMENT: HOW TO DO INITIAL DECONTAMINATION 5) Laura Mădălina Cursaru, Roxana Mioara Piticescu, Ioan Albert Tudor, Ana Maria Mocioiu, Dumitru Valentin Drăguț, IMNR (RO), THERMAL INVESTIGATION OF IRON OXIDE NANOMATERIALS. THE INFLUENCE OF SYNTHESIS PARAMETERS ON STRUCTURAL PROPERTIES 6) Silvana Dimitrijević, Aleksandra Ivanović, Jasmina Novaković Grbović, Stevan Dimitrijević, Milan Jovanović, MMI BOR / Univ. Belgrade (RS), RECYCLING OF TUNGSTEN OXIDE FROM DIAMOND CORE DRILLING CROWNS 7) Stevan Dimitrijević, Aleksandra Ivanović, Jasmina Novaković Grbović, Silvana Dimitrijević, Univ. Belgrade / MMI BOR (RS), POSSIBILITY OF USE OF AQUA REGIA FOR LEACHING THE WC-Co HARD METAL SCRAPS 8) Ion Frățilescu, Diana Anghel, Anca Lascu, Eugenia Făgădar-Cosma, ICT (RO), WATER SOLUBLE PORPHYRIN DERIVATIVES USED IN PLATINUM RECOVERY 9) Laura E. Geambazu, Ioana Csaki, Sigrun Nanna Karlsdottir, Victor Geantă, UPB / Univ. Iceland (RO / IS), CoCrFeNiMo HIGH ENTROPY ALLOY BEHAVIOUR IN GEOTHERMAL ENVIRONMENT

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- 10) **Mihai Ghiță**, Alexandra Georgiana Vătui, Antoneta Constantina Filcenco-Olteanu, Marian Burada, Daniel-Cristian Mihăiescu, Sorina Nicoleta Vâlsan, Ionuț Măcărescu, Mihai Tudor Olaru, Petre Capotă, Florentin Stoiciu, Dumitru Valentin Drăguț, **IMNR** (RO), SCIENTIFIC RESEARCHES AND TECHNOLOGICAL DEVELOPMENTS FOR THE EFFICIENT USE OF SECONDARY METALLIC RESOURCES
- 11) **Giosuè Chiara**, Mobili A., Citterio B., Biavasco F., Maria Letizia Ruello, Tittarelli F., **UNIVPM / UNIURB / ISAC-CNR** (IT), INNOVATIVE FINISHES FOR THE IMPROVEMENT OF INDOOR AIR QUALITY
- 12) **Viorel Ionescu**, **Univ. Ovidius** (RO), NUMERICAL MODELING OF MIXED-MODE DELAMINATION FRACTURE IN UNIDIRECTIONAL AS4/PEEK COMPOSITES
- 13) **Aleksandra Ivanovic**, Jasmina Novakovic Grbovic, Silvana Dimitrijevic, Stevan Dimitrijevic, **MMI BOR / Univ. Belgrade** (RS), KINETICS OF COBALT NITRIC ACID LEACHING FROM DIAMOND CORE DRILLING CROWNS
- 14) **Vjaceslavs Lapkovskis**, Viktors Mironovs, **RTU** (LV), RUBBER CONVERSION VIA DEVULCANISATION AND ITS FURTHER PROCESSING INTO COMPOSITE MATERIALS SUITABLE FOR ENVIRONMENTAL APPLICATIONS
- 15) **Claudio Larosa**, Attilio Converti, **Univ. Genoa** (IT) QUARTZ CRYSTAL MICROBALANCE COUPLED TO ASSIST THE MULTILAYER PROTEIN ASSEMBLY BY LANGMUIR BLODGETT TECHNIQUE
- 16) **Erika-Andrea Levei**, Cerasel Varaticeanu, Emilia Neag, Mircia Bizo, Mihai Ghiță, Francoise Bodenau, **INOE 2000 / Romalyn Mining / IMNR / BRGM** (RO / FR), RECOVERY OF GOLD AND SILVER FROM MINING TAILS BY AMMONIUM THIOSULPHATE LEACHING
- 17) **Lidia Licu**, Petre Capotă, **IMNR** (RO), DETERMINATION OF CHEMICAL COMPOSITION AND LAYERS THICKNESS BY ICP-OES
- 18) **Magdalena-Valentina Lungu**, Arcadie Sobetkii, Elena Enescu, Delia Pătroi, Virgil Marinescu, Eugen Manta, Nicolae Stancu, Dorinel Tâlpeanu, Marius Popa, Mariana Lucaci, Ioana Ion, Mihai Marin, **ICPE-CA / MGM STAR CONSTRUCT** (RO), ADVANCED Ti-Al-N WEAR RESISTANT COATINGS PRODUCED BY REACTIVE DC MAGNETRON SPUTTERING
- 19) **Ciprian A. Manea**, Ioana Csaki, Sigrun Nanna Karlsdottir, Victoraș Geantă, **UPB / Univ. Iceland** (RO / IS), THE BEHAVIOR OF AlCrFeNiMn HIGH ENTROPY ALLOY IN GEOTHERMAL STEAM
- 20) **Cornelia Marinescu**, Ancuța Sofronia, Cornel Munteanu, Maria Marcu, Fuad Khoshnaw, Cristina Florentina Ciobota, Speranța Tănăsescu, Elisabeta Mirela Cojocaru, **ICF / De Montfort Univ. / IMNR / UPB** (RO / UK), PHASE TRANSFORMATIONS AND MICROSTRUCTURE EVOLUTION IN FERRITE-AUSTENITE BASED ALLOY
- 21) **Maria Marinescu**, Ludmila Otilia Cintează, Cristina Stavarache, Christina-Marie Zălaru, Marcela Popa, Mariana-Carmen Chifiriuc, **Univ. Bucharest / ICO / ICUB** (RO), NOVEL PYRAZOLONES AS ANTIMICROBIALS
- 22) **Maria-Roxana Marinescu**, Bogdan-Cătălin Șerban, Cornel Cobianu, Nicolae Dumbrăvescu, Octavian Ionescu, Octavian Buiu, **UPB / IMT** (RO), CARBON BASED MATERIALS FOR SENSORS USED IN BIO(MEDICAL) APPLICATIONS

- 23) **Alina Matei**, Bianca Cătălina Țincu, Oana Tutunaru, Vasilica Țucureanu, **IMT / UPB** (RO), SYNERGETIC EFFECT OF ZnO – RESIN EPOXY NANOCOMPOSITES COATINGS FOR ADVANCED APPLICATIONS
- 24) **Ionuț Măcărescu**, Alexandra Gabriela Pascariu, Ioana Anasiei, Daniel-Cristian Mihăiescu, Alexandra Georgiana, Andreea Nicoleta Ghiță, Dumitru Valentin Drăguț, **IMNR** (RO), CHEMICAL AND MINERALOGICAL INVESTIGATIONS ON THE FÂNĂȚE TAILINGS IN ORDER TO IDENTIFY RECOVERY DIRECTIONS
- 25) **Sabin Mihai**, Diana Chioibașu, Andrei Popescu, Marc Leparoux, **CETAL-INFLPR / EMPA** (RO/ CH), BEHAVIOR OF AN ALUMINUM BASED METAL MATRIX NANOCOMPOSITE DURING IRRADIATION WITH HIGH POWER LASER PULSES
- 26) **Ana Maria Mocioiu**, Oana Cătălina Mocioiu, Laura Mădălina Cursaru, **IMNR / ICF** (RO), 3D STRUCTURES OF SiO₂-ZnO MATERIALS OBTAINED BY SOL-GEL ROUTE WITH OPTICAL AND ANTIBACTERIAL PROPERTIES FOLLOWED BY 3D PRINTING
- 27) **Oana Cătălina Mocioiu**, Diana Irinel Băilă, Ana Maria Mocioiu, **ICF / UPB / IMNR** (RO), THIN FILMS DEPOSITION ON GLASS USING E-GUN TECHNOLOGY FOR MEDICAL APPLICATIONS
- 28) Mihai Oane, Monica R. Nemțanu, **Mirela Brașoveanu**, Daniel Ighigeanu, **INFLPR** (RO), THERMAL DISTRIBUTION IN MATERIALS IRRADIATED IN THE RELATIVISTIC ELECTRON FIELD
- 29) **Mihai Oane**, Bogdan Sava, Ion N. Mihăilescu, Lucica Boroica, Dorina Ticoș, Adrian Scurtu, Cătălin M. Ticoș, **INFLPR** (RO), A NEW COMPUTATIONAL MODEL FOR DESCRIPTION OF THE FUSION PROCESS FOR A MICRO/NANO SIZES TUNGSTEN SPHERE UNDER POWERFUL LASER IRRADIATION
- 30) **Rovena Pascu**, Andreea Matei, Bogdan Sava, Alexandra Trefilov, **INFLPR** (RO), FABRICATION BY PLD OF 20%Sm-DOPED CERIA/ 20%NI-SDC THIN FILMS SUBANSABLY OF ELECTROCHEMICAL DEVICES FOR LOW AND INTERMEDIATED OPERATING TEMPERATURE
- 31) **Mattia Pierpaoli**, Aneta Łuczkiwicz, Sylwia Fudala-Książek, Robert Bogdanowicz, Maria Letizia Ruello, **UNIVPM / GUT** (IT / PL), CARBON NANOMATERIALS AS CRM-FREE ELECTRODES FOR THE LEACHATE ELECTROCHEMICAL OXIDATION
- 32) **B.O. Postolnyi**, R.F. Webster, R.D. Tilley, V.M. Beresnev, L. Rebuta, J.P. Araújo, A.D. Pogrebnyak, **U.Porto / Sumy Univ. / UNSW / Kharkiv Univ. / U.Minho** (PT / UK / AU) MULTI-LAYERED STRUCTURES OF METAL NITRIDE HARD COATINGS AS A SOLUTION FOR CRITICAL RAW MATERIALS PROBLEM
- 33) Maria Tănase, Marin Micuț, Adina Răducan, Cristina Scamoroscenco, Cristian Petcu, Cristina Lavinia Nistor, Elvira Alexandrescu, Laura Chirilă, Ioana Rodica Stănculescu, **Ludmila Otilia Cintează**, **Univ. Bucharest / ICECHIM / INCDTP / IFIN-HH** (RO), FACILE SYNTHESIS OF SUPERAMPHIPHOBIC COATINGS FOR TEXTILES WITH SPECIAL WETTABILITY
- 34) **Hamdi Tekin**, **Istanbul Arel Univ.** (TR), RECYCLING OF CRITICAL RAW MATERIALS: A CASE OF TURKEY
- 35) **Alexandra M.I. Trefilov**, Adriana E. Bălan, Lucica Boroica, Bogdan A. Sava, Bogdan Biță, Sorin Vizireanu, Gheorghe Dinescu, **INFLPR / Univ. Bucharest** (RO), PLASMA FUNCTIONALIZED CARBON NANOWALLS FOR PEM FUEL CELL APPLICATIONS

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	<p>36) Oana Tutunaru, Carmen Mihăilescu, Anton Ficai, IMT / UPB (RO), GLUCOSE DETECTION USING PEDOT BIOACTIVE LAYER</p> <p>37) Bianca Țincu, Andrei Avram, Marioara Avram, Vasilica Țucureanu, Alina Matei, Cătălin Mărculescu, Tiberiu Burinaru, Florin Comănescu, Oana Tutunaru, Ioana Demetrescu, IMT / UPB / USAMV (RO), THE STRUCTURAL MODIFICATION OF SINGLE LAYER GRAPHENE BY OXYGEN PLASMA TREATMENT</p> <p>38) Vasilica Tucureanu, Alina Matei, Ioan Albert Tudor, Dumitru Valentin Drăguț, Laura Mădălina Cursaru, Daniel Munteanu, IMT / IMNR / UNITBV (RO), OPTICAL PROPERTIES OF Au-YAG:Ce,Gd/PEDOT-PSS NANOCOMPOSITE</p> <p>39) Nicoleta Vitan, Lidia Licu, Petre Capotă, IMNR (RO) QUANTITATIVE PHASE ANALYSIS OF CHEMICAL COMPOUNDS, CARRIED OUT BY ICP-OES</p> <p>40) Mehmet Yilmaz, Maria Luisa Grilli, Ataturk Univ. / ENEA (TR / IT), THE EFFECT OF Li CONTENT ON THE STRUCTURAL PROPERTIES OF ZnO</p> <p>41) Christina Zălaru, Florea Dumitrașcu, Constantin Drăghici, Ludmila Otilia Cintează, Maria Marinescu, Isabela Tracomnicu, Marilena Cimpoeșu, Rodica Tatia, Lucia Moldovan, Univ. Bucharest / ICO / Cytogenomic Medical Laboratory / INCDSB (RO), NOVEL SUBSTITUTED HETEROCYCLES HYBRIDS WITH ANTI-TUMOR ACTIVITY</p>
07.11.2019 (THU)	DAY 2
08.00 – 13.00	Visit to IMNR laboratories
09.00 – 09.30	Registration
	<p>Section 3. Critical materials – COST Action CRM-EXTREME <i>(Eminescu Conference Hall)</i></p> <p><i>Chair: Maria Luisa Grilli, ENEA (IT), CRM-EXTREME WGs Coordinator</i></p>
09.30 – 10.50	<p>Silviya Boycheva, Denitza Zgureva, Hristina Lazarova, Katerina Lazarova, Tsvetanka Babeva, Margarita Popova, TUS / BAS (BG), PROCESSING OF HIGH-GRADE ZEOLITE COMPOSITES FROM SOLID FUEL COMBUSTION BY-PRODUCTS AS CRITICAL RAW MATERIALS SUBSTITUTES</p> <p>Petre Capotă, Eleonora Ana Neagu, Victoria Purcaru, Lenuța Enache, IMNR (RO), INTERNATIONAL COOPERATION IN CHEMICAL CHARACTERISATION OF NONFERROUS AND FERROUS ALLOYS</p> <p>Fábio Ferreira, Ricardo Serra, Albano Cavaleiro, João Oliveira, Univ. Coimbra / LED&Mat-IPN (PT), CORRELATION BETWEEN SUBSTRATE ION FLUXES AND PROPERTIES OF HIPIMS-DLC FILMS USED IN INTERNAL COMBUSTION ENGINES</p> <p>Maria Luisa Grilli, D. Valerini, G. Hu, C. Song, A. Nematpour, R. Chierchia, A. Rizzo, A. Rinaldi, M. Yilmaz, ENEA / CAS / Ataturk Univ. (IT / CN / TR), A COMPARATIVE STUDY OF THE MECHANICAL PROPERTIES OF Al₂O₃</p>

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	COATINGS FABRICATED BY ATOMIC LAYER DEPOSITION AND RADIO FREQUENCY SPUTTERING Antonio J. Sala Candela , UPM (ES), METAL FIBER BRUSHES AS A SUBSTITUTE OF GRAPHITE AND AN INNOVATIVE APPLICATION
10.50 – 11.20	Coffee break
11.20 – 13.00	<i>Chair: Maria Letizia Ruello, UNIVPM, (IT), CRM-EXTREME Chair</i> Pavel Novák , A. Knaislová, A. Školáková, P. Salvetr, F. Průša, M. Cabibbo, L. Jaworska, UCT / UNIVPM / IOS (CZ / IT / PL) INTERMETALLICS AS CRM SUBSTITUTES IN AUTOMOTIVE AND AEROSPACE INDUSTRY Lucian Păunescu , Marius Florin Drăgoescu, Sorin Mircea Axinte, Ana Casandra Sebe, Junkoeko / Daily Sourcing & Research / Cosfel Actual (RO), POROUS CERAMIC MATERIAL WITH HIGH MECHANICAL STRENGTH MADE FROM CLAY WASTE AND COAL ASH USING THE MICROWAVE ENERGY Ewa Rząd , Monika Solecka, Danuta Chmielewska, Barbara Synowiec, Artur Oziebło, Paweł Pichniarczyk, Tomasz Dudziak, ŁUKASIEWICZ RN (PL), EFFECT OF CERAMIC BASED COATINGS DEPOSITED ON LOW ALLOYED STEEL 10H2M EXPOSED AT HIGH TEMPERATURE IN AIR OXIDATION CONDITIONS A.Sezai Sarac , ITU (TR), GOLD - CONJUGATED POLYMER NANOCOMPOSITES FOR BIOMEDICAL APPLICATIONS Zara Cherkezova-Zheleva , D. Paneva, H. Kolev, M. Tsvetkov, E. Encheva and G. Stefanov, BAS / UNIV. SOFIA (BG) REUSE OF Fe-BASED AMORPHOUS ALLOYS CONTAINING CRM FOR WASTEWATER REMEDIATION
13.00 – 14.00	Lunch break
	Section 4. Advanced materials for extreme conditions <i>(Eminescu Conference Hall)</i> <i>Chair: Bojan Podgornik, IMT (SI)</i>
14.00 – 15.40	Bogdan Alexandru Sava, Lucica Boroica , Ileana Cristina Vasiliu, Elisa Mihail, Alexandra Trefilov, Ana Filip, Oana Gherasim (Fufa), INFLPR / INOE 2000 (RO), GRAPHENE AND OXIDE GRAPHENE COMPOSITE WITH PHOSPHATE GLASS T. P. C. Klaver , M. H. F. Sluiter, B. Podgornik, A. Gustin, D. Mitrică, R. Piticescu, TU Delft / IMT / IMNR (NL / SI / RO), HIGH THROUGHPUT SCANNING WITH A CALPHAD DATABASE FOR HIGH TEMPERATURE BCC HIGH ENTROPY ALLOYS

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	<p>Roxana Mioara Piticescu, Lars Österlund, Dumitru Ulieru, Janusz Smulko, Jan Mitrovics, Mohamed Fethi Diouani, Benachir Bouchikhi, Radu Ionescu, IMNR / Molecular Fingerprint Sweden AB / Sitex 45 / GUT / JLM Innovation / Institut Pasteur de Tunis / Univ. Moulay Ismail / Uppsala Univ. (RO / SE / PL / DE / TN / MA), DEVELOPMENT OF A NON-INVASIVE BREATH TEST FOR EARLY DIAGNOSIS OF TROPICAL DISEASES</p> <p>Adriana-Gabriela Plăiașu, Marian Cătălin Ducu, Sorin Georgian Moga, Aurelian Denis Negrea, Ecaterina Magdalena Modan, Ion Pătrașcu, UPIT (RO), NANOSTRUCTURED TRANSITION METALS OXIDES</p> <p>Romeu Chelariu, Victoraș Geantă, Nicanor Cimpoieșu, Bogdan Istrate, Ioan Carcea, Raluca-Maria Florea, TUIASI / UPB / Rancon, RESEARCH ON MULTICOMPONENT ALLOYS FROM THE FeCrNiMn-X SYSTEM FOR EXTREME USE CONDITIONS</p>
15.40 – 16.00	Coffee break
16.00 – 17.00	<p><i>Chair: Adriana-Gabriela Plăiașu, UPIT (RO), CRM-EXTREME MC Member</i></p> <p>A. Penalva García, B. Calderón Roca, Maria Dolores Romero Sánchez, I. Rodríguez Pastor, I. Martín Gullón, Applynano Solutions (ES), CARBON BASED NANOPARTICLES FOR APPLICATIONS IN THE TRANSPORT SECTOR: AUTOMOTIVE AND AERONAUTICS COMPONENTS</p> <p>Bojan Podgornik, Agnieszka Kračun, Borut Žužek, F. Tehovnik, IMT (SI), NANO-PARTICLES REINFORCED STEELS FOR EXTREME WORKING CONDITIONS</p> <p>Monika Solecka, Ewa Rząd, Grzegorz Golański, Paweł Wieczorek, Tomasz Dudziak, ŁUKASIEWICZ RN / CUT (PL), MATERIALS FOR ENERGY APPLICATIONS: CHARACTERISATION OF THE AUSTENITIC STEELS AFTER AIR AND STEAM OXIDATION</p> <p>Sorina-Nicoleta Vâlsan, Dumitru Valentin Drăguț, Mircea Corban, Maria Luisa Grilli, Antonio Rinaldi, Daniele Valerini, Felix Balima, Mythili Prakasam, A. Largeteau, Radu Robert Piticescu, IMNR / ENEA / CNRS (RO/ IT / FR), DESIGN, OBTAINING AND CHARACTERIZATION OF NEW MATERIALS BASED ON ZIRCONIA DOPED WITH MIXED RARE EARTH OXIDES</p> <p>Arcadii Sobetkii, Laurențiu Moșinoiu, Mircea Corban, Victor Manoliu, Mihai Boțan, G. Ionescu, Bogdan Vasile, R. Trusca, A. Surdu, Radu Robert Piticescu, IMNR / INCAS / UPB (RO), ZIRCONIUM PEROWSKITES AS NOVEL MATERIALS FOR HIGH TEMPERATURE COATINGS DEVELOPED THROUGH COMBINATORIAL EB-PVD DEPOSITION TECHNOLOGY</p>
17.00 – 17.15	<p>Poster session awards for young scientists (Eminescu Conference Hall)</p> <p><i>Chair: Radu Robert Piticescu, IMNR (RO)</i></p>

PERFORM-MAT (1PFE/2018)
Increased performance and competencies
of INCDMNR-IMNR in the field of emerging
technologies in materials engineering
based on non-ferrous metal



Project financed by the
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CRM-EXTREME (CA 15102)
Solutions for Critical Raw Materials
under Extreme Conditions
COST is supported by the EU
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ENERHIGH (ID P_37_776; ctr. 93/2016)
Innovative methods for enhancing high temperature
thermal energy storage properties of phase change materials
Project co-financed by the Fund for European Regional Development
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08.11.2019 (FRI)	DAY 3 – Satellite event COST Action CRM-EXTREME (CA15102) <i>(Eminescu Conference Hall)</i>
09.00 – 09.30	Registration*
09.30 – 10.00	Report on the Action's activities (state of the art and incoming steps)
10.00 – 10.50	In-depth analysis of the researches presented in "Session 3. Critical materials" Flash talks of the authors of posters and presentations
10.50 – 11.20	Networking Coffee Break
11.20 – 13.00	In-depth analysis of the researches presented in "Session 3. Critical materials" Question/Answer session with the authors of posters and presentations
13.00 – 14.00	Networking Lunch Break
14.00 – 15.40	Round table for work proposals on the researches presented
15.40 – 16.00	Closing remarks

**) Event open only for registered COST Action participants.*

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