

		Room A Conference Room	Room B S I	Room C S III	Room D Red Room	
May 16	08:30 – 09:30	Registration	Poster Session 1			
	09:30 – 10:00	Opening Ceremony				
	10:00 – 11:00	Plenary Session				
	11:00 – 11:30	Coffee break				
	11:30 – 13:30	Plenary Session				
	13:30 – 14:30	Lunch				
	14:30 – 16:30			Radioactive Waste Management	Nuclear Technology and Materials	Nuclear Reactors and Gen IV
	16:30 – 16:45	Coffee break				
	16:45 – 18:00	Round Table 1: Steps towards Horizon 2020				
Conference Dinner						

		Room A Conference room	Room B S I	Room C S III	Room D Red Room	
May 17	09:00 – 11:00	Plenary Session	Poster Session 2			
	11:00 – 11:30	Coffee break				
	11:30 – 13:30	Plenary Session				
	13:30 – 14:20	Lunch				
	14:20 – 16:20			Nuclear Safety and Severe Accidents	Radioprotection & Air, Water, Soil Protection	
	16:20 – 16:45	Coffee break				
	16:45 – 17:45	Round Table 2: YG versus SG – Building Bridges				

	Technical visits:
8:30 – 13:30	TRIGA Reactor, Hot Cells Facility, Material Testing Laboratories Vidraru Hydropower Plant
13:30 – 15:00	Lunch in Vidraru

08:30 – 09:30 Registration

09:30 – 10:00 Opening Ceremony

PLENARY SESSION I

Room A

Chairman: Prof.dr. Serban Constantin Valeca

Co-chairman: Dr. Dumitru Dina

10:00 – 10:30	Georges van Goethem <i>European Commission</i>	From Knowledge Transfer to Competence Building in Euratom: from Joint FP7 Projects to Horizon 2020 Programmes
10:30 – 11:00	Alessandro Alemberti <i>AnsaldoNucleare, Italy</i>	The Advanced Lead Fast Reactor European Demonstrator: Status of the Design
11:00 – 11:30	Alfons Weisenburger <i>KIT Germany</i>	Lead Cooled Reactors – Material Issues
11:30 – 11:50	Coffee break	
11:50 – 12:20	Peter Liska <i>VUJE, Slovakia</i>	The Allegro Project / European Project of Fast Breeder Reactor
12:20 – 13:30	Development of Nuclear Energy on Medium and Long Term in Romania	
12:20 – 12:30	Dumitru Dina <i>Nuclearelectrica SA, Romania</i>	Stress Tests at Cernavoda NPP
12:30 – 12:40	Dragos Popescu <i>EnergoNuclear, Romania</i>	Cernavoda NPP: Units 3&4
12:40 – 12:50	Serban Constantin Valeca <i>ICN Pitesti</i>	ALFRED: Current Status and Future Developments in Romania
12:50 – 13:30	Discussions	
13:30 – 14:30	Lunch	

Wednesday, May 16

PARALLEL SESSIONS**Session I.2**

Room D

Chairman: Dr. Georgios Glinatsis

Co-chairman: Mr. Andrei Rizoiu

Nuclear Reactors and Generation IV

14:30 – 14:50	<u>G. Glinatsis, D. Gugiu</u>	ENEA, Italy	Long-Lived Small LMFR. Core Design Challenges
14:50 – 15:10	<u>D. Gugiu, C. Petrovich</u>	INR, Romania	Neutronic Analysis of the Structural Materials used in Heavy Liquid Cooled Fast Reactors
15:10 – 15:30	<u>R. M. Mihaiu, V. M. Nistor</u>	INR, Romania	Study of Polonium Removal Methods for Lead and Lead Bismuth Cooled Fast Reactors
15:30 – 15:50	<u>A. Rizoiu, G. Horhoianu</u>	INR, Romania	Using Low Void Reactivity Bundles in CANDU@ Reactors
15:50 – 16:10	<u>I. Prodea</u>	INR, Romania	Effects of Low Void Reactivity Fuel Using on Core Integral Parameters in a CANDU 6 Reactor
16:10 – 16:30	<u>C. A. Margeanu, A. Rizoiu, Gh. Olteanu</u>	INR, Romania	Study of Spent Fuel Parameters for Low Void Reactivity Bundles in CANDU Reactors
16:30 – 16:45	Coffee break		

Wednesday, May 16

Session I.3

Room C

Chairman: Dr. Adrian Jianu

Co-chairman: Dr. Dumitru Ohâi

Nuclear Technology and Materials

14:30 – 14:50	<u>A. Jianu</u> , A. Weisenburger, A. Heinzl, R. Fetzer, M. DelGiaco, W. An, G. Müller	KIT, Germany	Investigation of Thermally Grown Oxides on FeCrAl Alloys Exposed to Heavy Liquid Metals
14:50 – 15:10	<u>F. Scarlat</u> , A. Scărișoreanu	INFLPR, Romania	Proposal of Laser Ion Beam Accelerator for Inertial Nuclear Fusion
15:10 – 15:30	<u>C. Ionescu</u> , A.G. Plăiașu, M. Abrudeanu, P. Ponthiaux, S.C. Vulpe, R. Vasile, F. Constantin	University of Pitesti, Romania	Study on Tribocorrosion Mechanism of Two Model Alloys
15:30 – 15:50	<u>T. Meleg</u> , M. Deaconu, I. Dumitrescu	INR, Romania	Thermophysical Properties of UZrH Fuel Between 300 and 1400 K
15:50 – 16:10	<u>D. Lucan</u> , L. Velciu, M. Mihalache, A. Dinu, D. Asteșăneșei, M. Pantiru	INR, Romania	Corrosion of the CANDU Steam Generator Tubing
16:10 – 16:30	<u>A. Dinu</u> , M. Stanciulescu	INR, Romania	Crystallographic texture of Zy-4 Claddings
16:30 – 16:45	Coffee break (Conference Hall)		

Wednesday, May 16

Session II.1

Room B

Chairman: Mrs. Stela Diaconu

Co-chairman: Dr. Daniela Diaconu

Radioactive Waste Management

14:30 – 14:50	<u>O. Niculae</u> , D. Slăvoacă, A. Sorescu, C. Lițescu	ANDR, Romania	Current Status of the Development of a New LILW Repository in Romania
14:50 – 15:10	<u>S. Diaconu</u> , C. Lițescu	ANDR, Romania	Recommendations for Radioactive Waste Treatment and Conditioning Station at Cernavoda NPP
15:10 – 15:30	<u>R. Toma</u> , R. Fako, Gh. Barariu, I. Prișecaru	CITON, Romania	Romanian Approach to Implement a Deep Geological Repository for Radioactive Waste in Crystalline Rock Formations
15:30 – 15:50	<u>R. Fako</u> , F. Sociu, Gh. Barariu, R. Georgescu	CITON, Romania	A Material Science Perspective on Developing Concepts for Final Disposal of Spent Fuel in Romania – Unknown Data, Challenges and Constraints
15:50 – 16:10	<u>C. Arsene</u>	INR, Romania	Testing the Capacity of Liquid Membranes for Extraction of Cs-137 and Co-60
16:10 – 16:30	<u>A. Constantin</u> , D. Diaconu, C. Bucur	INR, Romania	Performance Assessment for Irradiated Graphite Disposal in a Near Surface Repository
16:30 – 16:45	Coffee break (Conference Hall)		

Wednesday, May 16

Round Table 1

Room A

Chairman: Dr. Georges van Goethem

Co-chairman: Prof. dr. Petre Ghitescu

16:45 – 18:00 *Steps towards Horizon 2020*

May 16

19:30

Conference Dinner

PLENARY SESSION II

Room A

Chairman: Dr. Gerard Cognet

Co-chairman: CPI Ilie Turcu

09:00 – 09:30	Uddharan Basak <i>IAEA Vienna</i>	IAEA Activities on Nuclear Fuels
09:30 – 10:00	Ivo Kljenak <i>JSI Slovenia</i>	Highlights of Research on Containment Phenomena within the Severe Accidents Research Network of Excellence
10:00 – 10:30	Carole Wahide <i>CEA France</i>	Generation IV & Fuel Cycle : French Policy
10:30 – 11:00	Holly Anderson <i>Candu Owners' Group Canada</i>	Perspectives of Nuclear Energy in Canada following the Fukushima Event
11:00 – 11:30	Coffee break	
11:30 – 12:00	Teemu Kärkelä <i>VTT Technical Research Center Finland</i>	Research on the Transport and Chemistry of Fission Products in Primary Circuit and Containment Conditions at VTT
12:00 – 12:30	Ioan Viorel Arimescu <i>AREVA, United States</i>	Advances in Fuel Modeling and Design/Licensing Methodologies by Improved Knowledge and Uncertainty Quantification—AREVA Contributions
12:30 – 13:00	Mohamad Nassef .Hussein Comsan <i>Atomic Energy Authority Egypt</i>	Nuclear Energy Scenario for Electricity Generation and Water Desalination in Egypt
13:00 – 13:20	Daniela Diaconu <i>INR Romania</i>	NEWLANCER: Enlarging NMS Participation in Euratom Programme
13:20 – 13:30	Eugen Banches <i>AN&DR, Romania</i>	Status of National Participation in the INPRO Project of AIEA
13:30 – 14:30	Lunch	

Thursday, May 17

PARALLEL SESSIONS

Session I.1

Room B

Chairman: Dr. Joanne Ball

Co-chairman: Dr. Marin Constantin

Nuclear Safety and Severe Accidents

14:30 – 14:50	<u>J. Ball, H.L. Anderson</u>	Chalk River Laboratories, Canada	The CANDU Owner's Group Severe Accident Research and Development Program
14:50 – 15:10	<u>C. Ciurea - Ercău, E.Dincă, M. Tronea</u>	CNCAN, Romania	Stress Tests for Cernavoda NPP - the Regulatory Perspective
15:10 – 15:30	<u>M. Bițu, R Pancef, N.Anghel, I.P.Niță</u>	CITON, Romania	Thermal-hydraulic Analyze for Recirculated Cooling Water System from Cernavoda NPP Unit 1
15:30 – 15:50	<u>A.Cătană, E.Păuna, M. Ioan</u>	INR, Romania	CFD Analysis for Some Components of a HLM Material Testing Loop
15.50 – 16:10	<u>M. Nitoi, J. Holy, I. Dinu</u>	INR, Romania	Investigating the Relation between Common Cause Coupling Factors and Ageing
16:10 – 16:30	<u>M. Constantin, A. Rizoiu, M. Apostol, A. Constantin</u>	INR, Romania	CANDU Severe Accident Phenomena Simulated by ASTEC Code
16:30 – 16:45	Coffee Break		

Thursday, May 17

Session II.2 & II.3

Room C

Chairman: Dr. Vasile Stanciu

Co-chairman: Dr. Alexandru Toma

Radioprotection & Air, Water and Soil Protection

14:30 – 14:50	<i>K. Saleh, K. M. Alfakhar, A. Abd Elrahman</i>	University of Omar Lybia	The Effect of Thermal Neutrons on Samples of Human Blood
14:50 – 15:10	<i>R. Vasilache</i>	Canberra Packard, Romania	Cautions in Lowering the Legal Dose Limits: Linear No Threshold vs. Threshold Models
15:10 – 15:30	<i>J. Talpalariu, C. Talpalariu, M. Corina</i>	INR, Romania	Fault Detection and Isolation Modeling Methods Implemented in Gamma Dosimetric Network TRIGA Reactor
15:30 – 15:50	<i>C. N. Dulamă, R. I. Dobrin, A. Toma, R. Toma, S. Stoica</i>	INR, Romania	Experimental Tests for Separation of Actinides from Aqueous Samples
15:50 – 16:10	<i>F. Scarlet, E. Bădiță</i>	INFLPR, Romania	Method of Uncertainty Evaluation in Dosimetric Measurements using Gum
16:10 – 16:30	<i>A.F. Bucșă, D. Bărbos</i>	INR, Romania	The Determination of Environment Pollution Using Neutron Activation Analysis – K_0 Method on Mosses
16:30 – 16:45	Coffee break		

Thursday, May 17

Round Table 2

Room A

Chairman: Andrei Goicea

Co-chairman: Lavinia Rizea

16:45 – 17:45 *Young Generation vs. Senior Generation – Building Bridges*

May 17

May 18

8:30	Departure from Muntenia Hotel
9:00 – 10:30	Technical Visit: TRIGA Reactor, Hot Cell Facility, Material Testing Laboratories
11:00 – 13:30	Technical Visit: Vidraru Hydropower Plant
13:30 – 15:00	Lunch in Vidraru
16:30	Return in Pitesti

POSTERS SESSIONS

Poster Session 1

Nuclear Technology and Materials

S1-P1	S.Gherghinescu, I. Spiridon, G. Popescu <i>ICSI Rm Vâlcea, Romania</i>	Determination of Gas Flow Equilibrium Parameters due to the Mix of Two Gases with Different Thermo-Dynamical Characteristics
S1-P2	I. Spiridon, S. Gherghinescu, G. Popescu <i>ICSI Rm Vâlcea, Romania</i>	Gas Leak Localization by Calculation of the Local Leak Rate for an Interconnected System in a Vacuumed Cold-Box
S1-P3	I. Piciorea, G. Răducan, I. Ștefănescu, T. Oprea <i>ICSI Rm Vâlcea, Romania</i>	A Reliable Measurement Technique of Heavy Water as Nuclear Material
S1-P4	G. Ioniță, I. Spiridon, A. Bornea, I. Iordache <i>ICSI Rm Vâlcea, Romania</i>	Behavior and Characteristics of PT/C/PTFE Catalyst, Used in H ₂ -H ₂ O Isotopic Exchange Process
S1-P5	D. Aștefănesei, D. Lucan, M.S. Stoica <i>INR Romania</i>	Corrosion Tests of IN 600 at the Specific Parameters of the Steam Generator Primary Circuit
S1-P6	R. F. Negrea, O. Uță, M. Tătărăscu, D. Ilinca, G. Gheorghe, O. Ichim <i>INR, Romania</i>	Microstructural Characterization of Irradiated CANDU Pressure Tube Samples
S1-P7	L. Velciu, D. Aștefănesei, L. Popa, A. Nițu <i>INR, Romania</i>	Metallographic Examination of Two Nickel-Based Alloys
S1-P8	G. Gheorghe, I. Man, M. Mincu, R. Negrea <i>INR, Romania</i>	Crack Propagation on C-Shaped Specimens from CANDU Pressure Tube
S1-P9	L. Popa, M. Tunaru, L. Velciu <i>INR, Romania</i>	The Evaluation of Organic Inhibitors for the Protection of Grade 2 Titanium Alloys in Chloride Media
S1-P10	M. Tunaru, L. Velciu, L. Popa <i>INR, Romania</i>	The Use of MD-40 Biocide in the Inhibition of the Microbiologically Induced Corrosion in Raw Water
S1-P11	D. Puiu, T. Gyongyosi, F. Voicu, E. Dinu <i>INR, Romania</i>	The Development of Practical Techniques to Quantify the Ageing Degree for the Power Cables; Breaking Elongation Tests
S1-P12	E. Coacă, G. Oncioiu, S. Florea, C. Lungu, V. Andrei <i>INR, Romania</i>	Microstructure and Properties Induced by Surface Engineering Treatments Including Plasma Electrolytic Nitriding/ Carburizing/ Boriding of Iron Based Structural Materials
S1-P13	I. Ioniță, P. Mikula, G. Torok, P. Beran, M. Fulger, B. Venescu <i>INR, Romania</i>	Study of the Ageing Behavior of Incoloy 800 HT and 304-L Steel Using Neutron Scattering Techniques
S1-P14	M. Mincă, Gh. Oncioiu, C. Lungu, S. Florea, O. Rusu, E. Coacă, V. Andrei <i>INR, Romania</i>	XPS Characterization of the Surface Structures Developed on the Surface-Engineered Materials for Advanced Nuclear Systems
S1-P15	D. Ștefănescu, L. Velciu, M. Mincu <i>INR, Romania</i>	Inhibition of Mild Steel Corrosion in Simulated Pore Solution by Some Organic Inhibitors
S1-P16	O. Rusu, M. Mincă, E. Coacă, S. Florea, Gh. Oncioiu, C. Diaconu, V. Andrei <i>INR, Romania</i>	Electro-deposition as a Surface Engineering Solution for the Future Gen IV Reactors

S1-P17	C. Iorga, Ş.C. Valeca <i>INR, Romania</i>	Improving the Monitoring System for F/M Test Rig Heater
S1-P18	T. Gyongyosi, Ş.C. Valeca, V. N. Panaitescu, I. Prisecaru <i>INR, Romania</i>	Plugging of Demineralized Water Flow Into Horizontal High Diameter Pipeline (Dn 200 mm) with Artificial Ice Plug
S1-P19	T. Gyongyosi, I. Prisecaru, V. N. Panaitescu <i>INR, Romania</i>	The Experimental Installation of the First Plug (M1- M.E. Version) using an Unconventional Plastic Deformation Technique
S1-P20	A. Niţu, V. Piţigoii <i>INR, Romania</i>	Investigation of Nuclear Structural Materials Mechanical Properties

Radioprotection

S1-P21	Gh. Bulubaşa, C. Dulama, N. Bidiţă, A. Miu, M. Vladu, A. Toma <i>ICSI Rm Vâlcea, Romania</i>	Determination of Gamma Spectrometric Activity in Selected Samples – Laboratory Intercomparison Exercise
S2-P22	R. I. Dobrin, M. Pavelescu, C. N. Dulama, Al. Toma, S. Stoica <i>INR, Romania</i>	A Method for Low-Level Gross Alpha Activity Determination in Liquid Effluents
S2-P23	C. Ciocîrlan, C. Dulama, R Dobrin, A. Toma, O. Hiriţă, S. Stoica <i>INR, Romania</i>	Participation of the CROWN Laboratory in the Intercomparison Exercises Organized by IAEA
S2-P24	C. Talpalariu, J. Talpalariu <i>INR, Romania</i>	Radiation Measurements Computerised System for Spent Nuclear Fuel Transport Monitoring

International Partnership for a Sustainable Development

S2-P25	C.Kanovits, O.Comsa <i>European Commission, Belgium</i>	EU International Cooperation on Nuclear safety and Climate Change
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Poster Session 2

Nuclear Safety and Severe Accidents

S2-P1	C.Doca <i>INR, Romania</i>	The Quasistatic Bending of a Bernoulli-Euler Beam - Some Generalized Analytical Models
S2-P2	M. Vlad, R. Popovici, M. Popescu <i>CITON, Romania</i>	Development of Instrumentation and Control (C&I) Systems in NPP using Modern Techniques of Distributed Digital Control Systems
S2-P3	M. Șerbănel <i>INR, Romania</i>	The Influence of Heat Generated by the Zirconium-Steam Reaction on Thermal-hydraulic Behaviour of CANDU 6 Core
S2-P4	M. Apostol <i>INR, Romania</i>	Identification of Components Susceptible to Ageing by Probabilistic Techniques and Quantification of Ageing Effects
S2-P5	G. Radu, I. Prisecaru <i>INR, Romania</i>	The Flame Front Behaviour Following a Severe Accident in a Generic CANDU 6 Containment

Nuclear Reactors and Generation IV

S2-P6	L. Ciufu, M. Popescu <i>CITON, Romania</i>	Enhancing Nuclear Instrumentation: A Step Toward an Increased Control, Reliability and Accident Risk Mitigation at Cernavoda NPP
S2-P7	S. Ionescu, O. Uță, C. Gentea, M. Mincu, M. Pârvan, L. Dinu <i>INR, Romania</i>	Destructive Examination of Irradiated CANDU Fuel Elements
S2-P8	M. Stănculescu, D. Ohâi, A. Dinu, R. Mihaiu <i>INR, Romania</i>	Fuel Cladding Materials for Lead-Cooled Fast Reactors
S2-P9	I. E. Vișan, C. Roth <i>INR, Romania</i>	Neutron Activation Analysis Cross Sections Library Upgrading
S2-P10	E. Păuna, A.Cătană, M. Ioan <i>INR, Romania</i>	CFD Simulation of an Air-Based Heat Exchanger in a Heavy Liquid Metal Test Loop
S2-P11	G. Budriman, M. Mladin, S. Dulugeac <i>INR, Romania</i>	MCNP Calculation of Burn-up Credit Criticality and Isotopic Composition Benchmark

Polices and Strategies in Nuclear Research

S2-P12	Gh. Florescu, C. Agapi, V. Panaitescu, I.B. Florescu <i>INR, Romania</i>	The New Nuclear Technologies and Associated Latent Risk for Accidents
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Education, Continuous Formation and Knowledge Transfer

S2-P13	I. Crețu, E. Drăgan, M. Ionilă, M. Petra <i>INR, Romania</i>	The Public's Knowledge and Perception on the Nuclear Field - SCN Pitesti Opinion Survey
S2-P14	V. Bălăceanu, L. M. Georgescu, C. Valache, C. Tiron <i>INR, Romania</i>	First Year Results of "Study Case: The Development and Implementation of the Knowledge Transfer and Preservation Process at Cernavoda NPP" Research Contract
S2-P15	O.Comșa, C. Avădanei <i>CITON, Romania</i>	New Approach in Radiation Protection Education and Training in Romania: RONEN initiative

Radioactive Waste Management

S2-P16	S. Prodanova <i>State Enterprise Radioactive Waste , Bulgaria</i>	National Disposal Facility for Low and Intermediate Radioactive Waste
S2-P17	G. C. Lazăr, M. Tătărăscu, A. Benga <i>INR, Romania</i>	Separation and Determination of Lanthanides Using High Performance Liquid Chromatography
S2-P18	M. Tătărăscu, C. Lazăr, D. Ilinca, M. Mincu, O. Ichim, R. Negrea <i>INR, Romania</i>	Separation and Determination of Plutonium out of Liquid Waste from Post-Irradiation Examination of Nuclear Fuel
S2-P19	V.M. Nistor, R.M. Mihaiu <i>INR, Romania</i>	The Safety Enhancement in Transport of Radioactive Material and the Problematic of Denial of Shipment
S2-P20	M. Olteanu, C. Bucur, M. Dragomir <i>INR, Romania</i>	Separation of ^{99}Tc from Aqueous Liquid Samples
S2-P21	L. Bujoreanu, C. Bujoreanu <i>INR, Romania</i>	Study of 3H Efficiency Recovery from Cernavoda NPP Spent Ion Exchange Resins using Liquid Scintillation Analyzer
S2-P22	O. Ichim, M. Mincu, G. Androne, C. Lazăr, O. Uță, R. Negrea, M. Tătărăscu, D. Ilinca, A. Benga <i>INR, Romania</i>	Comparative Measurements of Alpha Sources Activity from Liquid Effluents and Wash/Decontamination Waters from Cernavoda Nuclear Power Plant
S2-P23	C. Bucur, D. Diaconu, M. Olteanu <i>INR, Romania</i>	Sorbition Effect on the Radionuclides Mobility in Vadose Zone

Air, Water and Soil Protection

S2-P24	F.Bucura, M.Constantinescu, C.Sandru <i>ICSI Rm Vâlcea, Romania</i>	Possible Utilization of the MBM as a Fuel
S2-P25	C.Sandru, F.Bucura, M.Constantinescu <i>ICSI Rm Vâlcea, Romania</i>	Evaluating Macrominerals Content of Bone Meal Powder
S2-P26	S. Stoica, M. Valeca, A. Toma, C. Ciocirlan, G. Zăvoianu, C. Dulama, S. Mihai <i>INR, Romania</i>	Bioaccumulation Assessment of Radionuclides in Aquatic Plants - Experimental Tests

Background

- 1970** – A mission of IAEA experts in Romania favorably advises the necessity to establish the Institute.
- 1971** – **Institute for Nuclear Technologies (ITN)** is founded, with the main purpose to provide scientific and technological support for the Romanian Nuclear Program.
- 1977** – Research laboratories are commissioned on the new premises in Mioveni-Colibasi, at 130 km NW from Bucharest. The Institute assignments are enlarged by involvement in design activities of nuclear system components. Its name is now changed into the **Institute for Nuclear Power Reactors (IRNE)**.
- 1978** – Quality Assurance Requirements were settled for the reactor operation. The first QA manual was accepted by the Nuclear Authority. Today the Quality Management System is extended to all activities which take place in the Institute: research, design, manufacturing and exploitation in the nuclear field;
- 1979** – November 18: first criticality is attained at the TRIGA Materials Testing Reactor, built within the Institute.
- 1980** – Commissioning of the Pilot-scale plant for the fabrication of CANDU-type fuel elements;
- 1983** – Commissioning of the Post-Irradiation Examination Laboratory (LEPI).
- 1984** – Commissioning of the Endurance Test Rig for fuel bundles at the Out-of-Pile Testing Department.
- 1984** – Commissioning of the Radioactive Waste Treatment Plant.
- 1985** – Starting of CANDU fuel bundles fabrication in SPEC (Unit for Fuel Elements Production).
- 1989** – With the arrival of the Fuelling Machine (F/M) Heads #4 and #5 intended for Cernavoda NPP-Unit 2, the F/M head test stand is commissioned.
- 1990** – Incorporated in the National Authority for Electric Power (RENEL), IRNE becomes the **Institute for Nuclear Research (ICN)**.
- 1992** – The Department for Fuel Elements Production separates from the Institute and becomes a distinct unit within RENEL, under the name of Nuclear Fuel Factory (FCN).
- 1992** – Beginning of the fuel conversion process at the TRIGA Reactor.
- 1994** – ICN specialists significantly contribute to the commissioning of Cernavoda NPP - Unit 1.
- 1995** – Commissioning at Cernavoda NPP-Unit 1 of the Failed Fuel Location System (SLCD), equipment entirely designed and manufactured by the Institute.
- 1996** – April 16: first criticality is attained at Cernavoda NPP-Unit 1, directly involving ICN specialists.
- 1998** – ICN becomes **SCN**, a subsidiary of the Romanian Authority for Nuclear Activities (RAAN), as an affiliate branch.
- 1999** – Return of spent fuel to the country of origin (USA).
- 2003 – 2005** – Testing and delivery of two Fuelling Machine Heads at Cernavoda NPP – Unit 2.
- 2004** – 25th anniversary of the TRIGA Reactor commissioning.
- 2006** – Completion of the TRIGA-SSR conversion from HEU (High Enriched Uranium) to LEU (Low Enriched Uranium) fuel.
- 2007** **May** – First criticality of Cernavoda NPP-Unit 2 reactor; October, commercial operation; ICN main contribution: F/M heads testing, Failed Fuel Location System.
- 2009** – HEU fuel returns to Russia under a US DOE contract.
- 2010** – Completion of the main refurbishing of TRIGA Reactor.
- 2011** – Romanian government decided to host ALFRED demonstrator in Romania and nominated ICN as responsible for its implementation

