



**Room A
Conference Hall**

<i>June 3rd</i>	8:15	Departure to ICN from Muntenia Hotel
	08:30 - 09:30	Registration
	09:30 - 10:30	Opening Ceremony, Key Notes
	10:30 - 11:30	Poster Session 1 with Coffee & Tea
	11:30 - 13:30	Plenary Session 1
	13:30 - 14:20	Lunch
	14:30 - 15:50	Plenary Session 2
	16:00 - 16:30	Coffee Break
	16:30 - 18:00	Plenary Session 2
<i>June 4</i>	09:00 - 18:00	Student Poster Session 2 at Ramada Hotel
<i>June 5</i>	19:00 - 23:00	Nuclear 2019 Awards; Conference closure
<i>June 6</i>	14:30 - 17:00	3 minute Pitch of Awarded Nuclear 2019 Student Papers

Monday, June 3

08:30 - 09:30 Registration

Welcome and Opening Remarks

Serban Constantin Valeca – President of the Scientific Board, RATEN ICN

Cristian Gentea – General Director, RATEN

Constantin Paunoiu – Director RATEN ICN

Nicolae Hurduc – Minister, Ministry of Research and Innovation

Doru Visan – State Secretary, Ministry of Energy

Emilian Dragnea – Prefect, Arges County

09:30 - 10:30 Constantin Dan Manu – President, Arges County Concl

Rodin Traicu – CNCAN, Romania

Roger Garbil – European Commission, DG RTD

Alessandro Alemberti – ANSALDO Nucleare

Christophe DRIDI – Director, General Group Reanult Romania/ PDG Dacia

Valeriu V. Jinescu – Technical Sciences Academy of Romania

Dumitru Chirlesan – Rector, University of Pitesti

Wilhelm Kappel – ICPE, Romania

Cosmin Ghita – SNN, Romania

10:30 - 11:30 Poster Session 1 with Coffee & Tea

PLENARY SESSION I

Relevance of European Framework Programme for national R&D priorities

Room A

Chair: Serban Constantin Valeca

Co-chair: Maria Roth

11:30 - 12:00 Euratom R&D Programme. RATEN Contribution and Benefits

Cristian Gentea, Maria Roth, Constantin Paunoiu, Alexandru Toma
RATEN, Romania

12:00 - 12:30 Relevance of H2020 Calls for Radioactive Waste Management in Slovenia

Nadja Železnik
Elektroinstitut Milan Vidmar -EIMV, Ljubljana, Slovenia

12:30 - 13:00	The Role of CFD Simulations in CRS4 Support to Liquid Metal Fast Reactors Design Manuela Profir, Vincent Moreau <i>CRS4, Sardinia, Italy</i>
13:00 - 13:30	Design of New Coatings and Sintered Materials based on Mixed Rare Earth Oxides Radu-Robert Piticescu, Mircea Corban, Maria Luisa Grilli, Mythili Prakasam <i>National R&D Institute for Nonferrous and Rare Metals-IMNR, Romania</i>
13:30 - 14:20	Lunch

PLENARY SESSION II		Room A
Major R&D Projects in nuclear: Status and challenges		
<i>Chair: Alessandro Alemberti</i>		
<i>Co-chair: Alexandru Toma</i>		
14:30 - 15:00	A Catalyst for Excellence: CANDU Owners Group as a Worldwide Centre of Knowledge Management Fred Dermarkar <i>CANDU Owners Group, Canada</i>	
15:00 - 15:30	Darlington NGS Refurbishment: Update on project progress and pertinence for Cernavoda Unit 1 John Saroudis <i>JIS Consultanta</i>	
15:30 - 16:00	ELI-NP – An Unique R&D infrastructure in the World (TBC) Ioan Ursu <i>IFIN-HH Bucharest, Romania</i>	
16:00 - 16:30	<i>Coffee Break</i>	
16:30 - 17:00	ALFRED Status: the staged approach Alessandro Alemberti <i>ANSALDO NUCLEARE, Italy</i>	
17:00 - 17:30	R&D Infrastructure for ALFRED in Romania Marin Constantin <i>RATEN ICN Pitesti, Romania</i>	
17:30 - 18:00	Nuclear R&D Priorities and Projects In Lithuania Gintautas Poskas <i>LEI, Lithuania</i>	
18:00 – 18:30	Contributions of RATEN ICN Pitesti in IAEA INPRO Program Cristina Alice Margeanu <i>RATEN ICN Pitesti, Romania</i>	

Monday, June 3 - ICN Conference Hall

Poster Sessions 1

Nuclear Energy

S1-P1	M. Sallah <i>Mansoura University, Egypt</i>	Stochastic Neutrons Transport in Clumpy Nuclear Reactors using Fractional Approach
S1-P2	N. H. Moadab, M. K. Saadi, M. Akbari <i>Islamic Azad University, Iran</i>	Investigation on the Use of Advanced Materials in Am-Be Neutron Shield Design
S1-P3	C. M. Moraru, I. Stefan, C. Bucur, O. Balteanu <i>ICSI-Rm. Valcea, Romania</i>	Considerations on Measuring Low Temperatures with PT 100 type Transducers in Cryogenic Plant for Tritium Separation
S1-P4	M.C. Arva, M. Stoica <i>RATEN ICN, Romania</i>	Uninterrupted Temperature Acquisition and Monitoring System for Coolant Overheating in LFR Reactor
S1-P5	I.V. Gondac, C.F. Constantinescu <i>RATEN ICN, Romania</i>	The Improvement of Nuclear Installations Operation using PSA Applications
S1-P6	M. Șerbănel, I. Prodea <i>RATEN ICN, Romania</i>	Thermahydraulic Model for CANDU Core Loaded with NUE Fuel Bundles
S1-P7	I. Prodea <i>RATEN ICN, Romania</i>	Investigating the Influence of Refueling Scheme Pattern on Core Parameters of a CANDU Reactor Fed with Thorium-based Fuel
S1-P8	A. Moise, I. Visan, A. Rizoiu <i>RATEN ICN, Romania</i>	Evaluations of Th-based CANDU 6 Fuel Bundle Performance using Monte Carlo and Collision Probability Methods
S1-P9	I. Visan, A. Moise <i>RATEN ICN, Romania</i>	Isotopic Inventories of the T37 Discharged Fuel Bundle
S1-P10	D. Lucan, L. Velciu, M. Fulger, G. Jinescu <i>RATEN ICN, Romania</i>	Corrosion Behavior of Structural Materials from CANDU NPP Key Equipment
S1-P11	B. Corbescu, T. Gyongyosi, D. Puiu, V. N. Panaitescu <i>RATEN ICN, Romania</i>	Forming an Ice Plug Inside a Horizontal 200 mm Nominal Diameter Pipeline using a 55% Nitrogen Vapours Exhaust Nozzle Restriction
S1-P12	T. Gyongyosi, B. Corbescu, D. Puiu, S. C. Valeca, V. N. Panaitescu <i>RATEN ICN, Romania</i>	The Influences of Reducing with up to 25% the Nitrogen Vapour Exhaust from the Ice Plugging Device Mounted on a 200 mm Nominal Diameter Pipe Containing Stationary Water

S1-P13	T. Gyongyoši, G. Deloreanu, D. Puiu, B. Corbescu, N. Anghel, R. Nastase, E. Dinu <i>RATEN ICN, Romania</i>	Ageing Behaviour of the Pressure Tube Simulator – Spacer – Calandria Tube Simulator (by Stages), in the Second Half Service Period
S1-P14	D. Pantazi, A. Popa <i>RATEN CITON, Romania</i>	Study on Nuclear Reactions that can Influence Design Solutions for Ionized Radiation Protection Shielding using Monte Carlo Codes
S1-P15	I. P. Nita, R. Pancef <i>RATEN CITON, Romania</i>	Sizing of Main Equipment and Systems from Regenerative Circuit of Advanced Lead Fast Reactor European Demonstrator
S1-P16	R. Popovici, M. Vlad, F. Vacariu, I. Zarif, B. Blănaru <i>RATEN CITON, Romania</i>	Advantages of using Field Programmable Gate Array for Processes Control at Cernavoda NPP
S1-P17	R. Muşoiu, V. Bilegan, A. Vişan <i>RATEN CITON, Romania</i>	Piping Vibration Analysis using MatLab and ANSYS Dynamic Simulation
S1-P18	F. Vasiliou, A. Sabie, V. Vasile, D. Ionescu, B. Blănaru <i>RATEN CITON, Romania</i>	Condition Monitoring of Induction Motor in Cernavoda NPP Using Motor Current Signature Analysis Technique
S1-P19	Š. Čerba, B. Vrban, J. Lúley, F. Osuský, D. Flamíková, V. Nečas <i>Institute of Nuclear and Physical Engineering, Slovakia</i>	Optimization of the Operation Process at the Diffusion Length and Fermi Age Measurement Facility
S1-P20	O. Ichim, C. Gentea, O. Uta, I. Man <i>RATEN ICN, Romania</i>	THERATRON Medical Radiological Installations Decommissioning and Intermediary Storage of the Spent Radiological Sources in PIEL as Radioactive Waste

Environmental Protection

S1-P21	Y. Khmurovska, P. Stemberk, S. Sikorin, J. Zak, Y. Kaladkevich, E. Pavalanski, V. Fatseyeu <i>Czech Technical University in Prague, Czech Republic</i>	Cement Mortar Creep under Exposure of Gamma-ray Irradiation
S1-P22	D. Flamíková, V. Nečas <i>Institute of Nuclear and Physical Engineering, Slovakia</i>	Analysis of Selected Biosphere Parameter Changes Using Probabilistic Methods
S1-P23	A. Yazdani, D. Giosanu <i>Tarbiat Modares University, Iran</i>	From Filtering of the Sunlight Gama Radiation to Controlling the Earth Soil Radiation
S1-P24	M. Alipour, M. K. Saadi, A. A. Rouhani <i>Islamic Azad University, Iran</i>	Investigation on Concrete Neutron Shielding Properties Filled by B₄C, CdO and BN microparticles

S1-P25	M. I. Cucu, D. Dupleac <i>Nuclearelectrica SA , Romania</i>	Study of Radon Concentration and Methods for its Reduction in Various Spaces
S1-P26	I. Petre, V. Fugaru, M. Gheorghe, R. M. Fechet, A. Moanță <i>CEPROCIM S.A., Romania</i>	Sustainable Materials for Gamma Radiation Shielding
S1-P27	G.S. Stana, M. Vitan, A. Florea, G. Serbanescu <i>RATEN ICN, Romania</i>	PLC based Digital Systems for Radiation Monitoring in Nuclear Objectives
S1-P28	G. Mihai <i>RATEN CITON, Romania</i>	Drying Installation for Solid Waste Material Contaminated with Tritium Water
S1-P29	I. Zabet, M. Bigu <i>RATEN CITON, Romania</i>	Methods for Improving the Thermal Transfer of Water-Gas Heat Exchangers with Externally Finned Pipe

Research Infrastructure

S1-P30	C. Meglea, M. Teodorescu, G. Petre, R. Nicolae, S. Meglea <i>RATEN CITON, Romania</i>	General Aspects Regarding the Feasibility of the Experimental Facilities ATHENA and ChemLab – Research Support Infrastructure for ALFRED
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Tuesday, June 4 – RAMADA Hotel

Student Poster Session

S2-P1	R. Susala, S. C. Valeca, G. Serbanescu <i>University from Pitesti, Romania</i>	Nuclear Dose Rate Field Monitoring. Wireless LoRa and ZigBee Technologies for Real Time Data Communications
S2-P2	V. Morlova, S. C. Valeca, M. Ioncescu <i>University from Pitesti, Romania</i>	Metallographic and Ceramographic Examination of Irradiated Nuclear Fuel
S2-P3	F. A. Florea, S. C. Valeca, M. Darie <i>University from Pitesti, Romania</i>	Tensile Tests on 304L Stainless Steel, in Water Environment, at High Temperature and Pressure
S2-P4	E. M. Breazu, C. Bucur, Ș. C. Valeca <i>University from Pitesti, Romania</i>	Degradation of Spent Ion Exchange Resins During Wet Storage Period
S2-P5	M.C. Petreanu, S. C. Valeca, E.M. Ana <i>University from Pitesti, Romania</i>	A Qualitative Analysis of the TRIGA Control Rod System Ageing
S2-P6	L. Moga, S. C. Valeca, E. Ioncescu, G. Enache <i>University from Pitesti, Romania</i>	Water Quality Monitoring in Spent Fuel Storage Pool – Safe Storage Aspect

S2-P7	T.I. Marin, M. Valeca, V.Neculae <i>University from Pitesti, Romania</i>	Quality Control of Gamma Spectrometry Measurements
S2-P8	I. A. Gardin, M.Valeca, I. Dumitrescu <i>University from Pitesti, Romania</i>	Determination of Trace Elements in Uranium-Zirconium Alloys Using Time of Flight Inductively Coupled Plasma Mass Spectrometry
S2-P9	I. Sandu (Nicolae), M. Valeca, M. Pătrașcu, A. Marin, D. Diniiași, E. Coacă, V. Ion, O. Rusu <i>University from Pitesti, Romania</i>	Analysis of Micro-Discharges during Plasma Electrolytic Oxidation on the Zr-2.5Nb Alloy
S2-P10	R. Joitescu, D. Chirlesan, L. Popa, M. Tunaru, L. Velciu <i>University from Pitesti, Romania</i>	Study of Corrosion Behaviour of some Dissimilar Welds from CANDU NPP Primary Circuit
S2-P11	A. Radu, C. Diaconescu, Ș.C.Valeca <i>University from Pitesti, Romania</i>	Methods Applied on Characterization Process of Spent Resins
S2-P12	V. G. Ionescu, S. C. Valeca, L. Velciu <i>University from Pitesti, Romania</i>	Metallographic Characterization of Inconel 718 Nickel-Alloy Subject to Heat-Cycling
S2-P13	D. Rotari, S. C. Valeca, C. Roth <i>University from Pitesti, Romania</i>	Bonner Spheres Neutron Spectrometry-Neutron Spectrometer Calibration Experiments
S2-P14	R. A. Preda, S. C. Valeca, D. Predescu <i>University from Pitesti, Romania</i>	Functional Simulation for the Separators Assembly and F/M Head Magazine Supply System using an ISAGRAF / OS9 – VME System
S2-P15	M. Ene, S. C. Valeca, V.Pitigoi <i>University from Pitesti, Romania</i>	Mechanical Parameters Characterization of CANDU Pressure Tube
S2-P16	M. Stoica, S. C. Valeca <i>University from Pitesti, Romania</i>	Preliminary Investigation on the Potential for Severe Accidents of Some Accidental Situations at ALFRED
S2-P17	A. Glont, S. C. Valeca, C. Roth, B. Corbescu <i>University from Pitesti, Romania</i>	Establishing the Theoretical Limit of the Liquid Nitrogen Requirement for the Freeze Isolation of a Horizontal Pipeline
S2-P18	A. I. Popescu, V. Cojocar, S. C. Valeca <i>University from Pitesti, Romania</i>	Monitoring and Control Systems used in the LECOTELO Experimental Installation
S2-P19	A. Simion, S. C. Valeca, G. Dragoi <i>University from Pitesti, Romania</i>	Electrical and Temperature Measurements for Monitoring of Inductive Brazing Processes
S2-P20	E. A. Danescu, M. Valeca, A. F. Bucsa <i>University from Pitesti, Romania</i>	Chlorine Determination Using NAA-k0 On Nuclear Industry Materials
S2-P21	C. S. Ionita, S. C. Valeca, P. Busuioc <i>University from Pitesti, Romania</i>	Experimental Method of Molybdenum-99 Obtained in TRIGA SSR Reactor

S2-P22	A. M. Nicolae, M. N. Ionescu, M. Ancuta, A. Pulpa, M. Valeca <i>University from Pitesti, Romania</i>	In Core Mobile System for Simulating Power Cycling Irradiation Conditions of Nuclear Fuel
S2-P23	S. D. Mircea, L. D. Stoenescu, M. Valeca <i>University from Pitesti, Romania</i>	Static Investigation of CANDU Experimental Nuclear Fuel using Metallic Foils and Radiographic Films
S2-P24	M. Sarbu, M. Valeca, A. Marin, O. Rusu, E. Coaca, M. Patrascu, V. Ion, D. Diniasi <i>University from Pitesti, Romania</i>	Plasma Electrolytic Oxidation Treatment of 316L Stainless Steel: Assessment on the Surface Chemistry
S2-P25	A. Marin, L. Savu, S. C. Valeca <i>University from Pitesti, Romania</i>	Radiographic Assessment of Experimental Fuel Rods Homogeneity at INR Pitesti
S2-P26	I. Neacsu, S. C. Valeca, M. Apostol <i>University from Pitesti, Romania</i>	CANDU Severe Accident Late Phase. Simulation of Molten Core Concrete Interaction
S2-P27	A. Ciocîrlan, M. Valeca, D. Bujoreanu <i>University from Pitesti, Romania</i>	Measurement of the Leachability of Solidified Radioactive Waste for Disposal at National Repository Baita-Bihor
S2-P28	A. Popecu, G. Duna, S. C. Valeca <i>University from Pitesti, Romania</i>	The Water Injection into the Fuel Channel using the Mechanical Simulator
S2-P29	S. C. Gheorghe, S. C. Valeca, C. Roth <i>University from Pitesti, Romania</i>	Low Intensity Thermal Neutron Flux Density Measurements
S2-P30	I. Pietriş, M. Valeca, G. Zăvoianu <i>University from Pitesti, Romania</i>	Determination of Natural Uranium Content in Environmental Samples
S2-P31	V. Slujitoru, S. C. Valeca <i>University from Pitesti, Romania</i>	Monte Carlo Studies for Advanced CANDU Fuel Containing Thorium-Plutonium Mixed Oxide
S2-P32	S. F. Stan, M. Valeca, M. Sorin <i>University from Pitesti, Romania</i>	Radiological Characterization of Materials Resulting from Authorized Nuclear Practices
S2-P33	A. Tudor, S. C. Valeca, D. Diaconu <i>University from Pitesti, Romania</i>	Sensitivity and Uncertainty Analysis for a Generic Concept of Spent Fuel Disposal in Clay Rocks in Romania
S2-P34	B. Chiriac, R. Dobrin, M. Valeca <i>University from Pitesti, Romania</i>	Measurement of Beta Activity by Spectrometry with Liquid Scintillators
S2-P35	L. Heber, S. C. Valeca, S. Ionescu <i>University from Pitesti, Romania</i>	Mechanical Tests on Materials Used in the Nuclear Industry
S2-P36	A. Pîrvu, M. Valeca, R. Iordache <i>University from Pitesti, Romania</i>	Assessing the Radiological Impact of Normal Operation of a Nuclear Installation

S2-P37	M. M. Mateescu, M. Valeca, G. Barbu <i>University from Pitesti, Romania</i>	Individual Radiological Monitoring of Occupationally Exposed Personnel to Ionizing Radiation
S2-P38	G. Radu, M. Dulama, M. Valeca <i>University from Pitesti, Romania</i>	Study of Methods Recommended for the Treatment of Radioactive Liquid Waste from Chemical Decontamination Processes
S2-P39	G. Pislaru, M. Valeca, G. Tudor <i>University from Pitesti, Romania</i>	Gross Beta Activity Concentration Monitoring in Soil and Vegetation
S2-P40	A. Despa, S. Valeca, O. Popescu <i>University from Pitesti, Romania</i>	Gas Detectors for Measurement of Alfa and Beta Gamma Contamination
S2-P41	M. Cirstea, S. C. Valeca, G. Ghita <i>University from Pitesti, Romania</i>	Modeling a Venturi Flow Meter Using Fluent CFD Computer Code
S2-P42	R. C. Popescu, D. Chirlesan, D. Puiu, T. Gyongyoşi, E. Dinu, B. Corbescu <i>University from Pitesti, Romania</i>	The Assessment of the Power Cables Ageing Degree by Thermal Methods
S2-P43	C. Catrina, S.C. Valeca <i>University from Pitesti, Romania</i>	Neutronic Characterisation of the Advanced CANDU fuel Bundle using Monte Carlo Methods
S2-P44	A. Mirescu, Ş. C. Valeca, C. Diaconu <i>University from Pitesti, Romania</i>	Thermosyphoning Simulation in the Primary Circuit of CANDU6