



RATEN
ICN
PITEȘTI



NUCLEAR 2026

20 - 22 May
Pitești
ROMANIA

The 16th
International Conference
on Sustainable Development
through Nuclear Research
and Education



organized by **RATEN ICN Pitești**
under the auspices of the **Romanian Academy**
in cooperation with **National University Alliance for Nuclear Energy**,
the **Academy of Romanian Scientists**
and the **Technical Sciences Academy of Romania**



conference
pr  **gram**

Day 1		Day 2			Day 3
Conference Hall		Conference Hall	Room A	Room B	RATEN ICN
09:30	Welcome	Nuclear Materials and Technologies	Radioactive Waste Management	Education and Training	Technical visit at RATEN ICN: TRIGA reactor, Hot Cells, ATHENA Chemlab
09:35	Keynotes				
10:05	Invited speakers				
11:05	Conference Photo&Coffee	Coffee break			
11:30	Invited speakers	Nuclear Materials and Technologies	Radioactive Waste Management	Round table: E&T – current challenges and perspectives	
13:00	Sponsors' session				
13:30	Lunch Break	Lunch Break			
14:30					
Conference Hall		Conference Hall	Room A		
14:30	LFR Technology	Advanced Nuclear Systems and SMRs	Radioprotection and Air, Water and Soil Protection		
15:30	Coffee break	Coffee break			
16:00	LFR Technology	Nuclear Safety, Nuclear Reactors and Nuclear Fuels			
		Conference Hall			
17:30		Nuclear 2026 Awards Nuclear 2026 Student Awards			
19:30	Conference dinner (Ramada Hotel)				

Transfer to the Conference venue:

- from Ramada Hotel – 8:30
- from Ibis Hotel parking – 8:35

ID card/passport is mandatory to access the Conference venue!

Day 1 – May 20

Opening session Conference Hall

Wednesday, May 20	9:30 - 9:35	Welcome by Daniela Diaconu (Director RATEN ICN) and Octavian Uță (Director General RATEN)	
	Keynotes		
	9:35 - 9:45	Marius-Viorel Poșa - Ministry of Energy, Romania	
	9:45 - 9:55	Constantin Saragea - Ministry of Investments and European Projects, Romania	
	9:55 - 10:00	Cantemir Ciurea-Ercău, CNCAN, Romania	
	10:00 - 10:05	Local authorities	
	Invited speakers		
	10:05 - 10:15	William Magwood NEA/OECD, France	Message from NEA/OECD
	10:15 - 10:40	<u>Domenico Rossetti Di Valdalbero</u> <i>EC DG RTD, Belgium</i>	The European Nuclear Research Priorities – Euratom in Action
	10:40 - 11:05	<u>Alina Constantin</u> <i>IAEA, Austria</i>	Advances in SMR Technology Development
	11:05 - 11:30	Coffee break / Conference Photo	
	11:30 - 11:50	Cosmin Ghită SNN, Romania	The Nuclear Power Programme in Romania
	11:50 - 12:10	Mihnea Costoiu, Politehnica Univerity Center, Romania	Nuclear Education Today
	12:10 - 12:35	Gheorghe Ioniță, RATEN, Romania	50 years of Heavy Water in Romania
	12:35 - 13:00	Daniela Diaconu, RATEN ICN, Romania	RATEN ICN: Looking ahead
	Sponsors' session		
	13:00 - 13:10	Marius Găbreanu, NUTECHNOLOGY, Romania	NUTECHNOLOGY - Your one-stop industrial 3D Printing Partner
	13:10 - 13:20	Rucsandra Săpoi, DOSITRAKER, Romania	Dositracker - Complete solutions in radiation protection
	13:20 - 13:30	Cătălina Iacob, VERDER, Romania	Advanced Laboratory Solutions for Nuclear Applications
	13:30 - 14:30	Lunch break	

Wednesday, May 20

LFR Technology		Conference Hall	
<i>Chair: Michele Frignani</i>		<i>Co-chair: Marian Cătălin Ducu</i>	
14:30 - 14:55	Roberto Adinolfi	AnsaldoNucleare, Italy	The EAGLES Consortium: a European Collaborative Endeavour
14:55 - 15:20	Michele Frignani	AnsaldoNucleare, Italy	EAGLES-300 Vision and Strategy: An Integrated LFR Roadmap
15:20 - 15:45	Marian Cătălin Ducu	RATEN, Romania	Romanian Contribution to SMR LFR Development
15:45 - 16:15 Coffee break			
16:15 - 16:40	Vincent Schryvers	SCK.CEN, Belgium	LEANDREA: Fast-Tracking LFR Deployment
16:40 - 17:05	Luca Maciocco	newcleo, Italy	Newcleo's Outlook: Delivering Our Gen-IV Vision
17:05 - 17:30	Marin Constantin	RATEN ICN Pitesti Romania	LFR SMRs in Future Energy Systems: Market Drivers, Technology Readiness, and Commercialization Constraints

19:30 – Dinner – Dimond Hall, Ramada Hotel

Day 2 – May 21

Nuclear Technologies and Materials			Conference Hall
<i>Chair: Vasile Radu</i>			
9:30 - 9:55	<i>Francisco García Ferré, Cyril Pudoyer, Andrea Ventrella, Enrico Virgillito, <u>Luca Silviali</u>, Lucas Autones, Mariano Tarantino, Andrea Barbensi, Luciano Cinotti</i>	<i>newcleo Italy</i>	NEWCLEO'S Strategy for Materials & Chemistry Implementation: Team, Infrastructure and Recent Highlights on Standard Steels, Coatings, New Materials, Chemistry and Irradiations
9:55 – 10:20	<i><u>Luca Silviali</u>, Giacomo Gregori, Guido Gerra, Serena Bassini, Dario Diamanti, Marco Utili, Francisco García Ferré, Mariano Tarantino, Luciano Cinotti</i>	<i>newcleo Italy</i>	LFR Coolant Chemistry R&D: Facilities, Activities and Results on Oxygen and Impurity Control in Normal and Accidental Scenarios
10:20 - 10:45	<i><u>Alexandru Nitu</u>, C. Ducu, D. Diaconu, V. Radu, T. Sireteanu, D. Constantinescu, G. Matache, A. Paraschiv, M. Boțan, R. R. Piticescu</i>	<i>RATEN ICN Pitesti Romania</i>	Overview of Centre of Excellence for Emergent and Digital Technologies for Advanced Materials Resilient to Extreme Conditions and Hostile Environments
10:45 – 11:10	<i><u>Vasile Radu</u>, Alexandru Nitu, Roxana Oprescu, Valentin Olaru, Amalia Popa, Alexandra Jinga, Mirela Matei, Denisa Toma</i>	<i>RATEN ICN Pitesti Romania</i>	RATEN ICN Research Activities Developed in the Framework of INNUMAT European Project
11:10 - 11:30 Coffee break			
11:30 - 11:55	<i><u>Daniel Paparagica</u>, Juliana Roman, Diana Diniasi, Melania Motea, Raluca Sindie</i>	<i>RATEN ICN Pitesti Romania</i>	Evaluation of a Thermally Aged Iron-Based Diffusion Alloy Candidate for Gen IV Reactors
11:55 - 12:20	<i><u>Livia Stoica</u>, Vasile Radu, Alexandru Nitu, Viorel Ionescu, Valentin Olaru</i>	<i>RATEN ICN Pitesti Romania</i>	The Normalization Method Applied on the Curved Compact Tension Samples Typical of the CANDU Pressure Tube to Obtain the <i>J-R</i> Resistance Curve
12:20 - 12:45	<i><u>Diana Diniasi</u>, Doinița Ciurcu, Daniel Paparagică, Raluca Sindie, Melania Moțea, Manuela Fulger</i>	<i>RATEN ICN Pitesti Romania</i>	Corrosion Performance of Two Chromium Coatings Deposited on Zircaloy-4
12:45 – 13:10	<i>Mariea Deaconu, <u>Irina Sturzeanu</u>, Iulia Dumitrescu, Daniel Paparagica, Valentin Olaru, Aurel David</i>	<i>RATEN ICN Pitesti Romania</i>	Preliminary Studies on the Obtaining and Structural Characterization of the Intermetallic Compound FeTi with Partial Mn Substitution by Powder Metallurgy Method
13:10 – 14:00 Lunch			

Thursday May 21

Thursday, May 21

Advanced Nuclear Systems and SMRs			Conference Hall
<i>Chair: Marin Constantin</i>		<i>Co-chair: Cristina Margeanu</i>	
14:00 - 14:25	<u>John Saroudis</u>	Laurentis Energy Partners, Canada	The OPG's BWRX-300 SMR project
14:25 - 14:50	<u>Mădălina-Iuliana Roman, Marin Constantin, Daniel Paparagică</u>	RATEN ICN Pitesti Romania	Towards a One-Dimensional Model for the Volatile Fission Products Transport to the cover Gas in a Lead-Cooled Fast Reactor
14:50 - 15:15	<u>Mihaela Roxana Roman, Adrian Arjoca, Bogdan Corbescu, Andreea Moise, Robert Muşoiu, Diana Oproiu, Elena Stoica</u>	RATEN ICN Pitesti Romania	An Overview of HELENA 2: From Concept to Early Research Activities for LFR Technology
15:15 - 15:40	<u>Fako Raluca Madalina, Beznila Hortensia, Meglea Sorin George</u>	RATEN CITON Romania	Gap Between Planning and Execution in EPC Projects: The Impact of Scheduling on Design, Procurement, and Construction
15:40 - 16:00 Coffee break			

Thursday, May 21

Nuclear Safety and Nuclear Reactors & Nuclear Fuels			Conference Hall
<i>Chair: Marin Constantin</i>		<i>Co-chair: Cristina Margeanu</i>	
16:00 - 16:25	<u>Iosif Prodea, Scott Holcombe, Andrey Mushakov, Christopher Kirby</u>	RATEN ICN Pitesti Romania	Neutronic Analyses of Metallic U-Zr Fuel Types in CANDU Reactors
16:25 - 16:50	<u>Alina-Cristina Ivaşcu, Dragoş-Victor Ionescu, Alexandru-Gabriel Nuţă, Ioana Neaşcu</u>	RATEN ICN Pitesti Romania	Modelling of Fission Gas Release in Chromia Doped Fuel using FEMAXI-6 Computer Code
16:50 - 17:15	<u>Cristina Alice Margeanu</u>	RATEN ICN Pitesti Romania	Effects of Cladding Coatings on the Characteristic Parameters of Spent Accident Tolerant Fuel
17:15 - 17:40	<u>Maria Adriana Dutceac</u>	RATEN ICN Pitesti Romania	Fire Dynamics Simulation and Risk Assessment in a TRIGA Nuclear Research Reactor Control Room using FDS Code

Radioactive Waste Management			Room A (S3)	
Chair: Crina Bucur		Co-Chair: Raluca Fako		
Thursday, May 21	9:30 - 9:50	<u>Crina Bucur</u> , Diederik Jacques, Meritxell Gran, Frank Lemy, Pierre Henocq, Tiziana Missana, Georg Kosakowski, Oleksandr Soloviov	RATEN ICN Pitesti Romania	Optimizing Near-Surface Disposal through Knowledge and Understanding – Progress of the SUDOKU WP of EURAD-2
	9:50 – 10:10	<u>Camelia Ichim</u> , Crina Bucur, Cătălin Badea, Marius Iordache, Cristina Diaconescu, Ionuț Florea, Andreea Militaru	RATEN ICN Pitesti Romania	Characterization of Caesium Diffusion in Argillaceous Formations
	10:10 - 10:30	<u>Ionuț Florea</u> , Eleonora Florea, Cristina Diaconescu	RATEN ICN Pitesti Romania	Optimization of the Setting Time and Mechanical Strength of Mortars Based on MKPC
	10:30 – 10:50	<u>Mirela Dulama</u> , Mirela Olteanu, Crina Bucur, Marius Iordache	RATEN ICN Pitesti Romania	Optimization of the Fenton Digestion Process for the Treatment of Spent Ion Exchange Resins
	10:50 – 11:10	<u>Cristina Diaconescu</u> , Magda Diana, Ionuț Florea, Camelia Ichim	RATEN ICN Pitesti Romania	Scaling Factor Determination Algorithm for ^{63}Ni and ^{90}Sr Quantification from TRIGA Liquid Radioactive Waste
	11:10 – 11:30	<u>NITA Iulian</u> , Pantazi Doina	RATEN CITON Romania	Exploring the Possibility of Disposing of Spent Nuclear Fuel from CANDU 6 and NuScale SMR in a Deep Geological Repository
11:30 - 12:00 Coffee break				

Radioprotection and Air, Water & Soil Protection			Room A (S3)	
Chair: Cristian Dulama		Co-Chair: Alexandru Toma		
Thursday, May 21	12:00 – 12:25	<u>Valentina Neculae</u> , Cristian Dulama, Roxana Iordache, Rodica Magoreanu	RATEN ICN Pitesti Romania	A Systematic Approach for the Assessment of Internal Dose in Occupational Exposure Scenarios
	12:25 - 12:50	<u>Rodica Magoreanu</u> , Valentina Neculae, Elena Geangavelea, Alexandra Bucur	RATEN ICN Pitesti Romania	RATEN ICN Participation in the Annual Proficiency Testing Programs (Tritium in Urine) under the Auspices of PROCORAD
	12:50 - 13:15	<u>Daniela Stanciu</u> , Gina Zăvoianu, Monica Valeca, Magdalena Cornea	RATEN ICN Pitesti Romania	Evaluation of ICP–OES Method Performance for Lead Determination in Environmental Samples
	13:15 - 13:40	<u>Ion Popescu</u> Alexandru Toma	RATEN ICN Pitesti Romania	A Questionable Change in Radiation Protection Policy
	13:40 – 14:00 Lunch			

Thursday, May 21

Education and Training		Room B (Red Hall)	
<i>Chair: Gabriel Pavel</i>		<i>Co-chair: Sorin Fianu</i>	
9:30 - 9:50	<u><i>Gabriel Pavel</i></u>	ENEN, Belgium	European support and opportunities for students and researchers
9:50 – 10:20	<u><i>Raluca Andreea Nedelcu</i></u>	SNN Romania	Nuclear growth starts with talent: Romania's Workforce for tomorrow
10:20 - 10:40	<u><i>Vosile Bercu</i></u>	University of Bucharest, Romania	ANUEN: a national initiative towards a sustainable human resource for the Romanian nuclear programme
Round table: Education & Training (E&T) – current challenges and perspectives <i>Moderator: Marin Constantin</i>			
<i>Topics to be addressed:</i>			
10:40 - 11:40	1. Realistic sizing of personnel needs 2. The skills gap in employment 3. Dual and vocational education 4. Practice, internship and real exposure 5. Retention and knowledge transfer	6. Attractiveness of the nuclear field 7. International competition for real talents 8. Adaptation to new technologies (SMR, Gen IV) 9. The role of industry in education 10. National coordination and accountability	
11:40 – 12:00	Coffee break		

Day 3 – May 22

Technical visit at RATEN ICN

Technical visit at RATEN ICN		
Thursday, May 22	8:30 – 9:00	Transfer to RATEN ICN
	9:00 – 9:15	Access formalities <i>Passport/ID mandatory</i>
	9:15 – 12:30	Technical Visit TRIGA research reactor, Hot Cells Facility, ATHENA and Chemlab
	12:30 – 13:00	Lunch
	13:00 -13:45	Transfer to Pitesti

POSTER SESSION 1 – May 20, 2026

Generation IV & LFR Technology

S1-P1	<u>Negrea Raluca Florentina</u> , Negrea Aurelian Denis <i>RATEN ICN Pitesti, Romania</i>	Advanced Small Modular Reactors and Microreactors: Technology Review and Design Comparison
S1-P2	<u>Elena Stoica</u> , Adrian Arjoca, Bogdan Corbescu <i>RATEN ICN Pitesti, Romania</i>	Preliminary Subchannel Analysis of the HELENA 2 Fuel Pin Simulator
S1-P3	<u>Georgeta N. Maria</u> , Darie Predescu <i>RATEN ICN Pitesti, Romania</i>	From Water-Born Suspensions to Liquid-Lead Dispersions: Solid Particulates Characterization in LFR Relevant Circuits and Their Operational

Nuclear Reactors

S1-P4	<u>Bogdan Venescu</u> , Ramona Venescu, Marius Media <i>RATEN ICN Pitesti, Romania</i>	Enhancing TRIGA Research Reactor Nuclear Safety by Using a Modern Control Console Architecture
S1-P5	<u>M. Media</u> , B. Venescu, A. Amzoi <i>RATEN ICN Pitesti, Romania</i>	Study of the Induction Heating Process Parameters for the Brazing of Instrumented Feedthroughs of the UZrH1.6 Moderator Fuel Element – ACPR Model
S1-P6	<u>Nicolae Alexandru Mihai</u> , Stoenescu Ștefan, Enache Nicoleta Gabriela <i>RATEN ICN Pitesti, Romania</i>	Radioisotope Production Capabilities at INR Pitesti using TRIGA Research Reactor
S1-P7	<u>Roxana Bezdedeau</u> , Iosif Prodea, Roxana Vaduva <i>RATEN ICN Pitesti, Romania</i>	Neutronic Behavior of ATF Candidates in CANDU reactors
S1-P8	<u>Vasiloiu Florina</u> , Sabie Adrian, Blanaru Bogdan Mihail <i>RATEN CITON, Romania</i>	Risk Analysis of Electric Arc Incidents in the Power Stations of the Cernavoda NPP

Nuclear Safety & Severe Accidents Management

S1-P9	<u>Ileana Cretu</u> , Mita Farcasiu, Diana Ureche, Mihaela Petra, Eleonora Florea <i>RATEN ICN Pitesti, Romania</i>	Improving Organizational Culture in the Field of Nuclear and Radiological Safety in RATEN ICN
S1-P10	<u>Oana Popescu</u> , Catalin Ionescu <i>RATEN ICN Pitesti, Romania</i>	Theoretical Study on Digital Twin Methodology Applicable to the TRIGA Reactor
S1-P11	<u>Palas Dragos</u> <i>RATEN CITON, Romania</i>	NuScale Project (SMR PWR) VS Classic PWR
S1-P12	<u>Popovici Razvan</u> , VLAD Magdalena, BLANARU Bogdan-Mihail <i>RATEN CITON, Romania</i>	Feasibility of Artificial Intelligence Implementation in Nuclear Power Plants within the Industry 4.0
S1-P13	<u>Vlad Magdalena</u> , POPOVICI Razvan, BLANARU Bogdan-Mihail <i>RATEN CITON, Romania</i>	The Impact of Artificial Intelligence on the Human Factor in Nuclear Power Plants

Radioactive Waste Management

S1-P14	<u>Maria-Andreea Militaru</u> , Mirela Dulama, Mirela Olteanu <i>RATEN ICN Pitesti, Romania</i>	Processes Affecting Performance in Direct Cementation Of Spent Ion-Exchange Resins
S1-P15	<u>D. Rotaru</u> , C. Diaconescu, A. Militaru <i>RATEN ICN Pitesti, Romania</i>	Efficiency of Selective Cobalt Retention from Liquid Radioactive Waste Using Puroilite Resin
S1-P16	<u>Ionut Florea</u> , Daniel Paparagică, Eleonora Florea, Cristina Diaconescu	Impact of CO ₂ Concentration on the Mechanical Properties and Mineralogical Composition of Mortars
S1-P17	<u>Catalin Badea</u> , Sergiu Petrescu, Ovidiu Ichim, Marian Hororoï, Crina Bucur <i>RATEN ICN Pitesti, Romania</i>	Experimental Setup for Assessing Radionuclide Release from CANDU Spent Fuel Under Relevant Geological Disposal Conditions
S1-P18	<u>Mirela Olteanu</u> , Mirela Dulama, Marius Iordache, Crina Bucur <i>RATEN ICN Pitesti, Romania</i>	Immobilization of Spent Ion-Exchange Resins: Challenges and Current Status
S1-P19	<u>Mirela Olteanu</u> , Marius Iordache, Crina Bucur <i>RATEN ICN Pitesti, Romania</i>	Optimization and Validation of a Radiochemical Method for ⁹⁹ Tc Determination in Complex Radioactive Waste Matrices

Radioprotection & Air, Water and Soil Protection

S2-P20	<u>Andreea Ionita</u> , Gratiela Tudor <i>RATEN ICN Pitesti, Romania</i>	Evaluation and Selection of Atmospheric Dispersion Modeling Codes and Radiological Consequence Assessment Relevant to the Specific Conditions and Types of Nuclear Facilities in Romania
S2-P21	<u>Faurescu Ionut</u> , Faurescu Denisa, Bogdan Diana, Ciolacu Silvia <i>ICSI Râmnicu Vâlcea, Romania</i>	PEM-Based System for Enriching Low-Level Tritium in Environmental Water Samples
S2-P22	<u>Ciolacu Silvia</u> , Faurescu Ionut, Faurescu Denisa, Bogdan Diana <i>ICSI Râmnicu Vâlcea, Romania</i>	Tritium Level in Precipitations Recorded in Rm. Vâlcea, Romania for the Period 1999-2024

Research Infrastructure

S1-P23	<u>Stefan Stoescu</u> , Diana Stoescu, Constantin Stoescu <i>RATEN ICN Pitesti, Romania</i>	Preliminary Geometric Modeling of the TRIGA ACPR and Associated Beam Channels Using GEANT4
S1-P24	<u>Liviu Stefan</u> , George Ana, George Bulubasa, Anisia Bornea, Marius Zamfirache, Ovidiu Balteanu, Ciprian Bucur, Sorin Marinescu, Marius Dumitrescu, Tatiana Oprea, Dan Mocanu <i>INCDTCl ICSI Rm. Valcea, Romania</i>	TRIVALCEA – A New Demonstrative Facility for Tritium R&D in Romania

POSTER SESSION 2 – May 21, 2026

Advances Materials & Nuclear Technologies

S2-P1	<u>Mariana Postelnicu</u> , Iulia Dumitrescu, Ciobanu Tiberiu, Alexandru Muşat, Emanuel Bădulescu <i>RATEN ICN Pitesti, Romania</i>	Types of Oxides Used for Grain Growth in Sintered UO ₂ Pellets
S2-P2	<u>Aurelia Elena Tudose</u> , Manuela Fulger, David Aurel, Alexandru Anghel, Raluca Sindie, Maria Prodea <i>RATEN ICN Pitesti, Romania</i>	Characterization of CrNx-Coated Incoloy 800HT Alloy after Oxidation in Water at High Temperature and Pressure
S2-P3	<u>I. Dumitrescu</u> , M. Deaconu, M. Postelnicu, I. Strurzeanu, M. Florea <i>RATEN ICN Pitesti, Romania</i>	Physicochemical Characterization of ADU-Derived UO ₂ Powder for Simulated Nuclear Fuel Applications in Generation IV Safety Research
S2-P4	<u>Ion Vlăduţ-Costin</u> , Rusu Oana Alice <i>RATEN ICN Pitesti, Romania</i>	Evaluating Metallic Barrier Layers For Cr-Coated ATF Claddings: A Comparative Review And Performance Assessment
S2-P5	<u>Gratiela Badulescu</u> , Vasile Radu, Alexandru Niţu, Viorel Ionescu, Denisa Toma, Amalia Popa, Livia Stoica, Alexandra Jinga, Mirela Matei, Valentin Olaru <i>RATEN ICN Pitesti, Romania</i>	Study on the Development of the Mechanical Burst Testing Method for Determining the Biaxial Mechanical Properties of Structural Materials from the Steam Generator
S2-P6	<u>Amalia Popa</u> , Alexandru Niţu, Vasile Radu, Viorel Ionescu, Denisa Toma, Gratiela Bădulescu, Alexandra Jinga, Livia Stoica, Valentin Olaru, Mirela Matei <i>RATEN ICN Pitesti, Romania</i>	Overview on the Steam Generator Technology Concepts Proposed For LFR
S2-P7	<u>Amalia Popa</u> , Vasile Radu, Alexandru Niţu, Viorel Ionescu, Denisa Toma, Gratiela Bădulescu, Alexandra Jinga, Livia Stoica, Mirela Matei, Valentin Olaru <i>RATEN ICN Pitesti, Romania</i>	Critical Analysis of Models Regarding the Representation of the Elasto-Plastic Behavior of Materials through Constitutive Equations of the $\sigma=f(\epsilon)$ Type
S2-P8	<u>Mirela Matei</u> , Vasile Radu, Alexandru Nitu, Livia Stoica, Alexandra Jinga, Valentin Olaru, Denisa Toma, Amalia Popa, Gratiela Badulescu <i>RATEN ICN Pitesti, Romania</i>	Study of the Zircaloy-4 Cladding Mechanical Fatigue Properties by Ring Tensile Tests to Obtain the Influence of Hydrogen on Fatigue Life Criteria
S2-P9	<u>Alexandra Jinga</u> , Vasile Radu, Alexandru Nitu, Livia Stoica, Denisa Toma, Mirela Matei, Valentin Olaru, Amalia Popa, Gratiela Badulescu <i>RATEN ICN Pitesti, Romania</i>	Study on the Developed Models Regarding the Phenomenon of Liquid Metal Embrittlement (LME) with the Main Characteristics, Advantages, Limitations and Open Issues
S2-P10	<u>Livia Stoica</u> , Vasile Radu, Alexandru Nitu, Denisa Toma, Alexandra Jinga, Mirela Matei, Amalia Popa, Gratiela Badulescu <i>RATEN ICN Pitesti, Romania</i>	The Inferential Statistical Technique Applied for Data Description of Tensile Properties of AISI 316L From MatDB European Database to Obtain the Ramberg-Osgood Constitutive Equation
S2-P11	<u>Mihaela Florea</u> , Irina Sturzeanu, Marica Deaconu <i>RATEN ICN Pitesti, Romania</i>	Synthesis Methods in Obtaining Intermetallic Compounds for Hydrogen Isotope Storage Applications
S2-P12	<u>Ciobanu Nicolae Tiberiu</u> , Şchiopu Adriana Gabriela, Postelnicu Mariana <i>RATEN ICN Pitesti, Romania</i>	Manufacturing Methods of Metal Hydride Nuclear Fuel: A Systematic Literature Review
S2-P13	<u>Mariana Pătrascu</u> , Elisabata Coaca, Oana Rusu <i>RATEN ICN Pitesti, Romania</i>	Current Status of the Development of Ceramic Barrier Layers Between Chromium Coatings and Zircaloy-4 for ATF-Type Fuels

S2-P14	<u>Irina Sturzeanu, Marica Deaconu, Daniel Paparagică</u> <i>RATEN ICN Pitesti, Romania</i>	Powder Metallurgy Synthesis of Intermetallics for Hydrogen Isotopes Storage Applications
S2-P15	<u>N. Anghel, R. Năstase, A. Avram</u> <i>RATEN ICN Pitesti, Romania</i>	Predictive Maintenance of Nuclear Facility Pipeline Systems Using Spectral Analysis of Mechanical Vibrations
S2-P16	<u>Simona Drăgut, Bogdan Puiu, Dumitru Puiu</u> <i>RATEN ICN Pitesti, Romania</i>	Accelerated Thermal Ageing of Flame-Retardant FR-XLPE Insulated Power Cables
S2-P17	<u>Georgiana Ionescu, Dumitru Puiu</u> <i>RATEN ICN Pitesti, Romania</i>	Experimental Investigation of Electrohydraulic Deformation with Fusible Wire for Steam Generator Tube Plugging
S2-P18	<u>Vilău Maria-Magdalena, Niță Cristina, Predescu Darie, Dobrin Ionuț</u> <i>RATEN ICN Pitesti, Romania</i>	Design Parameters and Electromagnetic Protection Solutions for Advanced CANDU Thermohydraulic Testing Infrastructure
S2-P19	<u>Cătălin Ionescu, Adrian-Petru Barbu, Ionuț Gabriel Nedelea, Bogdan Teodor Godea</u> <i>RATEN ICN Pitesti, Romania</i>	Integrated Control System for The Installations on the LEU Fuel Rod Manufacturing Line

Nuclear Education & Training

S1-P20	<u>Ionuț Gabriel Nedelea, Cătălin Ionescu, Adrian-Petru Barbu, Bogdan Teodor Godea</u> <i>RATEN ICN Pitesti, Romania</i>	Structural and Functional Optimization of Front-End Architecture in E-Learning Systems at the Institute for Nuclear Research Pitesti
S1-P21	<u>Ionuț Gabriel Nedelea, Cătălin Ionescu, Adrian-Petru Barbu, Bogdan Teodor Godea</u> <i>RATEN ICN Pitesti, Romania</i>	Back-End Development for Secure Data Management and Automated Evaluation Engines in E-Learning Platforms at the Institute for Nuclear Research Pitesti
S1-P22	<u>Țirou Marius-Cristian, Valeca Monica, Jînga Alexandra</u> <i>UNSTPB Pitești Center, Romania</i>	Study of The Initiation of Mechanical Fatigue Cracks at Volumetric Defects in a CANDU Pressure Tube
S1-P23	<u>D.C. Plaeasu, M. Valeca, M. Farcasiu</u> <i>UNSTPB Pitești Center, Romania</i>	Emergency Core Cooling System Modelling in Case of a Large LOCA in NPP CANDU 6
S1-P24	<u>Vlădulescu Andreea-Ioana</u> <i>UNSTPB Pitești Center, Romania</i>	Radiochemical Separation and Quantification of ⁶³ Ni in Nuclear Energy Sector Waste
S1-P25	<u>Dumitrescu Andreea Elena</u> <i>UNSTPB Pitești Center, Romania</i>	The Tritium Cycle in the Environment and Experimental Analysis of Tissue Free Water Tritium in Plants
S1-P26	<u>David Ioan Marinescu, Monica Valeca, Dumitru Puiu</u> <i>UNSTPB Pitești Center, Romania</i>	Technology for Plugging a Steam Generator Tube

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