

Day 1	Day 2	Day 3
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	Diamond	Amethyst	Opal	Topaz	Diamond	RATEN ICN
09:00	Welcome					
09:30						
09:30	Keynotes	Advanced Nuclear Systems and SMRs	Radioactive waste management	Nuclear Materials and Technologies	Round Table	Technical visit at RATEN ICN
10:00						
10:00	Opening Session					
11:00	Coffee break					
11:30						
11:30	Conference Photo	Advanced Nuclear Systems and SMRs	Radioactive waste management	Nuclear Materials and Technologies	Round Table	
12:00						
12:00	Opening Session					
13:00	Lunch Break					
14:00						
14:00	GenIV (LFR)	Nuclear Safety, Nuclear Reactors and Nuclear Fuels	Radioactive waste management	Sustainable Development		
15:30	Coffee break					
15:30						
16:00	GenIV (LFR)	Nuclear Safety, Nuclear Reactors and Nuclear Fuels	Radioprotection and Air, Water and Soil protection	Sustainable Development		
18:00		Carrier Event				
17:00		"Opportunities for a successful career in the nuclear field"				
18:30		Nuclear 2024 Awards				
18:30		Nuclear 2024 Student Awards				
19:00		Conference dinner				
20:00						

Day 1 – May 29

Diamond Room

Wednesday, May 29

9:00 - 9:20	Welcome by Constantin Păunoiu (Director RATEN ICN) and Octavian Ută (Director General RATEN)
9:20 - 9:45	Messages from Local authorities and Ministries

Keynotes

9:45 – 9:55	Cosmin Ghita/ Teodor Chirica, <i>SNN, Romania</i>
9:55 - 10:05	Cantemir Ciurea-Ercău, <i>CNCAN, Romania</i>
10:05 - 10:15	Mihnea Costoiu, <i>University Politehnica Bucharest, Romania,</i>
10:15 - 10:30	Alessandro Dodaro, <i>ENEA, Italy</i>

Opening Session

Chair: Catalin Ducu

Co-chair: Daniela Diaconu

10:30 – 11:00	Roger Garbil <i>EC DG RTD, Belgium</i>	Euratom, from research and innovation to demonstration and sustainable technology developments
11:00 – 11:30	Stefano Monti, <i>ENS Brussels, Belgium</i>	R&D&I Contributions to the New Nuclear Renaissance in Europe: the point of view of the European Nuclear Society and its High Scientific Council
11:30 - 12:00	Coffee break / Conference Photo	
12:00 - 12:30	Gabriel Lazaro Pavel, <i>ENEN Belgium</i>	Challenges for nuclear education in Europe, in the current context
12:30 - 13:00	Vladimir Kriventsev <i>IAEA, Vienna, Austria</i>	Review of Innovative Reactors Technology and Related IAEA Activities and Projects
13:00 - 14:00	Lunch break	

Wednesday, May 29

LFR Technology

Diamond Room

Chair: Michele Frignani

Co-chair: Marin Constantin

14:00 - 14:30	<u>Michele Frignani</u> ,	Ansaldo Nucleare, Italy	Roadmap for LFR SMR Development
14:30 - 15:00	Cătalin-Marian Ducu, D. Gugiu, M. Constantin, D. Diaconu, M. Nitoi, M. Apostol, I. Turcu	RATEN, Romania	ALFRED Research Infrastructure in support to LFR SMRs development
15:00 - 15:30	<u>Luciano Cinotti</u> , A. Barbensi, A. Toti, F. Moretti, M. Tarantino, U. Pasquali	newcleo srl; Turin, Italy	newcleo's R&D Programme in Support of Small Modular LFR Technology Development and Deployment
15:30 - 16:00	Coffee break		
16:00 - 16:30	<u>Fredrik Dehlin</u> , Janne Wallenius	KTH, Sweden	Status of LFR design and development in Sweden
16:30 - 17:00	<u>Manuela Profir</u> , V. Moreau	CRS4, Italy	CFD Simulation of Sloshing Phenomena Induced by Seismic Events. Application to ALFRED
17:00 - 17:30	<u>Vladislav Zobnin</u> , J. Neuhausen, R. Eichler	Paul Scherrer Institut, Switzerland	Study on Gas-Phase Tellurium Speciation over Lead-Bismuth Eutectic Melts
17:30 – 18:00	<u>Ana Maria Ivan</u> , M. Hororoï, M. Arva, M. Mincu, D.Gugiu, B.Corbescu, A. Vilcu	RATEN ICN, Pitesti Romania	Experimental Facility for Noble Gas Transport in Liquid Lead

Day 2 – May 30

		Advanced Nuclear Systems and SMRs		Amethyst Room		
		Chair: Marc Schyns		Co-chair: Cristina Margeanu		
Thursday, May 30	9:00 - 9:30	<u>Marin Constantin, Minodora Apostol</u>	RATEN ICN, Pitesti Romania	Severe Accident Investigation for Small Modular Reactors		
	9:30 - 10:00	<u>Irina Sanda, Marc Schyns, Rafaël Fernandez</u>	SCK CEN, Mol Belgium	The Belgian Pre-licensing Approach for MYRRHA		
	10:00 -10:30	<u>Cristina Alice Mărgeanu</u>	RATEN ICN, Pitesti Romania	Assessment of Spent Fuel Inventory and Radioactivity for an iPWR type Fuel Assemblies		
	10:30 - 11:00	<u>Mihaela Roxana Roman, D.V. Ionescu, E. Matei, D.F. Oproiu, D. Dupleac</u>	RATEN ICN, Pitesti Romania	Sensitivity Analysis of ALFRED Fuel Element Behavior		
	11:00 - 11:30 Coffee break					
	11:30 - 12:00	<u>Dan Serbanescu</u>	Nuclearelectrica Romania	An Exegetic Comparison for Various Types of Small Modular Reactors		
	12:00 - 12:30	<u>Donovan Mairé, M. Barbagallo, V. Verma</u>	Transmutex SA, Geneva, Switzerland	Reinventing Nuclear Energy Through START: A Pioneering Thorium-based Fuel Cycle for More Sustainability and Proliferation Safety		
	12:30 – 13:00	<u>Saeed Zare Ganjaroodi, Reza Khorrami Arani, Ehsan Zarifi</u>	University of Technology, Tehran, Iran	Thermal-Hydraulic Analysis of Advanced Nuclear Reactor; A Case Study of Micro Heat Pipe Cooled Reactor		
	13:00 – 14:00 Lunch					

		Nuclear Safety and Nuclear Reactors & Nuclear Fuels		Amethyst Room		
		Chair: Marco Caramello		Co-chair: Ilie Turcu		
Thursday, May 30	14:00 - 14:30	<u>Giorgio Khalil Youssef, M. Caramello, F. Giannetti</u>	Sapienza University of Rome Italy	Preliminary Analysis of ALFRED under Seismic Scenario		
	14:30 - 15:00	<u>Scott Holcombe, Andrey Mushakov, James Forno, Mirea Mladin, Stefan Dulugeac, Georgiana Budriman, Dragos Ionescu, Diana Oproiu</u>	Lightbridge Corporation, Reston, Virginia, U.S.A.	Lightbridge Fuel – Monolithic, Metallic, Multi-lobed, and Helically Twisted Fuel Rods for Use in Water-Cooled Reactors		
	15:00 - 15:30	<u>Mohammadhasan Dehghani, Farshad Faghihi, Seyed Abdollah Shojaei, Saeed Zare Ganjaroodi</u>	University of Technology, Tehran, Iran	Mechanical Effects Evaluation of the Zircaloy Clad in VVER-1000 Reactor Core		
	15:30 - 16:00 Coffee break					
	16:00 - 16:30	<u>Iosif Prodea</u>	RATEN ICN Pitesti Romania	Burnup Penalties for some ATF Options in a CANDU type Reactor		
	16:30 - 17:00	<u>Adrian Florinel Bucsa</u>	RATEN ICN Pitesti Romania	Chlorine Content Determination in Ion Exchange Resins using Neutron Activation Analysis – K ₀ Standardization		

Thursday, May 30

Radioactive Waste Management

Opal Room

Chair: Crina Bucur

Co-Chair: Daniela Diaconu

9:00 - 9:30	<u>Stéphane Poncet</u>	CURIUM, Lyon, France	Recovery of Lead from Nuclear Dismantling
9:30 - 10:00	<u>Rafael H.L Garcia,</u> <u>Y. Kodama, E.F.U. Carvalho,</u> <u>H.G. Riella, D. Schaffer,</u> <u>G.C. Conturbia, S.N. Guilhen</u>	Nuclear and Energy Research Institute - IPEN/CNEN, São Paulo, Brazil	Residue-Free Nuclear Fuel Production at IPEN
10:00 - 10:30	<u>Rémi André,</u> <u>Thierry Gervais</u>	KEP TECHNOLOGIES Lyon, France	Solutions to the Challenges of Nuclear Material and Waste Management, Including Quantification
10:30 - 11:00	<u>Mirela Dulama,</u> <u>Marius Iordache</u>	RATEN ICN Pitesti Romania	Treatment of Mixed Liquid Waste from Radioactive Decontamination: Operational Experience and Research at ICN
11:00 - 11:30 Coffee break			
11:30 - 12:00	<u>Camelia Ichim,</u> <u>Crina Bucur, Simona Laliu,</u> <u>Carmen Manolescu</u>	RATEN ICN Pitesti Romania	Uptake of ⁶³ Ni onto Hardened Cement Paste: Effect of Iron and Organic Molecules
12:00 - 12:30	<u>Crina Bucur, C. Ichim, M. Dianu, C. Diaconescu, A. Stafie, V. Toboşaru</u>	RATEN ICN Pitesti Romania	Measurement of C-14 in Spent Molecular Sieve and Metallic Waste
12:30 - 13:00	<u>Alexandru-Florin Berevoianu-Mira,</u> <u>Raluca Mărginean,</u> <u>Andrei I. Apostol,</u> <u>Larisa-Maria Ganea,</u> <u>Doina Stanciu</u>	IFIN - HH Bucuresti, Magurele Romania	Applications of Non-destructive Analysis Techniques for Characterisation of Materials Found Outside the Regulatory Control
13:00 - 14:00 Lunch			
14:00 - 14:30	<u>Cristina Elena Diaconescu,</u> <u>Magdalena Dianu</u>	RATEN ICN Pitesti Romania	Influence of Co-60 in Separation, Purification and Quantification of Ni-63 from Radioactive Waste Samples
14:30 - 15:00	<u>Simona Laliu,</u> <u>Crina Bucur, Camelia Ichim,</u> <u>Carmen Manolescu</u>	RATEN ICN, Pitesti Romania	Current Status of Geological Disposal Programme and a Review of the Potential Candidate Sites in Romania
15:00 - 15:30 Coffee break			

Thursday, May 30

Radioprotection and Air, Water & Soil Protection

Opal Room

Chair: Cristian Dulama

Co-Chair: Alexandru Toma

15:30 - 16:00	<u>Daniela Stanciu,</u> <u>Gina Zăvoianu</u>	RATEN ICN Pitesti Romania	Determination of Po-210 Content in Environmental Samples by Alpha Spectrometry
16:00 - 16:30	<u>Gina Zavoianu, Monica Valeca, Daniela Stanciu</u>	RATEN ICN Pitesti Romania	Phytoremediation of Uranium from Wastewater using Water Hyacinth (Eichhornia Crassipes)
16:30 - 17:00	<u>Rodica-Valeria Magoreanu,</u> <u>Graţia-Irene Tudor</u>	RATEN ICN Pitesti Romania	The Preliminary Treatment and the Analysis of the Bioassay Samples in the Radiotoxicology Laboratory
17:00 - 17:30	<u>Valentina Neculae, Cristian Dulama, Roxana Iordache, Daniel Dupleac</u>	RATEN ICN Pitesti Romania	Performance Evaluation of LSC Methods for Simultaneous Determination of Gross Alpha-beta Activity in Spike Water Samples

Thursday May 30

Nuclear Technologies and Materials

Topaz Room

Chair: Vasile Radu

Co-Chair: Alexandru Nitu

9:00 - 9:30	<u>Vasile Radu,</u> <u>Livia Stoica, Alexandru Nitu, Alexandra Jinga, Denisa Toma, Mirela Matei, Valentin Olaru</u>	RATEN ICN Pitesti Romania	Models of Crack Initiation and Propagation through the Finite Element Method for the Evaluation of the Zr-2.5%Nb Alloy Pressure Tubes Fracture Toughness
9:30 - 10:00	<u>Livia Stoica,</u> <u>Vasile Radu, Alexandru Nitu, Denisa Toma, Alexandra Jinga, Mirela Matei, Valentin Olaru</u>	RATEN ICN Pitesti Romania	The Integration of Statistical Techniques in the Analysis of Experimental Fracture Mechanics Data for the CANDU Pressure Tube, Zr-2.5%Nb Alloy
10:00 - 10:30	<u>Denisa Toma,</u> <u>Alexandru Nițu, Nicu Bizon, Viorel Ionescu, Livia Stoica, Alexandra Jinga, Mirela Matei, Valentin Olaru, Amalia Popa, Gratiela Badulescu</u>	RATEN ICN Pitesti Romania	Study to Implement 3D Stress-Strain Analysis at Various Temperatures for Standardized Tensile Tests on Gen IV Structural Materials
10:30 - 11:00	<u>Gheorghe Ionita,</u> <u>Gheorghe Titescu, Nicolae Sofilca</u>	ICSI Rm. Valcea, Romania	Compacted Contact Element for Tritium Removal from Heavy Water
11:00 - 11:30 Coffee break			
11:30 - 12:00	<u>Manuela Fulger,</u> <u>V. Lautaru, A. David, C.Samarineanu</u>	RATEN ICN Pitesti Romania	Corrosion of Cladding Materials Candidate for SCW-SMR: Results Obtained in the ECC SMART Project
12:00 - 12:30	<u>Mirela Matei,</u> <u>Vasile Radu, Alexandru Nitu, Livia Stoica, Alexandra Jinga, Valentin Olaru, Denisa Toma</u>	RATEN ICN Pitesti Romania	Simulation of the Collapsing type of the Zircaloy-4 Cladding by Elasto-Plastic Mechanical Fatigue to obtain the Basquin Equation
12:30 - 13:00	<u>Marin Mincu,</u> <u>Ion Man, Octavian Uță, Mihai Bogdan Nedelea</u>	RATEN ICN Pitesti Romania	Measurement of Oxide Layer Thickness on Irradiated Fuel Rods by Eddy Currents Technique
13:00 - 14:00 Lunch			

Thursday, May 30

Sustainable Development

Topaz Room

Chair: Mirela Nitoi

Co-chair: Minodora Apostol

14:00 - 14:30	<u>Karin Popa</u>	EC, JRC, Karlsruhe, Germany	Hands-On Training Activities at the JRC-Karlsruhe and Selected Scientific Output
14:30 - 15:00	<u>Marin Constantin,</u> <u>Minodora Apostol, Daniela Diaconu</u>	RATEN ICN Pitesti Romania	Nuclear Development Scenarios in the Context of Climate Policies and Development of Disruptive Technologies
15:00 - 15:30	<u>Mirela Nitoi,</u> <u>D. Gugiu, A. M. Ivan, M. Apostol, M. Constantin</u>	RATEN ICN Pitesti Romania	RATEN ICN Contributions to ANSELMUS Project
15:30 - 16:00 Coffee break			
16:00 - 16:30	<u>Minodora Apostol,</u> <u>C. Turcanu, R Geysmans, M.Constantin, B. Marinescu, M.C Nila Stratone</u>	RATEN ICN Pitesti Romania	Sociotechnical Integration in Research Labs
16:30 - 17:00	<u>Mirela Nitoi,</u> <u>A. Ikonopoulos, E. Urbonavičius, L. Cizelj, M. Ursić</u>	RATEN ICN Pitesti Romania	Efforts to Achieve Harmonization in the Licensing of Fission and Fusion Power Plants

SIDE EVENTS

30 May 2024

9:00 – 11:00: Diamond Room
Round table:
Romanian Nuclear Industry Potential in support to SMR LFR

17:00 – 18:30: Topaz Room
Carrier Event:
“Opportunities for a successful career in the nuclear field”
organized in the frame of ENEN2plus project

18:30 – 19:00: Opal Room
Nuclear 2024 Awards
Nuclear 2024 Student Awards
Closing Remarks

20:00: Ramada – Coral restaurant
Conference Dinner

Day 3 – May 31

Technical visit at RATEN ICN

Transfer to RATEN ICN provided

Departure from Pitesti:

9:00 – Arges Hotel

9:10 – Hotel Ramada

Departure from ICN: 13:00

POSTER SESSION 1 – May 29, 2024

Advanced Nuclear Systems and SMRs

S1-P1	<u>Georgeta Roxana Bezdedeau</u> , Cristina Alice Mârgeanu, Andreea Filofteia Serbanescu <i>RATEN ICN Pitesti, Romania</i>	Influence of the Absorbent Elements (Gd_2O_3) Distribution in an iPWR type Fuel Assembly on the Cell Neutronic Parameters
S1-P2	<u>Păun Florin Gabriel</u> , Maria-Ioana- Petruța Iliescu <i>RATEN CITON Bucuresti</i>	Calculation of Thermal Stratification in Pools of Passive Safety Systems in Advanced Reactors using Finite Element Calculations
S1-P3	<u>Stana Ana-Maria</u> , Andreea-Irina Ivan <i>RATEN CITON Bucuresti</i>	Simulation of Transient and Accident Scenarios using the iPWR Simulator for the Primary and Secondary Systems in SNRs – iPWR Type
S1-P4	<u>Iulian Pavel Niță</u> , Fabian Stănuță, Ana Maria Stana <i>RATEN CITON Bucuresti</i>	Redesigning of Secondary Circuit of NuScale Reactor in order to Accommodate increase of Power from 50 to 77 MWe
S1-P5	<u>Drașcoș Palas</u> <i>RATEN CITON Bucuresti</i>	Presentation of Conceptual Models of SMR Technology Steam Generators

Nuclear Reactors, Nuclear Fuels

S1-P6	<u>Ciprian Coșar</u> <i>ICSI Râmnicu Vâlcea, Romania</i>	Tritium Management in the context of Next Generation of Nuclear Reactors
S1-P7	<u>Cristian Costea</u> , Mihai Arva <i>RATEN ICN Pitesti, Romania</i>	Data Logging for Thermochemical Stabilization in Helium of Low-Enriched Uranium Fuel Element
S1-P8	<u>Vlad-Andrei Uță</u> , Gina Zăvoianu <i>RATEN ICN Pitesti, Romania</i>	Comparative Study on Obtaining the ^{99}Mo Radioisotope Using LEU Fission or Neutron Activation of Molybdenum
S1-P9	<u>Marius Media, T. Tudorache</u> , Adrian Amzoi, Cristian Mihail Coculescu <i>RATEN ICN Pitesti, Romania</i>	Densification by High-Temperature Induction Heating of LEU-INR Fuel Rod
S1-P10	<u>Nicoleta Gabriela Enache</u> , Ionica Haiducu, Aronela Rădulescu <i>RATEN ICN Pitesti, Romania</i>	Corrosion Coupons Survey of Secondary Cooling System of TRIGA 14MW Reactor
S1-P11	<u>Aronela Rădulescu</u> , Nicoleta Gabriela Enache <i>RATEN ICN Pitesti, Romania</i>	Dimensional Measurements of the LEU Nuclear Fuel Elements from TRIGA SSR 14 MW reactor
S1-P12	<u>Sabin Călin</u> , Marin Mincu, Răzvan Marinescu <i>RATEN ICN Pitesti, Romania</i>	Analysis of Filling Gases from Low Enrichment Fuel Elements by Mass Spectrometry
S1-P13	<u>Aronela Rădulescu</u> , Nicoleta Gabriela Enache <i>RATEN ICN Pitesti, Romania</i>	Implementation of Nuclear Safeguards for Generation IV Reactors
S1-P14	<u>Aronela Rădulescu</u> , Nicoleta Gabriela Enache <i>RATEN ICN Pitesti, Romania</i>	EURATOM Safeguards Enforcement at RATEN ICN Pitesti

Nuclear Safety & Severe Accidents

S1-P15	<u>Maria-Adriana Dutceac</u> , Florina Cristina Constantinescu <i>RATEN ICN Pitesti, Romania</i>	Modelling a Complex System from CANDU6 NPP in a Possible Earthquake Occurrence
S1-P16	<u>Cosmin Ivan</u> , Alexandru Florea, Mirela Nitoi <i>RATEN ICN Pitesti, Romania</i>	Reflections on the Applications of Digital Twin in Nuclear Power Plants

Radioactive Waste Management

S1-P17	<u>Daniela Rotaru</u> , Magdalena Dianu <i>RATEN ICN Pitesti, Romania</i>	Decontamination Efficiency of Cobalt in Aqueous Liquid Waste Treatment Process
S1-P18	<u>Valentin Lăutaru</u> , Aurel David <i>RATEN ICN Pitesti, Romania</i>	Corrosion Behaviour of DC01 Carbon Steel in Environments that Simulate the Chemical Conditions of the Pore fluids of some Conditioning Matrices
S1-P19	<u>Aurel David</u> , Valentin Lautaru, Doinita Ciurcu, Manuela Fulger <i>RATEN ICN Pitesti, Romania</i>	Assessment of Corrosion Behavior of AlMg3 in Two Conditioning Matrices with Different Chemistry: Portland Cement Matrix and MKPC Matrix
S1-P20	<u>Aronela Rădulescu</u> , Silviu Stanciu <i>RATEN ICN Pitesti, Romania</i>	Nuclear Safeguards Implementation in Case of Radioactive Waste and Spent Nuclear Fuel Management
S1-P21	<u>Aronela Rădulescu</u> , Silviu Stanciu <i>RATEN ICN Pitesti, Romania</i>	Nuclear Safeguards Concepts and Requirements in Case of TRIGA Spent Nuclear Fuel Management

Research Infrastructure

S1-P22	<u>George Serbanescu</u> , Andreea Serbanescu, Madalin Soare <i>RATEN ICN Pitesti, Romania</i>	Application for Image Analysis and Processing using Artificial Neural Networks
S1-P23	<u>Mugurel Ungureanu</u> , Darie Predescu <i>RATEN ICN Pitesti, Romania</i>	Technical Study for Hands-On Installation Layout

Education, Continuous Learning and Knowledge Management

S1-P24	<u>Ileana Violeta Gondac</u> , Cristina Gratiela Badulescu, Maria Adriana Dutceac <i>RATEN ICN Pitesti, Romania</i>	Aspects of nuclear Knowledge Management Activities at Institute for Nuclear Research Pitesti
S1-P25	<u>Ileana Cretu</u> , Cristian Dulama, Eleonora Florea, Mihaela Petra <i>RATEN ICN Pitesti, Romania</i>	Public Education Activities Carried Out within the Information Center at Institute for Nuclear Research Pitesti
S1-P26	<u>Andreea Alexandru</u> , Luminita Nitulescu, Monica Valeca <i>RATEN ICN Pitesti, Romania</i>	Thermal-hydraulic Analysis of Loop-type Installations using the RELAP-MOD4 Code
S1-P27	<u>Alexandru Gabriel Nută</u> , Roxana Mihaela Roman, Monica Valeca <i>National University of Science and Technology POLITEHNICA University Center, Pitești, Romania</i>	Contributions to Fuel Element Behavior Assessment using the Finite Element Method
S1-P28	<u>Cristian Grigore</u> , Monica Valeca, Mirea Mladin	Computational Fluid Dynamics (CFD) with Application in Nuclear Plant Thermohydraulics

	<i>National University of Science and Technology POLITEHNICA University Center, Pitești, Romania</i>	
S1-P29	<u>Bogdan Puiu</u> , Monica Valeca, Dumitru Puiu <i>National University of Science and Technology POLITEHNICA University Center, Pitești, Romania</i>	Fuel Bundle Testing Rig Modernization
S1-P30	<u>Mihai Nedelea</u> , Ion Man, Monica Valeca <i>National University of Science and Technology POLITEHNICA University Center, Pitești, Romania</i>	New Techniques for Examining Nuclear Fuel and Structural Materials
S1-P31	<u>Iuliana Varga</u> , I. Stanciu, G. Gabriel <i>National University of Science and Technology POLITEHNICA University Center, Pitești, Romania</i>	Robot Arm with AI for Spent Fuel Manipulation from CANDU Reactor

POSTER SESSION 2 – May 30, 2024

Nuclear Technology and Materials

S2-P1	<u>Felicia Vasut</u> <i>ICSI Râmnicu Vâlcea, Romania</i>	Producing a New Catalyst for Hydrogen Isotopes Recombination
S2-P2	<u>Alexandra Jinga</u> , Vasile Radu, Alexandru Nitu, Livia Stoica, Denisa Toma, Mirela Matei, Valentin Olaru, Amalia Popa <i>RATEN ICN Pitești, Romania</i>	Development of the Hydride Continuity Coefficient metric to characterize zirconium hydrides at flaws in CANDU pressure tube
S2-P3	<u>Valentin Olaru</u> , Daniel Petrescu, Livia Stoica, Alexandra Jinga, Denisa Toma, Mirela Matei, Amalia Popa, Marius Constantinescu <i>RATEN ICN Pitești, Romania</i>	Study of Lead-Exposed 316L Steel using the "Small Punch Test" Method
S2-P4	<u>Alexandru Nitu</u> , Vasile Radu, Viorel Ionescu, Denisa Toma, Livia Stoica, Alexandra Jinga, Mirela Matei, Valentin Olaru, Amalia Popa, Gratiela Badulescu <i>RATEN ICN Pitești, Romania</i>	Development of the Non-standardized Pin-Loading Test Method to Obtain the Fracture Mechanics Parameters of Zircaloy-4 Cladding Tube
S2-P5	<u>Mihai Arva</u> , Cristian Costea <i>RATEN ICN Pitești, Romania</i>	Automation System Using Siemens S7-1200 PLC for Oxygen and Lead Corrosion Control System
S2-P6	<u>Mihai Arva</u> , Cristian Costea <i>RATEN ICN Pitești, Romania</i>	Review of Instrumentation and Process Control Used in Molten Lead Facilities for Severe LFR Accident Investigation
S2-P7	<u>Constantin Adrian Robea</u> , Ionuț Dobrin <i>RATEN ICN Pitești, Romania</i>	Device for Extracting the Radiological Protection Plug Stuck in the Fuel Channel – Conceptual Method
S2-P8	<u>Mircea Dafin Popescu</u> , Denis-Gabriel Dima, Ionuț Dobrin, Ciprian-Ion Maria <i>RATEN ICN Pitești, Romania</i>	CANDU Fuelling Machine Cold Test Facility – Start-up Routine Based on Operating Assisting Flow Charts
S2-P9	<u>Irina Sturzeanu</u> , Mariaea Deaconu, Mihaela Florea <i>RATEN ICN Pitești, Romania</i>	Hydrogen Storage as Metal Hydrides – A Review of Concepts Needed in Understanding H ₂ Sorption – Desorption Processes

S2-P10	<u>María Cristina Radulescu</u> , Mugurel Ungureanu <i>RATEN ICN Pitesti, Romania</i>	Water Injection into the Fuel Channel using Hot Thermomechanical Loop from Fuelling Machine Testing Rig
S2-P11	<u>Nicolae Anghel</u> , Mugurel Ungureanu <i>RATEN ICN Pitesti, Romania</i>	Determining the Operating Condition of an Electric Motor Based on the Spectral Analysis of the Generated Mechanical Vibrations
S2-P12	<u>Viorel Ionescu</u> , Alexandru Nitu, Denisa Toma, Livia Stoica, Alexandra Jinga, Valentin Olaru, Amalia Popa, Mirela Matei, Gratiela Badulescu <i>RATEN ICN Pitesti, Romania</i>	The Initiation of Fatigue Cracking in Zr-2.5%Nb CANDU Pressure Tube at Typical End-of-Life Hydrogen Concentrations
S2-P13	<u>Madalin Soare</u> , George Serbanescu <i>RATEN ICN Pitesti, Romania</i>	Integrated Hardware/Software Solution for Monitoring and Control Thermal Processes in Nuclear Installations
S2-P14	<u>Diana Mirită</u> , Andreea Polici, Cosmina Lazăr, Marin Mincu <i>RATEN ICN Pitesti, Romania</i>	The Role of 99Mo-Zr Gel in 99Mo/ 99mTc Generators Produced by Neutron Activation of Molybdenum
S2-P15	<u>Dobrin Ionuț</u> , Denis-Gabriel Dima, Ciprian-Ion Maria, Mircea Dafin Popescu <i>RATEN ICN Pitesti, Romania</i>	High-Performance Human-Machine Interface for Demineralized and Degassed Water Supply System of CANDU Fuelling Machine Testing Loop
S2-P16	<u>Nicolae Tiberiu Ciobanu</u> , Adriana Gabriela Schiopu, Mariana Postelnicu, Gabriela Tudorache, Valentin Olaru, Aurel David <i>RATEN ICN Pitesti, Romania</i>	Experimental Studies of the Binary System Zr-Er
S2-P17	<u>Cornelia Guta</u> , Cristian Costea <i>RATEN ICN Pitesti, Romania</i>	Information System for the Management of Data Related to Lifting Installations and Equipment
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S2-P35	<u>Rodica-Valeria Maghareanu</u> , Vlad-Andrei Uță Gratiela-Irene Tudor <i>RATEN ICN Pitesti, Romania</i>	Overview Regarding Urine Tritium Determination in Internal Dosimetry Measurements