

22-nd Conference EnergEn 2018, 24-26 October, 2018, Băile Govora, ROMANIA

XXIInd National Conference with International Participation
**New Cryogenic and Isotope Technologies for
Energy and Environment**

EnergEn 2018

Băile Govora, ROMANIA
24-26 October, 2018

PROGRAMME

Organized by
the National Research and Development
Institute for Cryogenics and Isotopic
Technologies - ICSI Rm. Valcea
&
the Ministry of Research and Innovation

New Cryogenic and Isotope Technologies for Energy and Environment

EnergEn 2018

Băile Govora, Romania

October 24-26, 2018

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EnergEn 2018 PROGRAMME ... at a glance

Tuesday 23 th October		Wednesday 24 th October		Thursday 25 th October		Friday 26 th October	
						Parallel Scientific Sessions	
16:00	Registration	08:00	Registration	09:00	Registration	09:00	Isotopes of hydrogen & its applications Part I Assembly of H2 Romania
19:30	Ice Breaker Party	09:30	Conference Opening	Parallel Scientific Sessions		11:10	Coffee Break
22:00	End of the 1 st Day	10:00	Plenary Session – Part I	09:30	Energy storage and hydrogen technologies Part III Material science for energy and environment Part III	11:30	Isotopes of hydrogen & its applications Part II WORKSHOP HyLaw project
		11:30	Coffee Break	11:00	Coffee Break	13:30	Closing the conference
		11:45	Plenary Session – Part II	11:20	Energy storage and hydrogen technologies Part IV Material science for energy and environment Part IV	13:35	Lunch
		13:30	Lunch	13:00	Lunch	14:30	Technical visit to ICSI Rm. Valcea
		Parallel Scientific Sessions		Parallel Scientific Sessions			
		15:00	Energy storage & hydrogen technologies Part I Material science for energy and environment Part I	14:15	Cryogenic technologies Life quality & environment technologies		
		16:20	Coffee Break	16:45	Coffee Break		
		16:40	Energy storage & hydrogen technologies Part II Material science for energy and environment Part II	17:00-18:00	Poster Session II		
		18:10	Poster Session I				
		19:30	End of the 2 nd Day	19:30	Conference dinner		
		Dinner *		23:00	End of the 3 rd Day		

Organizing Committee

* Dinner (optional) - not included in the conference registration fee. Estimated price: 70 RON. For this service you can opt at the registration.

Tuesday - October 23, 2018

16:00 - 19:30	Registration <i>Location - Palace Hotel</i>
19:30 - 22:00	Ice Breaker Party <i>Location - Palace Hotel</i>

Wednesday - October 24, 2018

08:00 - 09:30	Registration <i>Location - Palace Hotel</i>
09:30 - 09:50	Conference Opening <i>Location - Cinema Hall Baile Govora</i>
	<i>Acad. Marius Peculea</i> Romanian Academy, Romania
	<i>Prof. univ. Ecaterina Andronescu</i> Universitatea Politehnica din București, Romania
	We are ICSI! <i>Mihai Varlam</i> National Research and Development Institute for Cryogenics and Isotopic Technologies – ICSI Rm. Valcea, Romania
PLENARY SESSION	
<i>Location - Cinema Hall Baile Govora</i>	
Chairpersons: <i>Damian Axente & Liviu Stefan</i>	
09:50 - 10:20	Post Li-ion batteries <i>Norbert Wagner, Alexander Kube, Frieder Warth, Andreas Kaspar Friedrich</i> German Aerospace Center (DLR), Institute for Engineering Thermodynamics, Stuttgart, Germany
10:20 - 10:50	Pd-membranes applications from tritium separation to pure hydrogen production <i>Silvano Tosti</i> ENEA Frascati, Italy
10:50 - 11:20	R&D of Tritium technology for CFETR: progress and prospect <i>Luo Wenhua, Luo Deli, Meng Daqiao, Li Rong, Huang Zhiyong, Song Jiangfeng, Huang Guoqiang, Chen Chang-an, Deng Xiaojun, Qin Cheng, Qian Xiaojing, Zhang Guikai</i> Chinese Academy of Engineering Physics, China
11:20 - 11:35	Coffee Break
11:35 - 11:55	Cernavoda Tritium Removal Facility - Recent History and Future Plans for Project Implementation <i>Andrew Roberts</i> KINECTRICS, Canada
11:55 - 12:15	Dismantling an obsolete tritium installation <i>Kris Dylst, Yves D'Joos, Herman Lodewyckx, Anisia Bornea, Marius Zamfirache</i> Belgian Nuclear Research Center, Mol, Belgium
12:15 - 12:45	Smart and connected system for ecological monitoring and situational awareness <i>Ashok Vaseashta</i> International Clean Water Institute and New Jersey University, USA
12:45 - 13:15	Nuclear assisted hydrogen production <i>Damian Axente, Cristina Marcu</i> ITIM Cluj Napoca, Romania
13:15 - 13:30	Safe, reliable and efficient hydrogen handling <i>Roberto Escobar</i> NovaSwiss, Switzerland

13:30 - 15:00	Lunch	
15:00 - 18:15	PARALEL SCIENTIFIC SESSIONS	
	ENERGY STORAGE AND HYDROGEN TECHNOLOGIES – Part I <i>Location - Cinema Hall Baile Govora</i> Chairpersons: <i>Norbert Wagner & Nicolae Aldea</i>	MATERIAL SCIENCE FOR ENERGY AND ENVIRONMENT – Part I <i>Location - Conference Room Palace Hotel</i> Chairpersons: <i>Laurentiu Asimopolos & Violeta Niculescu</i>
15:00 - 15:30	Keynote: Lithium sulphur batteries: strategies to increase the cycle life <u>Silvia Bodoardo</u> Politecnico di Torino, Italy	Keynote: Remarks on the thermal properties of rocks and the treatment of geothermal waters <u>Laurentiu Asimopolos, Natalia-Silvia Asimopolos, Violeta Carolina Niculescu</u> Institute of Geology, Bucharest, Romania
15:30 - 15:55	Invited: Li-ion battery manufacturing in Europe: Italian initiative <u>Mihaela Aneta Dumitrescu</u> Lithops S.R.L, Torino, Italy	Invited: Theoretical and experimental approach to destabilization methods for improvement of hydrogen sorption kinetics in Mg based systems <u>Jasmina Grbović Novaković, Sandra Kurko, Sanja Milošević Govedarović, Tijana Pantić, Bojana Paskaš Mamula, Mirjana Medić, Nikola Novaković</u> University of Belgrad, Vinča Institute of Nuclear Science, Serbia
15:55 - 16:20	Invited: The role of energy storage in low consumption working vehicles <u>Aurelio Somà, Francesco Mocera, Elena Vergoni</u> Politecnico di Torino, Italy	Invited: Glassy dynamics polymethylphenylsiloxane in one- and two-dimensional nanometric confinement – A comparison <u>Wycliffe Kiprof Kipnusu, Mohamed Elsayed, Reinhard Krause–Rehberg and Friedrich Kremer</u> Universität Jaume I, Spain
16:20 -16:40	Coffee Break	
16:40 -17:10	Invited: α -SETS software for analysis, modelling and simulation of the Stirling engine <u>Adrian Bot, Vasile Rednic, Nicolae Aldea</u> ITIM Cluj Napoca, Romania	Invited: Development of azulene tailored pi-conjugated systems: solution and solid-state characterization <u>Adrian Ion, Sergiu Shova, Marius Andruh, Simona Nica</u> “C.D. Nenitzescu” Institute of Organic Chemistry, Bucharest, Romania
17:10 - 17:30	Advanced lithium ion batteries <u>Krum Banov, Ilya Popov, Dimka Ivanova, Ludmi Fachikov, Branimir Banov</u> Institute of Electrochemistry and Energy Systems “Academician Evgeni Budevski”, Sofia, Bulgaria	Dye-sensitized solar cells fabricated on plastic and glass substrate <u>Izabell Craciunescu, Alexandrina Nan, Gabriel Rosca, Adrian Bot</u> ITIM Cluj Napoca, Romania
17:30 - 17:50	Optimum slope and azimuth angles for solar collector and PV module <u>Shin Ki-Yoel, Cristian Hoarca</u> Yeungnam University Republic of Korea, Korea	XAS and XRD studies on the structure of vitroc ceramic electrodes based on lead-lead dioxide-manganese dioxide <u>Marius Rada, Mioara Zagrai, Jing Zhang, An Pengfei, Simona Rada</u> ITIM Cluj Napoca, Romania
17:50 - 18:10	Thermal receptor for concentrated solar power. An experimental and simulated efficiency study. <u>Vasile Rednic, Robert Gutt, Emil Bruj, Gabriel Roșca, Radu Pop, Sergiu Pogăcian, Dan Zotoiu, Adrian Bot</u> ITIM Cluj Napoca, Romania	Synthesis of well dispersed gold nanoparticles on reduced graphene oxide and application in PEM Fuel Cells <u>Adriana Marinoiu, Elena Carcadea, Mircea Raceanu, Mihai Varlam</u> National Research and Development Institute for Cryogenics and Isotopic Technologies – ICSI Rm. Valcea, Romania

18:15 - 19:30	POSTER SESSION – I <i>Location – Small Conference Room Palace Hotel</i>
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Thursday - October 25, 2018

09:00 - 09:30	Registration <i>Location - Palace Hotel</i>	
09:30 - 13:00	PARALEL SCIENTIFIC SESSIONS	
	ENERGY STORAGE AND HYDROGEN TECHNOLOGIES – Part II <i>Location - Cinema Hall Baile Govora</i>	MATERIAL SCIENCE FOR ENERGY AND ENVIRONMENT – Part II <i>Location - Conference Room Palace Hotel</i>
	Chairpersons: <i>Konstantin Petrov & Elena Carcadea</i>	Chairpersons: <i>Wycliffe Kiprof Kipnusu & Ciprian Iacob</i>
09:30 - 10:00	European Local Energy Ownership in Energy Transition <i>Filip Carlea, Maria Simona Raboaca</i> National Institute of Economic Research, Bucharest, Romania	Charge transport and glassy dynamics of polymerized ionic liquids in bulk and in unidirectional silica nanopores <i>Ciprian Iacob, Atsushi Matsumoto, Tadashi Inoue, James Runt</i> National Research and Development Institute for Cryogenics and Isotopic Technologies – ICSI Rm. Valcea, Romania
10:00 - 10:20	PEM Fuel Cells - on the Way from Modeling to Reality <i>Carcadea Elena, Varlam Mihai, Jianu Catalin, Patularu Laurentiu, Dorin Schitea</i> National Research and Development Institute for Cryogenics and Isotopic Technologies – ICSI Rm. Valcea, Romania	Graphene modified fluorinated cation-exchange membranes proton exchange membrane water electrolysis <i>Daniela Ion-Ebrasu, Bruno G. Pollet, Adnana Spinu-Zaulet, Amalia Soare, Elena Cacadea, Dorin Schitea, Alin Chitu, Mihai Varlam, Konstantin Petrov</i> National Research and Development Institute for Cryogenics and Isotopic Technologies – ICSI Rm. Valcea, Romania
10:20 - 10:40	Smart conductive charging station, fixed and mobile, for electric vehicles (SMiLE-EV) <i>Constantin Filote, Daniel Fodorean, Claudia Martis, Filip Carlea, Mihai Rata, Maria Simona Raboaca</i> Stefan cel Mare University of Suceava, Romania	Mastering electronic percolation threshold of metal-oxide composites towards highly porous solid-state catalysts <i>Stanica Enache, Mirela Dragan, Amalia Soare, Konstantin Petrov, Mihai Varlam</i> National Research and Development Institute for Cryogenics and Isotopic Technologies – ICSI Rm. Valcea, Romania
10:40 - 11:00	Modelling of fuel cell, battery and ultracapacitor as energy sources for EV charging stations <i>Daniel Fodorean, Rares Catalin Nacu, Aron Attila Popp, Constantin Filote, Filip Carlea, Maria Simona Raboaca</i> Technical University of Cluj-Napoca, Cluj Napoca, Romania	The interaction of hydrogen with nanosized Pd clusters <i>Abdelmalek Malouche, Oana Grad, Dan Lupu, Claudia Zlotea, Gabriela Blanita</i> ITIM Cluj Napoca, Romania
11:00 - 11:20	Coffee Break	
11:20 - 11:40	An EV charging station demonstrator <i>Mihai Rata, Gabriela Rata, Constantin Filote, Ana Maria Cozgarea, Andreea Raluca Felseghi, Maria Simona Raboaca</i> Stefan cel Mare University of Suceava, Romania	Aspects regarding material history effect (manufacturing & operation) on damage phenomena of certain stainless-steel grades <i>Raluca Fako, Adriana Oltean, Iulian Nita</i> RATEN-CITON Bucuresti, Romania
11:40 - 12:00	DC-DC converter for fast charging of electric vehicles <i>Ciprian Afanasov, Constantin Filote, Valentin Vlad, Gabriela Rata, Maria Simona Raboaca</i> Stefan cel Mare University of Suceava, Romania	Biogas up-grading to Syngas catalyzed by alumina supported nickel catalysts <i>Diana Lazar, Monica Dan, Maria Mihet</i> ITIM Cluj Napoca, Romania

12:00 - 12:20	Interfaces and communication protocols for electric car charging station <i>Valentin Vlad, Mihai Rata, Constantin Filote, Alexandru Lavric, Maria Simona Raboaca</i> Stefan cel Mare University of Suceava, Romania	LaCoO ₃ perovskite-type oxide: synthesis and characterization towards practical applications <i>Mirela Dragan, Stanica Enache, Amalia Soare, Konstantin Petrov, Mihai Varlam</i> National Research and Development Institute for Cryogenics and Isotopic Technologies – ICSI Rm. Valcea, Romania
12:20 - 12:40	Study on geothermal energy on Romanian territory <i>Natalia-Silvia Asimopolos, Laurentiu Asimopolos</i> Institute of Geology, Bucharest, Romania	Fabrication technology of self-standing binder free LiMn ₂ O ₄ /MWCNT electrode by vacuum filtration method <i>Constantin Bubulinca</i> National Research and Development Institute for Cryogenics and Isotopic Technologies – ICSI Rm. Valcea, Romania
12:40 - 13:00		Fabrication and hydrogen permeation of Al ₂ O ₃ /Er ₂ O ₃ coating by MOD method <i>Zhang Dongxun</i> Shanghai Institute of Applied Physics, Chinese Academy of Science, China
13:00 - 14:15	Lunch	
14:15 - 16:45	PARALEL SCIENTIFIC SESSIONS	
	CRYOGENIC TECHNOLOGIES <i>Location - Cinema Hall Baile Govora</i> Chairpersons: <i>Silvano Tosti & Sebastian Brad</i>	LIFE QUALITY AND ENVIRONMENT TECHNOLOGIES <i>Location - Conference Room Palace Hotel</i> Chairpersons: <i>Karel Lemr & Roxana Elena Ionete</i>
14:15 - 14:45	Keynote: Studies of cryogenic distillation equipments and process <i>Sebastian Brad, Alin Lazar, Mihai Vijulie</i> National Research and Development Institute for Cryogenics and Isotopic Technologies – ICSI Rm. Valcea, Romania	Keynote: Mass spectrometry in forensic analysis <i>Karel Lemr</i> Palacky University, Olomouc, Cehia
14:45 - 15:05	The Technological Chain of Enrichment of ³ He <i>Petar Dalakov, Maxim Kupriyanov, Jürgen Klier</i> Institut für Luft- und Kältetechnik Dresden, Germany	GC-MS and neutron activation (NAA) analysis of medicinal <i>Teucrium L.</i> species <i>Nina Ciocarlan, Alexandru Ciocarlan, Ion Dragalin, Aculina Aricu, Inga Zinicovscaia, Svetlana Gundorina</i> Institutul de Chimie al Academiei de Stiinta a Moldovei, Republic of Moldova
15:05 - 15:25	Production of light gases stable isotopes by cryogenics method <i>Vitaly Bondarenko, Iurii Symonenko, Dmytro Tyshko, Borys Pylypenko</i> Institute of Refrigeration Cryotechnology and Ecoenergetics n.a. V.S. Martynovsky, Odessa, Ukraine	Stable isotope ratio of O-H-C bioelements and its applicability in verifying the origin of wine <i>Roxana Elena Ionete, Diana Costinel, Raluca Popescu, Oana Botoran</i> National Research and Development Institute for Cryogenics and Isotopic Technologies – ICSI Rm. Valcea, Romania
15:25 - 15:45	Cryogenic support of rectification units for the neon isotopes production <i>Vitaly Bondarenko, Artem Chyhrin, Hlib Bashkirov</i> Cryoin Engineering, Odessa, Ukraine	Alternative analytical approaches for detecting adulteration of honey <i>Elisabeta Irina Geana, Corina Teodora Ciucure, Raluca Popescu, Diana Costinel, Roxana Elena Ionete</i> National Research and Development Institute for Cryogenics and Isotopic Technologies – ICSI Rm. Valcea, Romania
15:45 - 16:05	Characterization of gamma radiation fields emitted by 60-Co sources inside of the chambers for simulation of specific outer space conditions <i>Catalin Stelian Tuta, Cristian Postolache, Aurelia Celarel, Constantin Cenusu, Viorel Fugaru, Mihail-Ravan Ioan</i> IFIN-HH Bucuresti, Romania	Multidimensional chromatography coupled with high speed mass spectrometry. Progress in orthogonal acceleration time-of-flight mass spectrometry <i>Mircia Toderici</i> National Research and Development Institute for Cryogenics and Isotopic Technologies – ICSI Rm. Valcea, Romania

16:05 - 16:25	Mathematical model of a heat exchanger working with different refrigerant fluids <i>Ion Zabet, Iulia Nita, Raluca Fako, Gratiela Maria Tarlea</i> IFIN-HH Bucuresti, Romania	Nuclear jet engines test makes new challenges for studies of radioactivity in environment <i>Jerzy Wojciech Mietelski</i> The Henryk Niewodniczanski Institute of Nuclear Physics, Polish Academy of Sciences, Krakow, Poland
16:25 - 16:45	Sustainable solutions for public terrestrial transportation <i>Iurie Bosneaga, Elena Agarwal</i> Institute of Applied Physics of Academy of Sciences, Chisinau, Republic of Moldova	Virtual screening of Trabenazine and its deuterated analogue against the synaptic vesicular amine transporter <i>Radu Tamaian</i> National Research and Development Institute for Cryogenics and Isotopic Technologies – ICSI Rm. Valcea, Romania
16:45 - 17:00	Coffee Break	
17:00 - 18:00	POSTER SESSION <i>Location – Small Conference Room Palace Hotel</i>	
19:30 - 23:00	Conference Dinner <i>Location – Palace Hotel</i>	

Friday - October 26, 2018

09:00 - 13:30 PARALEL SCIENTIFIC SESSIONS		
	ISOTOPES OF HYDROGEN AND ITS APPLICATIONS <i>Location - Cinema Hall Baile Govora</i> Chairpersons: <i>Jerzy Wojciech Mietelski & Octavian G. Dului</i>	Assembly of H2 Romania <i>Location - Conference Room Palace Hotel</i> Chairperson: <i>Ioan Iordache</i>
09:00 - 09:30	Time series analysis of 18 years of continuous observation of tritium content in Ramnicu Valcea precipitations <i>Octavian G. Dului, Carmen Varlam</i> University of Bucharest, Faculty of Physics, Bucharest, Romania	Assembly of the Hydrogen Energy Association in Romania
09:30 - 10:00	Cernavoda Tritium Removal Facility – Connection to Fusion R&D <i>Liviu Stefan, Anisia Bornea, Marius Zamfirache, Nicolae Bidica, Iuliana Stefan</i> National Research and Development Institute for Cryogenics and Isotopic Technologies – ICSI Rm. Valcea, Romania	
10:00 - 10:30	Progress of tritium related materials for fusion system <i>Chen Chang'an</i> Chinese Academy of Engineering Physics, China	
10:30 - 10:50	Overview of tritium activity in the nuclear fission reactors <i>Iulian Nita, Maria Deaconu, Raluca Fako, Sorin Meglea, Dan Bujoreanu</i> RATEN-CITON Bucharest, Romania	
10:50 - 11:10	Introduction of Institute of Materials, CAEP <i>Zhang Xinjian</i> Chinese Academy of Engineering Physics, China	

11:10 - 11:30	Coffee Break	WORKSHOP – HyLaw Project <i>Location - Conference Room Palace Hotel</i> Chairpersons: <i>Alexandru Floristean & Ioan Iordache</i>
11:30 - 11:50	Progress of HCCB TBM system <u>Song Jiangfeng</u> Chinese Academy of Engineering Physics, China	
11:50 - 12:10	Progress of WDS technology in CAEP <u>Li Peilong</u> Chinese Academy of Engineering Physics, China	HyLaw – Project presentation <i>Ioan Iordache, Dorin Schitea, Alexandru Floristean, Ioan Stefanescu, Nicolas Brahy</i>
12:10 - 12:30	Capabilities of ICSI tritium laboratory in providing accurate estimation of tritium level in the uncontaminated environment <u>Carmen Varlam, Irina Vagner, Ionut Faurescu, Denisa Faurescu</u> National Research and Development Institute for Cryogenics and Isotopic Technologies – ICSI Rm. Valcea, Romania	Hydrogen Europe Proposals of Politics/Strategies in Hydrogen Energy for Romania Discussions and Suggestions to Accelerate the Implementation of Hydrogen Technologies in Romania
12:30 - 12:50	Polymer electrolyte membrane used in tritium enrichment of aqueous sample <u>Carmen Varlam, Ionut Faurescu, Dorin Schitea, Ionut Spiridon, Alin Chitu, Diana Costinel, Laurentiu Patularu, Daniela Ion-Ebrasu, Irina Vagner</u> National Research and Development Institute for Cryogenics and Isotopic Technologies – ICSI Rm. Valcea, Romania	
12:50 - 13:10	Synthesis of labelled compounds with tritium using organometallic compounds as intermediates <u>Cristian Postolache, Viorel Fugaru, Catalin Stelian Tuta, Bubueanu George</u> IFIN-HH, Bucuresti, Romania	
13:10 - 13:30	Non-steady-state modelling of the permeation of multi-component hydrogen isotopes through metals <u>Nicolae Bidica</u> National Research and Development Institute for Cryogenics and Isotopic Technologies – ICSI Rm. Valcea, Romania	
13:30 - 13:35	Closing the Conference	
13:35 - 14:30	Lunch	
14:30 - 16:00	Technical visit to ICSI Rm. Valcea (optional – by subscription at registration)	

POSTER PRESENTATION

Wednesday - October 24, 2018

18:00 - 19:30	POSTER SESSION – I
	Location – Small Conference Room Palace Hotel
WP-1	Hydrogen mobility demonstrator – Hy-DeMo <i>Mihail Culcer, Mircea Raceanu, Mariana Iliescu, Adrian Enache, Nicu Bizon, Mihai Varlam</i>
WP-2	NMC cheap and prospective cathode material for EV&HEV <i>Krum Banov, Ilya Popov, Dimka Ivanova, Ludmi Fachikov, Branimir Banov</i>
WP-3	Hydrogen production based on glycerol steam reforming process performed in a membrane reactor <i>Mirela Draghia, Madalina Ivanovici, Gheorghe Pasca, Alin Fuciu</i>
WP-4	Hydrogen-rich gas production by biomass conversion in a free-fall reactor promoted by Fe/CaO catalyst <i>Adrian Armeanu, Elena David, Violeta Niculescu, Claudia Sandru</i>
WP-5	Hydraulic simulation, concerning optimization of water flow capture for micro-hydro power plants in order to increase the energy production <i>Radu Pop, Vasile Rednic, Oana Raita, Emil Bruj, Daniel Banyai, Liviu Vaida, Adrian Bot</i>
WP-6	Integrated solar power plant system based on Dish Stirling technology for sustainable energy generation <i>Gabriel Rasoi, Mihai Culcer, Mariana Iliescu, Maria Simona Raboaca, Dan Mocanu, Adrian Armeanu</i>
WP-7	Stirling engine burning chamber design and simulation in ANSYS Fluent <i>Robert Gutt, Vasile Rednic, Emil Bruj, Adrian Bot</i>
WP-8	Heat recovery system for Stirling engine flue gases <i>Emil Bruj, Vasile Rednic, Robert Gutt, Radu Pop, Sergiu Pogacian, Adrian Bot</i>
WP-9	Characterizing of a small high temperature superconducting coil intended to be used as energy storage unit for spacecraft power systems <i>Mariana Iliescu, Mihail Culcer, Florian Stefanescu, Marian Curuia, Elena Carcadea, Nicu Bizon, Mihai Varlam</i>
WP-10	Development of a hydrogen filling station for fuel cell electric vehicle at ICSI Rm. Valcea <i>Laurentiu Patularu, Mihai Varlam, Elena Carcadea, Eusebiu Ilarian Ionete, Dan Mocanu, Adrian Armeanu</i>
WP-11	Thermal behavior investigation of a Li-ion pouch cell <i>Alexandru Ciocan, Alexandru Rizoiu, Alexandru Badita</i>
WP-12	First results on laser-induced graphene foam as gas diffusion layer for PEM fuel cells <i>Athanasios Tiliakos, Alexandra M.I. Trefilov, Elena Dutu, Eugenia Tanasă, Adriana Balan, Ioan Stamatina</i>
WP-13	Electrochemical hydrogen separation <i>Ioan Iordache, Dorin Schitea</i>

WP-14	Disposal and energy recovery from sewage sludge <i>Marius Constantinescu, Felicia Bucura, Roxana Elena Ionete, Anca Zaharioiu, Corina Ciucure, Simona Oancea</i>
WP-15	Radiological characterization of resulted materials from refurbishing of tritium laboratory <i>George Bubueanu, Cristian Postolache, Viorel Fugaru, Catalin Stelian Tuta</i>
WP-16	Experimental plant for carbon isotopes separation by carbon monoxide cryogenic distillation <i>József-Zsolt Szücs-Balázs, Stefan Bugeac, Codruta Mihaela Varodi, Claudia Lar, Mariana Cristina Marcu, Mihai Liviu Gligan</i>
WP-17	Tritium activity on-line monitoring in the Pik reactor water coolants by using flow-through radiometer Wilma <i>Tatiana Voronina, Daria Tugusheva</i>
WP-18	On-line monitoring of the deuterium content in heavy water reflector of Pik reactor <i>Tatiana Voronina, Daria Tugusheva</i>
WP-19	The area measurements in the tritium laboratory within NIPNE Magurele <i>Viorel Fugaru, Cristian Postolache, Gheorghe Bubueanu, Catalin Stelian Tuta, Diana Chiper</i>
WP-20	Advanced technology for tritiated water waste processing based on the CECE separation process <i>Anisia Mihaela Bornea, Marius Zamfirache, George Ana, Alina Niculescu, Liviu Stefan, Toma Constantin, Ovidiu Balteanu, Ciprian Bucur</i>
WP-21	Ordered packing dedicated to deuterium depleted water production <i>Nadia Paun, Gheorghe Titescu, Ioan Stefanescu, Adrian Armeanu, Constantin Ciorte, Cristian Mladin</i>
WP-22	Titanium hybrids with controlled H/T ratio for AMS facilities calibration <i>Viorel Fugaru, Cristian Postolache, Mihaela Enachescu, Catalin Stan-Sion, Andrei Antohe, Catalin Stelian Tuta, Diana Chiper, George Bubueanu</i>
WP-23	Aspects concerning increasing of wettability of mixed catalytic packing for hydrogen-water isotopic exchange <i>Gheorghe Ionita, Amalia Soare, Ionut Spiridon</i>
WP-24	Electrochemical investigation of Pd/CNT composite for hydrogen isotope identification <i>Ana-Maria Iordache, Stefan-Marian Iordache, Eusebiu Ilarian Ionete, Ioan Stamatin</i>
WP-25	The usage of the polymeric gel "Decongel" for the radiochemical decontamination <i>Diana Chiper, Cristian Postolache, Viorel Fugaru</i>
WP-26	Dynamic simulation of a multicomponent distillation column for D-T separation <i>Alina Niculescu, Toma Constantin, George Ana</i>
WP-27	The ^{15}N separation by isotopic exchange in nitrox system at pressure <i>Damian Axente, Stefan Bugeac, Stefan Gergely, Mihai Gligan, Cristina Marcu, Zsolt Szücs, Codruta Varodi</i>
WP-28	Synthesis of a new labelled ^{15}N organic compound based on 2-nitromalonaldehyde ^{15}N core <i>Claudia Lar, József-Zsolt Szücs-Balázs, Monica Violeta Cîrcu, Anca Cristina Petran, Codruta Mihaela Varodi, Stefan Bugeac, Aurel Baldea</i>
WP-29	Bifacial solar cells <i>Marin Gheorghe, Simona Gheorghe</i>

WP-30	Development and basic research on flexible dye-sensitized solar cell <i>Gabriel Rosca, Izabell Craciunescu, Alexandrina Nan, Adrian Bot</i>
WP-31	Study about smartgrid in energy <i>Carmen Maria Moraru, Iulia Stefan, Florentina Magda Enescu</i>
WP-32	Cathode Materials with Mixed High Energy Density and Pulse Power Capability for Li-ion Batteries - Preliminary Results <i>Mihaela Buga, Alexandru Vlad, Adhana Spînu-Zăuleț, Alexandru Rizoiu, Radu Ene</i>
WP-33	Studies on Hydrogen Interaction with Uranium Alloys <i>Mariaea Deaconu, Ion Furtuna, Alice Dinu, Maria Mihalache</i>
WP-34	Characterization of Biofilms Developed on Carbon Steel Using X-Rays Micro-Diffraction <i>Alice Dinu, Mariana Tunaru</i>

Thursday - October 25, 2018

16:45 - 18:00	POSTER SESSION – II Location – Small Conference Room Palace Hotel
TP-1	The change of the local environment of samarium ions in lead-borate glasses and vitroc ceramics <i>Adriana Dehelean, Simona Rada, Marius Rada, Ramona Suci</i>
TP-2	Spectroscopic and electrochemical properties on the lead-lead dioxide-manganese dioxide vitroc ceramics <i>Mioara Zagrai, Simona Rada, Ramona Suci, Marius Rada, Adrian Bot</i>
TP-3	Electrochemical performances of lead-lead dioxide-copper oxide glasses and vitroc ceramics as electrodes for batteries <i>Simona Rada, Mioara Zagrai, Marius Rada, Lidia Magerusan, Ramona Suci, Maria Suci</i>
TP-4	Sulfur – doped reduced graphene oxide decorated with platinum nanoparticles as electrocatalyst for methanol oxidation <i>Adriana Vulcu, Camelia Berghian-Grosan, Diana Lazar, Sebastian Porav, Gheorghe Borodi, Teodora Radu</i>
TP-5	A new method to obtain Pt on graphene oxide using microwave reactor <i>Felicia Vasut, Anisoara Oubraham, Adriana Marinoiu, Amalia Soare</i>
TP-6	Synthesis of gold nanoparticles supported on reduced graphene oxide by microwave procedure <i>Adriana Marinoiu, Felicia Vasut, Anisoara Oubraham, Radu Dorin Andrei, Irina Vagner, Amalia Soare, Catalin Capris, Elena Carcadea</i>
TP-7	Perovskite-type lanthanum cobaltite for use as a catalyst: synthesis and characterization <i>Mirela Dragan, Stanica Enache, Amalia Soare, Konstantin Petrov, Mihai Varlam</i>
TP-8	Electrochemical stability investigation of platinum on graphene oxide catalyst using cyclic voltammetry method <i>Claudia Sisu, Radu Dorin Andrei, Adriana Marinoiu, Claudia Sandru, Marius Constantinescu, Irina Petreanu, Elena Carcadea</i>

TP-9	Development of Mesoporous materials for catalytic conversion of residual biomass <i>Elena David, Claudia Sandru, Violeta Niculescu, Adrian Armeanu</i>
TP-10	A new method to synthesize electrospun polyacrylonitrile nanofibers <i>Radu Dorin Andrei, Adriana Marinoiu, Felicia Bucura, Anca Zaharioiu, Violeta Niculescu, Claudia Sisu, Elena Carcadea</i>
TP-11	Structural modification in $Zr_{1-x}(Ge/Y)_x$ complex oxides <i>Michail-Liviu Craus, Vitalij Turchenko, Valerij Simkin, Tat'jana Evgenievna Konstantinova, Anelija Savin</i>
TP-12	Phosphorous removal from wastewater in the presence of mesoporous materials <i>Violeta Niculescu, Mihaela Iordache, Marius Miricioiu, Laurentiu Asimopolos</i>
TP-13	Aspects concerning the environmental impact assessment procedure for a heavy water management facility <i>Ionela Ramona Aranghel, Nusa-Crenguta Madgalin, Simona Machita, Bogdan Blanaru</i>
TP-14	Database of drinking water sources monitoring in Babeni-Valea Mare area – preliminary results <i>Carmen Varlam, Nicolae Sofilca, Ionut Faurescu, Alin Chitu, Irina Vagner, Mihaela Iordache, Diana Costinel, Denisa Faurescu</i>
TP-15	Geochemical characterization of the Olt River (Romania), using of Piper and Durov Diagrams <i>Claudia Sandru, Mihaela Iordache, Andreea Radulescu, Violeta Niculescu, Roxana Elena Ionete</i>
TP-16	Aspects on advanced isotopic and multiparametric investigation of surface waters as support in environmental processes <i>Andreea-Maria Iordache, Mihaela Iordache, Claudia Sandru, Cezara Voica, Ramona Zgavarogea, Roxana Elena Ionete</i>
TP-17	Development of voltammetric sensors based on conducting polymers for the detection of amino acids <i>Ancuta Dinu, Constantin Apetrei</i>
TP-18	Multi-element and ^{13}C analysis for assessing quality of meat <i>Adriana Dehelean, Dana Alina Magdas, Cezara Voica, Gabriela Cristea, Ioana Feher</i>
TP-19	Manipulation of spontaneous emission of long living isomers using UV-C radiation <i>Nicolae Enaki, Tatiana Paslari, Marina Turcan, Sergiu Bazgan, Starodub Elena, Ashok Vaseashta</i>
TP-20	Shifting retention time in gas-chromatography. Practical problems for analytical development of urethane in the alcoholic distillates by GC-MS <i>Mircia Toderici</i>
TP-21	Non-equilibrium (cold) plasma as an energy-efficient method of microbiological decontamination and heat and mass transfer intensification <i>Iurie Bosneaga, Elena Agarwal</i>
TP-22	Voltametric sensor for the analysis of electroactive compounds from Ginkgo Biloba based pharmaceutical products <i>Ramona Oana Gunache (Rosca), Constantin Apetrei</i>

TP-23	HPTLC identification of some mushroom and vegetal species for quality control of derived products <i>Bubueanu Elena Corina, Pavaloiu Ramona</i>
TP-24	Comparative spectroscopic and chromatographic quantification of nicotine in Moldavian tobacco <i>Alexandru Ciocarlan, Aculina Aricu, Mariana Deleanu</i>
TP-25	Preliminar studies about the beta-cyclodextrin encapsulation of Eugenia caryophyllata essential oil and eucalyptol <i>Alina Ionela Stancu, Elena Pincu, Gabriela Ioniță, Anca Ruxandra Leontieș, Eliza Oprea</i>
TP-26	Influence of the agricultural practices on the compositional profile of vegetables – conventional versus organic. <i>Raluca Popescu, Diana Stegarus, Claudia Sandru, Mihaela Iordache, Felicia Bucura, Anca Zaharioiu, Elisabeta-Irina Geana, Corina Ciucure, Diana Costinel, Roxana Elena Ionete</i>
TP-27	Wines produced in Bulgaria – chemical profile via ^1H NMR. <i>Desislava Gerginova, Yavor Mitrev, Svetlana Simova</i>
TP-28	Application of spectroscopic techniques coupled with multivariate statistical analysis for wines authenticity assessment. <i>Elisabeta-Irina Geana, Corina Teodora Ciucure, Raluca Popescu, Constantin Apetrei</i>
TP-29	Geographical, vintage and variety fingerprinting of wines based on elemental content and chemometric approach. <i>Ioana Feher, Dana Alina Magdas, Adriana Dehelean, Costel Sarbu</i>
TP-30	Spectroscopic and chemometric methods for wine classification. <i>Dana Alina Magdas, Simona Cinta Pinzaru, Ioana Feher, Bogdan Ionut Cozar</i>
TP-31	Characterization and classification of honeys with different botanical sources based on organic acids and water-soluble vitamins in conjunction with chemometric analysis. <i>Corina Teodora Ciucure, Elisabeta Irina Geana</i>
TP-32	Impact of adulteration with different sugar syrups on honey organic acids and water-soluble vitamins. <i>Corina Teodora Ciucure, Elisabeta Irina Geana</i>
TP-33	Measurement of Ra-226 via Rn-222 in Water Samples by LSC <i>Relu Dobrin, Cristian Dulama, Crina Bucur, Valentina Neculae</i>
TP-34	CANDU 600 Failed fuel location system. Analysis of BF3 delayed neutron detectors ageing <i>Oana Iuliana Popescu, George Serbanescu, Mihaela Vitan, Simona Budan, Alexandru Florea</i>



The XIInd National Conference with International Participation
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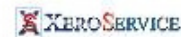


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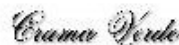
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