

## Lucrări științifice / tehnice cotate sau indexate

1. **M. Constantin, M. Apostol, A. Constantin** - *Analysis of the Releases Produced by CANDU Type Irradiated Fuel Bundles Accidentally Remained in the Air* - Progress in Nuclear Energy, Vol.108, pp.351-357, Septembrie 2018
2. V. Malinovski, **A. Marin**, D. Negrea, V. Andrei, **E. Coaca**, C. N. Mihailescu, Cristian P. Lungu - *Characterization of Al<sub>2</sub>O<sub>3</sub>/ZrO<sub>2</sub> composite coatings deposited on Zr-2.5Nb alloy by plasma electrolytic oxidation* - Applied Surface Science 451, 169-179 (IF=4.439), 2018
3. **R. Neacșa, A. Rizoiu**, I. Prisecaru - Improving CANDU Performance by using Uranium - Thorium Mixed Oxide Fuel - KERNTECHNIK vol. 83, No.2, pag. 106-111, Apr. 2018
4. **M. Fărcașiu, M. Nițoi, M. Apostol**, C.F. Constantinescu - *Data collection assessment for the human performance analysis in nuclear installations* - KERNTECHNIK, vol. 83, No.2, pag. 91-95, Apr. 2018
5. **Alexandru Nițu, Vasile Radu**, E. Ungureanu, M. Abrudeanu - *The study of the mechanical properties of small tubes made from Oxide Dispersion Strengthened steel by using the Ring Tension Tests* - Revista de chimie, ISSN 0034-7752, vol. 69, nr. 11/2018
6. **Alexandru Nițu, Vasile Radu**, E. Ungureanu, M. Abrudeanu - *Investigation of the fracture mechanics properties of small tubes from Oxide Dispersion Strengthened steels* - Revista de chimie- ISSN 0034-7752, vol. 69, nr. 12/2018
7. **Elisabeta Coaca, Alexandru Marin, Oana Rusu**, Viorel Malinovski, Victor Andrei - *Plasma electrolytic oxidation treatment of Zr-2.5Nb alloy for corrosion resistance enhancement* - Rev. Chim. 69, 3490-3493 (IF=1.412), 2018
8. **Crina Bucur, Ionut Florea**, Pascal E Reiller, Dorin Dumitrescu - *14C content in CANDU spent ion exchange resins and its release under alkaline conditions* - RADIOCARBON, Volumul 60, Ediția 6, decembrie 2018
9. **Crina Bucur, Camelia Ichim, Ionut Florea** - *14C Release from TRIGA irradiated graphite* - RADIOCARBON, Volumul 60, Ediția 6, decembrie 2018
10. **Crina Bucur, Manuela Fulger, Ionut Florea, Aurelia Tudose** - *14C content in CANDU spent fuel claddings and its release under alkaline conditions* - RADIOCARBON, Volumul 60, Ediția 6, decembrie 2018
11. S Necib, C Bucur, S Caes, F Cochin, B Z Cvetković, **M Fulger**, J M Gras, M Herm, L Kasprzak, S Legand, V Metz, S Perrin, T Sakuragi, T Suzuki-Muresan - *Overview of 14C release from irradiated zircalloys in geological disposal conditions* - RADIOCARBON, Volumul 60, Ediția 6, decembrie 2018

## Lucrări științifice/tehnice indexate în baze de date internaționale

1. **Alexandru Toma** - *RATEN ICN Infrastructure for R&D and E&T in nuclear energy* - NUCLEAR 2018 - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
2. **Csaba Roth**, Brian Boer, Remi Delville, **Mirea Mladin, Cristian Dulama**, Marc Verwerft, **Georgiana Budriman, Calin Truta, Dumitru Barbos, Iustin Popa, Andreea Udrea, Laurentiu Aioanei, Cristian Gondac, Laura Savu** - *Performing transient tests on LFR type fuel interim results* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
3. **Mariana Pătrașcu, Elisabeta Coacă, A. Marin, Gheorghe Oncioiu, Lucian Velciu, Oana Rusu** - *Fe-Ni-Cr Superficial Structures Developed on Carbon Steels from Ionic Liquids by Electrodeposition* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
4. **Minodora Apostol, Marin Constantin, Ilie Turcu, Mirela Nitoi, Daniela Gugiu** - *Requirements and Needs for ALFRED Environmental Impact Assessment* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955

5. **Cristian Dulama, Relu Dobrin, Alexandru Toma**, Ion I. Popescu - *Methodology for evaluation of tritium degassing rate and removable contamination for metallic surfaces* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
6. **Silvia Stoica, Relu Dobrin, Valentina Neculae**, Ilie Prisecaru - *An Improved Method for Determination of Natural Uranium in Aqueous Samples by Alpha-LSC* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
7. **Raluca Boboc, Irina Paraschiv, Șerban Constantin Valeca**- *The Effects of a LOCA Accident on the Durability of the CANDU 600 Concrete Containment* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
8. **Doinita Bucșă, Mariana Tunaru, Alice Dinu, Lucian Velciu, Laurentiu Popa** - *The Involvement of Bacteria in the Failure of a Carbon Steel Pipe* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
9. **Maria Șerbucă, Alice Dinu, Șerban Constantin Valeca** - *Consideration on the Corrosion Process in CANDU Steam Generator Tubes* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
10. **M. C. Radulescu, G. Duna, V. Cojocaru, S. C. Valeca** – *Equipment for simulating the loss of working agent caused by the appearance of cracks in high pressure pipes* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
11. **C. M. Chivoreanu, M. Valeca, C. Arsene** – *Treatment of Irradiated Graphite from Thermal Columns of TRIGA Reactor* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
12. **Cosmin Constantin Din, Cristina Alice Margeanu, Serban Constantin Valeca** – *Preliminary Study on the Cost Competitiveness of an SMR using LFR Technology in Romanian Energy System* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
13. **Alina – Mihaela Udrea**, Mihaela – Mirela Vitan – *Intelligent measuring system of radioisotope nuclear activity for the medical field* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
14. **Laura Savu, Serban Constantin Valeca, Calin Stefan Truta** – *Some elements of Ageing Management at INR TRIGA Research Reactor* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
15. **Diana – Adriana Sirbu, Serban Constantin Valeca, Iosif Prodea** – *Implications on the Nuclear Safety at the using of a Mixed Uranium – Thorium Fuel Design in a CANDU Power Reactor* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
16. **Beatrice Ionela Nen, Serban Constantin Valeca, Liliana Bujoreanu** – *Methods for determination of beta radionuclides from liquid radioactive waste by scintillation fluid spectrometry* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
17. **Alexandru Mihai Nate, Monica Valeca, Daniela Diaconu** – *Temperature Influence on the Bentonite Swelling Properties at Spent Fuel Disposal* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
18. **Marin Constantin** - *Nuclear Development in the Context of New Energy Markets* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955

19. **Mirela Nitoi, Ilie Turcu** - *RATEN ICN opportunities as Technical Support Organisation* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
20. **Cristina Alice Mărgeanu, Marin Constantin, Minodora Apostol, Iosif Prodea, Andrei Rizoiu** - *Multicriteria Comparative Evaluation of Evolutionary and Innovative Nuclear Energy Systems using INPRO KIND Project Approach* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
21. **Iosif Prodea, Marieta Șerbănel, Diana Oproiu** - *CANDU Nuclear Fuel Performance Improving by Using the Advanced 52-Element Bundle Design* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
22. **Iuliana Visan, Andreea Moise, Gheorghe Olteanu** - *SERPENT Simulations for CANDU 6® Fuel Bundle Using LEU and Thorium Mixed Oxide* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
23. **Alina Cristina Răduț, Diana Oproiu, Silviu Florea, Gheorghe Olteanu, Mihaela Roxana Roman, Dragos Victor Ionescu** - *Evaluation of the ELESIM-TORIU Computer Code Capability to Simulate the Thorium Based CANDU Fuel Behavior in Normal Irradiation Conditions* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
24. **Roxana Bezdedeanu-Neacșa, Andrei Rizoiu, Gheorghe Olteanu, Iuliana Visan, Ilie Prisecaru** - *Reducing Void Effect in Thorium-Based Advanced CANDU Reactors by Using Burnable Absorbers* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
25. **Ana Maria Segarceanu, M. Constantin** - *Sensitivity Analysis for Neutron Parameters Affected by Technological Tolerances in Typical CANDU Cells* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
26. **Mita Farcasiu, Cristina Constantinescu, Heliana Iorga** - *Human Performance Analysis in Socio-Technical System* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
27. **Vasile Radu**- *Study of the Stress Relaxation Induced by Creep at Blunt Flaws in the CANDU Pressure Tubes* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
28. **Alexandra Ion, Vasile Radu, Alexandru Nitu** - *The Influence of Hydrogen Concentration on the Ramberg-Osgood Constitutive Equation for Zr-2.5%Nb Pressure Tube Alloy* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
29. **Alexandru Nitu, M. Abrudeanu, V. Radu, V. Ionescu, A. Ion, V. Olaru** - *New Fracture Mechanics Method for the ODS Steel Testing* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
30. **Irina Paraschiv, Ion Voica**- *Influence of Temperature Level on the Properties of C25/30 Concrete used at Cernavoda NPP Containment* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
31. **Raluca Negrea, Romica Budișteanu, Adrian Constantin, Catalin Ducu, Adriana Gabriela Plăiasu, Stefan Tabacu, Sorin Moga, Denis Negrea** - *Advanced Complementary Techniques for the Investigation of Pure Copper Plates Friction Stir Welding* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
32. **Crina Bucur, Manuela Fulger, Ionut Florea, Relu Dobrin, Cristina Diaconescu, A Tudose, Octavian Uta** - *Long-Term Corrosion Tests on Irradiated Zy-4 cladding and 14C Release Assessment* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955

33. **Daniela Diaconu, Alina Constantin** - *Sensitivity analysis of C-14 radiological impact for a generic concept of spent fuel disposal in România* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
34. **Marina Petre, Diana Miriță, Cosmina Lazăr, Marin Mincu, Ilie Prisecaru**- *Characterization of Spent Ion-Exchange Resins by Alpha Spectrometry Technique* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
35. **Oana Popescu, D. Dobrea, A. Florea**, G. Serbanescu, S. Balasoiu, M. Vitan - *Analysis of BF<sub>3</sub> Neutron Field Measurement Results Obtained During a Long Time Interval* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
36. **Valentina Neculae, Relu Dobrin, Cristian Dulama** - *Quality Control of the Gamma Spectroscopy Systems used at the Radiation Protection Laboratory of the Institute for Nuclear Research* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
37. **Gina Zăvoianu, Ovidiu Hircă, Relu Dobrin** - *Determination of Natural Uranium Content in Waste Water by Chemical and Radiological Methods* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
38. **Gabriela Barbu** - *Statistical Analysis of Data on Ionizing Radiation Exposure of Professionally Exposed Personnel from Institute for Nuclear Research Pitești* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
39. **Raluca Boboc, Irina Paraschiv, Șerban Constantin Valeca** - *The Effects of a LOCA Accident on the Durability of the CANDU 600 Concrete Containment* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
40. Ioana Toader, **Serban Constantin Valeca, Valentin Olaru, Gheorghe Olteanu** – *Microstructural Comparative Analysis of Tensile Tested SEU – 43 Tube Samples* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
41. **A.F. Florea, O. Popescu**, G. Serbanescu, S. Balasoiu, M. Mocanasu – *Neutron Field monitoring system using PLC S7-300 platform* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
42. **Madalin Savu, Marina Petre, Serban Constantin Valeca** – *Characterization Methods for the Sodium Molybdate Solution Used in Nuclear Medicine* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
43. M. Vitan, **O. Popescu**, M. Mocanasu, C. Costea, A. Florea, G. Serbanescu – *Data Acquisition and Control of Nuclear Processes with Industrial PLC Equipments Educational Development Systems* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
44. **Mariana Tunaru, Doinita Bucșă, Alice Dinu, Lucian Velciu, Laurentiu Popa** - *The Involvement of Bacteria in the Failure of a Carbon Steel Pipe* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
45. Silvia Mariana Vulpe, **Serban Constantin Valeca, Adrian Bucsa** – *Determination of Arsenic Species in Water* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
46. Raluca Elena Habudeanu, **Gheorghe Doru Savu, Monica Valeca** – *Quality Control of Solid Low Radioactive Waste Treatment Process* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955

47. Valentina Cristina Rosu, **Elena Dumitru, Monica Valeca** – *Laboratory Experiments for Processing of Radioactive Sludge* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
48. **Mihaela Petra, Mita Farcasiu, Ileana Cretu, Eleonora Dragan**- *The Assessment of the Safety Culture at Institute for Nuclear Research Pitești* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
49. **Marieta Șerbănel, Iosif Prodea** - *Thermalhydraulic Modelling of 100% ROH LBLOCA for CANDU 6 Reactor using RELAP5 Code* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
50. **Luminita Nitulescu, Gabriel Ghita, Gheorghe Florescu** – *Loss of Feed Water Analysis to the CANDU 6 Steam Generators* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
51. **Andrei Vilcu**, Masatoshi Kondo, Takahashi Minoru - *Study about the Corrosion of Structural Materials in Pb-Bi Eutectic and Coolant Oxidation* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
52. **Dumitra Lucan, Alice Dinu, Madalina Stanciulescu, Maria Mihalache** - *Properties of Deposits Removed from the CANDU Steam Generator Secondary Side* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
53. **Razvan Marinescu, Marin Mincu** - *Establishing Optimal Parameters for Determination of the Hydrogen Concentration Using the Differential Scanning Calorimeter* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
54. **Dumitra Lucan, Corina Mocanu, Alice Dinu, M. Stanciulescu, Maria Mihalache** - *Characterization of Deposits Removed from the CANDU Steam Generator* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
55. **Lucian Velciu, Tiberiu Meleg, Marian Pantiru, Daniel Petrescu, Florea Voicu** - *Assessment of Inconel 617 Alloy Tested by Heat-Cycling* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
56. **Diana Dinași, Dumitra Lucan, Manuela Fulger** - *Electrochemical Testing of SA 516 Carbon Steel Oxidized in Simulated Primary Circuit Conditions* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
57. **Mihai-Cătălin Arva, Mihai Stoica** - *Techniques and Methods of Signal Integrity Assessment at Neutron Detector Preamplifier Module DEPIN-01* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
58. **Viorel Ionescu, Vasile Radu, Alexandru Nitu, V. Cojocaru, Alexandra Ion, V. Olaru** - *Study of Mechanical Fatigue under Various Load Spectra on the Zr-2.5%Nb Pressure Tube Specimens* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
59. **Maria Mihalache, Iulia Dumitrescu, Madalina Stanciulescu** - *Evaluation Method of Chemical Composition for Metallic Powder by X-Ray Spectroscopy* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
60. **Laurentiu Popa, Mariana Tunaru, Lucian Velciu, M. Lazăr** - *Corrosion Behaviour of Dissimilar Welds Between Inconel 600 Alloy and Carbon Steel from Primary Circuit of CANDU NPP* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955

61. **Aurelia Elena Tudose, Manuela Fulger, Lucian Velciu, Maria Mihalache** - *Analysis of the Oxides Formed on Stainless Steel Components of the Secondary Circuit of CANDU Reactor* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
62. **Dumitru Puiu, Tiberiu Gyongyosi, Bogdan Corbescu, Gheorghe Deloreanu, Elena Dinu, Costin Cepisca, Bogdan Puiu** - *Matlab Software Application to Determine the Electrically Conductor Heating* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
63. **Marin Dinca, Luiza Diana Stoenescu** - *Method of Non-Destructive Investigation of the Fresh Nuclear Fuel with Scintillators and Radiological Films* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
64. **Diana Mirită, Marina Petre, Ana-Maria Ivan, Cosmina Lazăr** - *Resins Used in Purification Stages of the Sodium Molybdate Solution* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
65. **Marius Media, T. Tudorache, A. Amzoi** - *Numerical Modeling of the Induction Heating Process for Brazing Upper Seal of Instrumented TRIGA -LEU Nuclear Fuel Element* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
66. **Daniel Petrescu, Valentin Lautaru** - *Comparative Study Regarding Efficiency of Magnetite and Zirconium Hydroxide for Antimony Removal from Aqueous Solutions* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
67. **Gabriel Ghiță, Ilie Prisecaru** - *Cooling System for Neodymium - Permanent Magnets Liquid Metal Pumps* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
68. **Gabriela Gheorghe, Silviu Ionescu, Ion Man** - *Mechanical Tests on C-Shape Samples Machined Out of CANDU Pressure Tube Samples* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
69. **Bogdan Corbescu, Tiberiu Gyongyosi, Dumitru Puiu, Valeriu Nicolae Panaitescu** - *Forming an Ice Plug Inside a Horizontal High Diameter Pipeline (200 Mm Nominal Diameter) Using a 15% Nitrogen Vapours Exhaust Nozzle Restriction* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
70. **Tiberiu Gyongyosi, Bogdan Corbescu, Dumitru Puiu, Serban Constantin Valeca, Valeriu Nicolae Panaitescu** - *Pipe Ice Plugging Tests Using a ~ 15% Exhaust Liquid Nitrogen Vapor Restriction for The Freezing Device Mounted On a 200 mm Horizontal Pipe, in a Stationary Flow Regime* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
71. **Tiberiu Gyongyosi, Gheorghe Deloreanu, Dumitru Puiu, Bogdan Corbescu, Nicolae Anghel, Ramona Nastase, Elena Dinu** - *Ageing Behaviour of the Pressure Tube Simulator–Spacer–CalandriaTube Simulator Coupling (by Stages), in the First Half Service Period* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
72. **Octavian Uță, Cristian Gentea, Mădălin Savu** - *Ir-192 Sealed Sources for Industrial Radiography* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
73. **G.C. Lazăr, M. Mincu, M.G. Petre, D.I. Miriță, R. Marinescu, A. Benga** - *Lanthanides Separation from Spent Fuel by High Performance Liquid Chromatography* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
74. **Magdalena Dianu, Crina Bucur** - *Matrix Influence on 63Ni Activity Recovery from Aqueous Samples* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955

75. **Csaba Roth**, B.Boer, R.Delville, **M. Mladin**, **G.Budriman**, **C.Truta**, **D.Barbos**, **I.Popa**, **A.Udrea**, P.Dries, K.Vanaken, **L.Aioanei**,**C.Gondac**, M.Verwerft, **M.Ciocanescu**, **A.Tudor**, **A.Datcu**, **V.Tencu**, **G.Militaru**, **L.Savu** - *Fast Reactor Fuel Transient Tests at the TRIGA-ACPR Reactor* - The 11th Annual International Conference on Sustainable Development through Nuclear Research and Education, May 23-25, 2018, Pitești, România, ISSN 2066-2955
76. **A. Vilcu** - *Study on lead-bismuth circulation technology and corrosion characteristics of welded steels* - Baza de date a Tokyo Institute of Technology, Aug. 2018
77. **Marin Constantin**, **Ilie Turcu**, **Constantin Paunoiu**, **Alexandru Toma**, **D.Diaconu**, **M.Apostol**, **M.Nitoi**, **D.Gugiu** - *Lead Fast Reactor Technology and ALFRED Demonstrator Development in the Context of Future Markets of Energy* – FOREN 2018, Costinesti, June 2018
78. **V. Olaru**, **V. Ionescu**, **D.V. Ionescu**, **Al. Nitu**, **A. Ion**, **F. Voicu** - *Fatigue tests on SEU-43 Zircaloy4 Tubes at 350°C* - 14th WEC Central & Eastern Europe Reg. Energy Forum – FOREN 2018, Buc., România, 10-14.06. 2018
79. **Daniel Petrescu**, **Lucian Velciu** - *Chemical cleaning of solidified lead from 316 austenitic steel a structure candidate material for lead-cooled fast reactors* – The 14th WEC Central & Eastern Europe Regional Energy Forum - FOREN 2018, 10 -14 June 2018
80. **Valentin Olaru**, **Viorel Ionescu**, **Dragos Ionescu**, **Alexandru Nitu**, **Alexandra Ion**, **Florin Voicu** - *Fatigue Tests on SEU-43 Zircaloy-4 Tubes at 3500C* - The 14th WEC Central & Eastern Europe Regional Energy Forum - FOREN 2018, 10 -14 June 2018
81. **Alexandra Ion**, **Vasile Radu** - *The influence of thermal loads under constant mechanical stress on the hydride's morphology in the CANDU pressure tube* - The 14th WEC Central & Eastern Europe Regional Energy Forum - FOREN 2018, 10 -14 June 2018
82. **Irina Paraschiv** - *Oxygen Control in Lead cooled systems via solid phase- preliminary tests for developing PbO mass exchangers* - The 14th WEC Central & Eastern Europe Regional Energy Forum - FOREN 2018, 10 -14 June 2018
83. **Lucan Dumitra**, **Lucian Velciu** - *Corrosion of some candidate structural materials for Lead Fast Reactors* - Journal of Engineering Sciences and Innovation, Vol.3, Issue 4/2018, pp 313-328, 2018
84. **Elisabeta Coaca**, **Oana Alice Rusu**, **Alexandru Horia Marin**, **Lucian Velciu**, **Maria Mihalache**, Victor Aurel Andrei, Teodor Visan - *Microscopic and electrochemical characterization of alumina ceramic films developed onto 316L stainless steel by micro-arc oxidation in plasma electrolysis* - UPB Scientific Bulletin, Series B, 80, 17-32 (IF=0), 2018
85. **B. Corbescu**, **T. Gyöngyösi**, **D. Puiu**, R.A. Chihai, V.N. Panaitescu- *Vizualizarea secventiala a proceselor de formare a dopului de gheata in sectiunea de testare a unei conducte de diametru mare* - Știință și inginerie. ISSN 2067-7138, Editura AGIR, vol 34, București, 2018
86. **B. Corbescu**, **D. Puiu**, **T. Gyöngyösi**, V.N. Panaitescu - *Formarea unui dop de gheață în conducta de diametru mare, în apă staționară, folosind o reducere de 24% pentru evacuarea vaporilor de azot* –vol.1122, Journal of Physics: Conference Series, 2018
87. Gabriel Georgescu, Véronique Jacques, **Mirela Nitoi**, Luca Podofillini, Marina Röwekamp - *PSA Lessons Learned from Viewpoint of the ETSON TSOs* - IAEA Conference on Challenges Faced by Technical and Scientific Support Organizations (TSOs) in Enhancing Nuclear Safety and Security: Ensuring Effective and Sustainable Expertise, Brussels, Belgium, 15–18 October 2018
88. J.P. Van Dorsselaere, B. Autrusson, M. Adorni, F. Rocchi, L. Cizelj, N. Fedotova, S. Shevchenko, A. Schaffrath, E. Uspuras, O. Pecherytsia, **M. Nitoi**, Y. Yamamoto, S. Power - *Overview of ETSON modelling and experimental capabilities for R&D on nuclear safety* - IAEA Conference on Challenges Faced by Technical and Scientific Support Organizations (TSOs) in Enhancing Nuclear Safety and Security: Ensuring Effective and Sustainable Expertise, Brussels, Belgium, 15–18 October 2018
89. **Alexandru Toma** - *The role and responsibilities of RATEN ICN as TSO for the Romanian Nuclear Regulatory Authority*, IAEA Conference on Challenges Faced by Technical and Scientific Support Organizations (TSOs) in Enhancing Nuclear Safety and Security: Ensuring Effective and Sustainable Expertise, Brussels, Belgium, 15–18 October 2018
90. **Mariea Deaconu**, **Ion Furtuna**, **Alice Dinu**, **M. Mihalache** - *Studies on Hydrogen interaction with uranium alloys* - The XXI National Conference with International participation -New Cryogenic and Isotope Technologies for Energy and Environment- EnergEN 2018, Octombrie 2018

91. I. Nita, **Mariea Deaconu**, R. Fako, S. Meglea - *Overview of Tritium Activity in the Nuclear Fission Reactors - The XXI National Conference with International participation* -New Cryogenic and Isotope Technologies for Energy and Environment- EnergEn 2018, Octombrie 2018
92. **Alice Dinu, Mariana Tunaru** - *Characterization of Biofilms Developed on Carbon Steel using X-Rays Micro-Diffraction* - The 22nd Conference, New Cryogenic and Isotope Technologies for Energy and Environment ENERGEN 2018, 24-26 Octombrie 2018
93. **Relu Dobrin, Cristian Dulama, Crina Bucur, Valentina Neculae** - *Measurement of Ra-226 via Rn-222 in Water Samples by LSC* - 22nd Conference "New Cryogenic and Isotope Technologies for Energy and Environment" - EnergEn 2018, 24-26.10.2018
94. **Oana Popescu**, George Șerbănescu, Mihaela Vitan, Simona Bălășoiu, Alexandru Florea - *CANDU 600 Failed Fuel Location System. Analysis of BF3 Delayed Neutron Detectors Ageing* - New Cryogenic and Isotope Technologies for Energy and Environment – EnergEn 2018 (Govora – Rm. Vâlcea), 26.10.2018

## Lucrări științifice/tehnice în reviste, altele decât cele cotate sau indexate

1. **M. Constantin** - *Nuclear Development under the Economic Constraints* - Journal of Nuclear Research and Development, No. 15, May 2018, pg. 1-2, ISSN 2247 – 191X, ISSN-L 2247 – 191X
2. **D. E. Gugiu, S.C. Valeca**, F. Bortosu - *Isotopic Inventory Evaluations in Lead-Cooled Fast Reactors* - Journal of Nuclear Research and Development, No. 15, May 2018, pg. 9-13, ISSN 2247 – 191X, ISSN-L 2247 – 191X
3. **M. C. Petreanu, S.C. Valeca, I. Prodea** - *Burning Thorium-based Nuclear Fuels in CANDU Reactors - A Way to Improve Burnup and Nuclear Safety* - Journal of Nuclear Research and Development, No. 15, May 2018, pg. 23-26, ISSN 2247 – 191X, ISSN-L 2247 – 191X
4. **A.C. Radut, S.C. Valeca, S. Florea, D.F. Oproiu, G. Olteanu** - *Assessment of NUE Fuel Element Performance in Normal Operating Conditions* - Journal of Nuclear Research and Development, No. 15, May 2018, pg. 27-31, ISSN 2247 – 191X, ISSN-L 2247 – 191X
5. **I. Prodea, A. M. Segarceanu, R. M. Roman, D.F. Oproiu** - *An Assessment of Romanian National Determined Contribution to Climate Change Mitigation* - Journal of Nuclear Research and Development, No. 15, May 2018, pg. 32-36, ISSN 2247 – 191X, ISSN-L 2247 – 191X
6. **A. Tudose, M. Valeca, M. Fulger, A. Dinu, L. Velciu, G. Bucsa** - *Characterization of the Oxide Films formed on Carbon Steel Components of the Secondary Circuit of CANDU NPP* - Journal of Nuclear Research and Development, No. 15, May 2018, pg. 56-60, ISSN 2247 – 191X, ISSN-L 2247 – 191X
7. **C. Diaconescu, I. Florea, M. Dianu, R. Dobrin** - *Characterization of the Spent Ion Exchange Resins generated from Cernavoda NPP Operation: Gamma Ray Spectrometry Measurements* - Journal of Nuclear Research and Development, No. 15, May 2018, pg. 61-64, ISSN 2247 – 191X, ISSN-L 2247 – 191X
8. **F. Chirita, M. Dulama, M. Valeca, C. Diaconescu** - *Processing of Spent radioactive Ion Exchange Resins: Treatment vs. Direct Conditioning* - Journal of Nuclear Research and Development, No. 15, May 2018, pg. 65-68, ISSN 2247 – 191X, ISSN-L 2247 – 191X
9. **M. Constantin** - *Future Market's Opportunities for Nuclear Power* - Journal of Nuclear Research and Development, No. 16, December 2018, pg. 1-2, ISSN 2247 – 191X, ISSN-L 2247 – 191X
10. **D. Diaconu, A. Constantin, C. Bucur** - *Sensitivity Analysis of C-14 Radiological Impact for a Generic Concept of Spent Fuel Disposal in Romania* - Journal of Nuclear Research and Development, No. 16, December 2018, pg. 14-20, ISSN 2247 – 191X, ISSN-L 2247 – 191X
11. **A.C. Radut, D.F. Oproiu, S. Florea, G. Olteanu, M.R. Roman, D.V. Ionescu** - *Evaluation of the ELESIM-TORIU Computer Code Capability to Simulate the Behaviour of Thorium Based CANDU Fuel in Normal Irradiation Conditions* - Journal of Nuclear Research and Development, No. 16, December 2018, pg. 21-26, ISSN 2247 – 191X, ISSN-L 2247 – 191X



12. **R.G. Bezdedeanu-Neacsu, A.C. Rizoiu, I. Prisecaru** - *Reducing Void Effect in Thorium-Based Advanced CANDU Cells by Using Burnable Absorbers* - Journal of Nuclear Research and Development, No. 16, December 2018, pg. 27-33, ISSN 2247 – 191X, ISSN-L 2247 – 191X
13. **M. Media, T. Tudorache, A. Amzoi** - *Numerical Modeling of the Induction Heating Process for Brazing Upper Seal of Instrumented TRIGA - LEU Nuclear Fuel Element* - Journal of Nuclear Research and Development, No. 16, December 2018, pg. 34-38, ISSN 2247 – 191X, ISSN-L 2247 – 191X
14. **M. Dinca, D.L. Stoenescu** - *Method of Non-Destructive Investigation of the Fresh Nuclear Fuel with Scintillators and Radiographic Films* - Journal of Nuclear Research and Development, No. 16, December 2018, pg. 45-51, ISSN 2247 – 191X, ISSN-L 2247 – 191X
15. **O. Rusu, M. Valeca, A.H. Marin, A. Bumbes, E. Coaca, R. Negrea** - *X-Ray Photoelectron Spectroscopy Investigations on Hydrided Zy-4 Fuel Cladding* - Journal of Nuclear Research and Development, No. 16, December 2018, pg. 52-54, ISSN 2247 – 191X, ISSN-L 2247 – 191X
16. **A. Tudose, M. Fulger, L. Velciu, M. Mihalache** - *Analysis of the Oxide formed on Stainless Steel Components of the Secondary Circuit of CANDU Reactor* - Journal of Nuclear Research and Development, No. 16, December 2018, pg. 55-60, ISSN 2247 – 191X, ISSN-L 2247 – 191X
17. **I. Paraschiv, I. Voica** - *Influence of Temperature Level on the Properties of C25/30 Concrete used at Cernavoda NPP Containment* - Journal of Nuclear Research and Development, No. 16, December 2018, pg. 61-65, ISSN 2247 – 191X, ISSN-L 2247 – 191X
18. **I. Florea, C. Diaconescu, M. Mihalache, N. Deneanu, C. Bucur** - *Effect of Various Environments on Mechanical Strength of Mortars* - Journal of Nuclear Research and Development, No. 16, December 2018, pg. 66-70, ISSN 2247 – 191X, ISSN-L 2247 – 191X

## Comunicări științifice prezentate la conferințe naționale și internațională

1. **Crina Bucur, Manuela Fulger, Ionut Florea, Aurelia Tudose, Relu Dobrin** - *Leaching test and corrosion measurements for irradiated Zr-4* - Final Symposium of CAST project, Lyon, France, 16-18 ianuarie 2018, 16 ianuarie 2018
2. **Crina Bucur, Ionut Florea, Relu Dobrin, Dan Bujoreanu** - *14C Content and Speciation of SIERS from CANDU* - Final Symposium of CAST project, Lyon, France, 16-18 ianuarie 2018, 17 ianuarie 2018
3. **Crina Bucur, Camelia Ichim, Ionut Florea, Liliana Bujoreanu** - *14C in TRIGA Irradiated Graphite and its Release under Alkaline Conditions* - Final Symposium of CAST project, Lyon, France, 16-18 ianuarie 2018, 17 ianuarie 2018
4. **C.A. Mărgeanu** - *Romanian Nuclear Energy System – present status, development plans and economic challenges on short term* - 17th WPNE meeting, NEA/OECD, Paris, France, 31.01.2018
5. **M. Constantin** - *Load Following based on Hydrogen and Synergies with vRES* - NEA/OECD, ARFEM Expert Group Meeting, Paris, January 2018
6. **Mirela Nitoi, Ilie Turcu** - *RATEN Capabilities ICN R&D - ETSON ERG meeting, Bologna, Italy, 15 February 2018*
7. **Alice Ionescu** - *State-of-the-Art Knowledge of Crystalline Rocks for Disposal of Radioactive Waste* - Contributii la raportul NEA CRC, 22.02.2018
8. **Cs. Roth, M. Mladin, C. Dulama** - *Overview of the transient tests at TRIGA-ACPR: -On-line temperature measurements; -Post irradiation examination; - Conclusions on transient tests at TRIGA-ACPR - 3rd MAXSIMA WP5.1 Technical meeting, SCK CEN, Mol, Belgium, 02.03.2018*
9. **C-tin. Paunoiu** - *Self-assessment process developed by the institute for nuclear research Pitesti for triga14mw research reactor* - Workshop on Self-Assessment of Research Reactor Safety, 6-9 March 2018, IAEA HQ, Vienna Austria

10. P. Agostini, A. Alemberti, **M. Apostol, M. Constantin, D. Diaconu**, M. Frignani, G. Grasso, **D. Gugiù, M. Nitoi**, M. Tarantino, **I. Turcu**, G. Villabruna - *Elements of the ALFRED Project* - ESNII Executive Board Meeting, Brussels, 21 March 2018
11. **M. Constantin** - *ALFRED, Implementation in Romania* - ESNII Executive Board Meeting, Brussels, 21 March 2018
12. **M. Constantin** - *SMR Strategic Elements -Romania* - MS Presentation - IAEA, RER2014 Meeting, Vienna, March 2018
13. **M. Constantin** - *SMR – Some Aspects of the Central and East European Context* - I-NERI project meeting, Amsterdam, Aprilie 2018
14. **Crina Bucur, Ionut Florea, Nicoleta Deneanu, Relu Dobrin, Nicu Dulama** - *RA-226 sorption on intact and degraded HCPs* - CEBAMA 3rd Annual Workshop, Nantes, 17-18 Aprilie 2018, 17 aprilie 2018
15. **C. A. Mărgeanu** - *Trial application of ROADMAPS template to Romania's Nuclear Energy System. Case study* - Technical meeting of INPRO ROADMAPS Cooperation Project; IAEA, Viena, Austria, 15-18.05. 2018
16. **B. Corbescu, T. Gyöngyösi, D. Puiu**, R.A.Chihaia, V.N.Panaitescu - *Sequential visualisation of the ice plug development process inside the test section of a large diameter pipeline* - A XVIII-a Conferință internațională multidisciplinară „Profesorul Dorin Pavel – fondatorul hidroenergeticii românești”. Cluj Napoca, 2 iunie 2018
17. **Dinu Alice** - *A 14- a Intalnire anuala a ECG-COMON / Intalnire Anuala “European Cooperative Group on Corrosion Monitoring of Nuclear Materials* – ECG-COMON - Slovenia/Ljubljana, 10-13 iunie 2018
18. **D. Barbos, M. Ciocanescu, C-tin. Paunoiu** - *ICN Pitesti heu fuel shipment to its country of origin* - The 12th Technical Meeting on Lessons Learned from High Enriched Uranium Take-back Programmes Beijing, China, 11-14 June 2018
19. **Crina Bucur** - *End-User-Group Questionnaire: expectation from the answers to be received from EUG members* - CHANCE General Assembly, 19-20 iunie 2018, Espoo, Finlanda, 19 iunie 2018
20. **Iordache Marius** - *RATEN ICN Pitești – Treatment and Conditioning of Radioactive Waste in view of their Final Disposal* - Regional Workshop on Storage of the Radioactive Waste, 25-29 iunie 2018, Vilnius, Lithuania, 26 iunie 2018
21. **Mihai Cătălin Arva**, Nicu Bizon, Alin Gheorghită Mazăre, Laurențiu Ionescu - *Method Proposal for Efficiency Improvement in Wireless Energy Power Transfer System with Two Inductive Coupled Resonator Coils* - The 6<sup>th</sup> European Conference on Renewable Energy Systems, ECRES 2018, (Istanbul – Turcia), 27.06.2018
22. **Mihai Cătălin Arva, Mirel Stănică, Nicolae Anghel** - *Analysis on vibration and resonance characteristics of an low speed 3-phase stepper motor* - ECAI 2018 International Conference 10th Edition on Electronics, Computers and Artificial Intelligence (Iași – România), 29.06.2018
23. **G. Budriman** - *Romania- Report on Nuclear Energy Progress* - IAEA Interreg. Training Course on "Licensing and Construction Preparation and Oversight for New and Extending Nuclear Power Program", Ulsan, Coreea, 18.06-06.07. 2018
24. **M.Constantin** - *ALFRED Demonstrator as a Crucial Step for LFR SMR Development – Stepwise Approach for the Implementation in Romania* - NDC Conference, Zadar, Croatia, June 2018
25. **Relu Dobrin, Cristian Dulama, Crina Bucur** - *Ra-226 determination in aqueous samples by alpha-liquid scintillation counting of Rn-222* - 18th International Balkan Workshop on Applied Physics and Materials Science, 10-13.07.2018
26. **Marin Dincă** - *Flash dynamic investigation by neutron and gamma imaging* - A 18-a Conferinta balcanica internationala de fizica aplicata si stiinta materialelor, IBWAP-2018 (18th International Balkan Workshop on Applied Physics and Materials Science), Universitatea Ovidiu din Constanta, 10.07 – 13. 07.2018
27. **Dan Bujoreanu** - *Treatment and conditioning of spent sealed sources for safe storage, transportation and disposal at National Repository Baita-Bihor* - Technical Meeting on Current Status of the Predisposal Management of Institutional Radioactive Waste, 17-20 iulie 2018, Viena, Austria, 18 iulie 2018

28. **M. Constantin** - *Nuclear Development and Electrification of Transport - Some Considerations for UE and Romania* - NEA/OECD, ARFEM Expert Group Meeting, Paris, July, 2018
29. **M. Constantin** - *Implementation of ALFRED Demonstrator in Romania – Supply Chain Considerations* - IAEA, INPRO meeting, Vienna, July 2018
30. **D. Barbos, M. Ciocanescu, C-tin. Paunoiu** - *Updating of decommissioning plan of TRIGA 14MW RR* - Workshop on Decommissioning Planning for Research Reactors IAEA Headquarters, Vienna, Austria 27–31 August 2018
31. **M. Mladin, G. Budriman, St. Dulugeac** - *ROM\_INR\_A\_1 Benchmark & Results of Calculation by data provider. Calculation of Mo-99 Activation Benchmark in Rsg-Gas Indonesia. INR Results on SAF\_SAFARI-1 Benchmark* - A 3-a Intalnire Coordonata in cadrul CRP T12029, IAEA, Viena, Austria, 28.08.2018
32. **A. Vilcu**, M. Kondo, T. Minoru, P. M. Adhi - *Experience gained from performing corrosion tests in Pb-Bi eutectic loop* - IAEA-ICTP Workshop on "Physics and Technology of Innovative Nuclear Energy Systems", Trieste, Italia, 20-24.08. 2018
33. **Diniași Diana, Tudose Aurelia** - *Proiect European NUGENIA PLUS-* FP7 - Centrum Vyzkumu Řež, Cehia, 26.08- 08.09. 2018
34. **Mirela NITOI** - RATEN ICN activities as TSO - ETSO JSP Summer workshop, Mioveni, Romania, 3-7 September 2018
35. D. F. Oproiu, **A. C. Răduț, M. R. Roman** - *Thermal Evolution of a Conceptual Repository Designed for CANDU Spent Fuel Disposal* - ETSO–JSPN Summer Workshop on "Radioactive waste management, environmental protection and decommissioning", RATEN ICN, Romania, 03-07.09. 2018
36. **C. M. Olteanu, R. M. Voiculescu, R. Baibarac** - *Testing radioactive material transportation packages in ICN Pitesti* - ETSO JSP Summer Workshop 2018 Radioactive waste management, environmental protection and decommissioning, 06 September 2018
37. **Crina Bucur** - *Radioactive Waste Management Program* - ETSO Summer Workshop 3-7 septembrie 2018, RATEN ICN, Mioveni, Romania, 3 septembrie 2018
38. **Ionut Florea, Crina Bucur, Cristina Diaconescu, Maria Mihalache, Nicoleta Deneanu** - *Behavior of cement based materials in near surface repository conditions* - ETSO Summer Workshop 3-7 septembrie 2018, RATEN ICN, Mioveni, Romania, 4 septembrie 2018
39. **Cristina Diaconescu, Crina Bucur, Ionut Florea** - *Methods for Spent Ion Exchange Resins Characterisation* - ETSO Summer Workshop 3-7 septembrie 2018, RATEN ICN, Mioveni, Romania, 4 septembrie 2018
40. **Alice Ionescu** - *Disposal of spent nuclear fuel in salt formations – overview of the Romanian geological disposal program* - 8<sup>th</sup> Meeting of NEA Salt Club, Hannover, Germany, 07.09.2018
41. **C. A. Mărgeanu** - *Nuclear Power – A Competitive Low-Carbon Energy Source in the National Energy System* - 1st Conf. of Postgraduate Research in Physics, Mansoura University, Egipt, 17-19.09. 2018
42. **G. Radu** - *Applications of ASTEC code in relation with hydrogen behaviour on a generic CANDU 6 reactor* - IAEA Technical Meeting on "Hydrogen Management in Severe Accidents", Viena, Austria, 25-28.09. 2018
43. **Marin Mincu** - *Some aspects concerning Post-Irradiation Examination of CANDU type nuclear fuel* - HOTLAB 2018 The 55-th edition of the Annual meeting hot laboratories and remote handling, Halden Finlanda, 17-21 septembrie 2018
44. **Ion Man** - *Compact tension sample preparation out of CANDU pressure tube using the numerical controlled milling machine* - HOTLAB 2018 The 55-th edition of the Annual meeting hot laboratories and remote handling, Halden Finlanda, 17-21 septembrie 2018
45. **A. Bucsa** - *TRIGA Research Reactor Decommissioning Plan* - Training Course on Planning and Costing of Decommissioning", 17 – 21 Septembrie 2018, Bratislava, Slovacia
46. **Deaconu Mariea** - *Participare la întâlnirea de lucru pe Proiect TRANSversal Actions for Tritium-TRANSAT* - Regatul Unit al Marii Britanii, 24-27.09. 2018

47. **Relu Dobrin, Cristian Dulama, Adrian Bucsa** - *QA/QC at Radiation Facilities from Institute for Nuclear Research (ICN) – Pitesti* - Technical Meeting on Strengthening Quality Assurance/Quality Control Protocols in Radiation Facilities Through Dosimetry Inter-comparison, 1-5.10.2018
48. **Florea Ionuț** - *Decommissioning plan for TRIGA RR* - Technical Meeting on Phase II of the Data Analysis and Collection for Costing of Research Reactor Decommissioning (DACCORD) Project, 1-5 octombrie 2018, IAEA Viena, Austria - 2 octombrie 2018
49. **M. Apostol, M. Constantin** - *ALFRED, Some Aspects of the Economics* - TC RER2014-Workshop on Infrastructure, Economic and Financing Aspects of SMRs, Vienna, Austria, 1-5 October, 2018
50. **Cristian Dulama** - *Methods for Quantification of Difficult-to-Measure Radionuclides, Implemented at ICN Pitesti since its Adherence to ALMERA* - 15th Coordination Meeting of the IAEA's Network of Analytical Laboratories for the Measurement of Environmental Radioactivity, 8-10.10.2018
51. **C. A. Mărgeanu** - *Benefits versus Risks. Comparative evaluation of Innovative and Evolutionary NES technologies. App. of KIND-ET tool new modules* - Technical Meeting of INPRO CENESO Cooperation Project; raport de progres, IAEA, Viena, Austria, 09-12.10. 2018
52. L. Vondrovic, J. Flügge, M.I. Yamada, P.E. Mariner, A. Talitskaya, S. Hirshorn, **A. Ionescu**, I. Blechschmidt (Crystalline Club, NEA) - *The IGSC Crystalline Club: Sharing innovative solutions for DGRs in hard rocks - IGSC Safety Case*, Symposium 2018 „Current Understanding and Future Direction for the Geological Disposal of Radioactive Waste”, 11.10.2018
53. **Fulger Manuela** - *Oxidation Behavior Of Austenitic Stainless Steels And Ni Alloys In Supercritical Water* - Conferinta „The Nuclear Materials NUMAT 2018, 14-18 Octombrie 2018
54. **B. Corbescu, D.Puiu, T.Gyöngyösi**, V.N.Panaitescu - *Forming an ice plug inside a high diameter pipeline in stationary water using a nitrogen vapour exhaust restriction - Resort* - International Conference on Sustainable Future and Technology Development, Bucharest, 15 octombrie 2018
55. **Diaconescu Cristina** - RATEN ICN Pitesti, Romania – *Radioactive waste treatment and conditioning department* - TC Training on Characterization of radioactive waste during Predisposal Operations, 15-19 octombrie 2018, Moscova, Rusia, 15 octombrie 2018
56. **Lucan Dumitra** - *Procese specifice coroziunii materialelor structurale ale Reactoarelor LFR* - Conferinta Internationala Energie Si Mediu, Provocari Majore ale Secolului XXI, Ploiesti, 18-19 Octombrie 2018
57. **M. Constantin, S. C. Valeca, I. Turcu** A.Alemberti, M.Frignani, G.Grasso, P.Agostini - *Strategic Elements For SMR Development In Romania Based on LFR Technology* - 1st International Conference on Generation IV and Small Reactors (G4SR-1), Ottawa, Canada, Nov. 6-8, 2018
58. **S. Stanciu** - *Strategic Utilisation Plan: Institute for Nuclear Research-Pitesti TRIGA research reactor (2017 to 2020)* - Training Workshop on Expansion of the Research Reactor Stakeholder Base through Strategic and Business Plan, Vienna, Austria, 12-16 Nov 2018
59. **Fulger Manuela** - *Influence of Cr content on oxidation behavior of nuclear materials in supercritical water* - Conferința Internațională ”Tehnologii emergente în ingineria materialelor EmergeMAT” – Ediția I și Workshop-ul ”Materiale pentru condiții extreme”- Ediția a IV-a., Bucuresti, 14-16 Noiembrie 2018
60. **Dinu Alice** - *Întâlnirea tehnică / Proiectul MEACTOS* - Manchester, Marea Britanie, 19-21 Noiembrie 2018
61. **Valentina Neculae** - *Radiological characterization of waste at the Institute for Nuclear Research Pitesti* - Regional Workshop for Initial Radiological Waste Characterization, 19-23.11.2018
62. **Vasile Radu, Alexandru Nitu** - *Technical Meeting/ GEMMA (NFRP-5)* - KIT, Germania, 28 Noiembrie-1 Decembrie 2018
63. **Crina Bucur** - *Draft synthesis of EUG answers to WP2 questionnaire* - CHANCE WP2 Workshop n°2, 29 noiembrie 2018, Paris, 29 noiembrie 2018
64. **I. Prodea** - *Safety and Economic Aspect at the Using of Standard and Advanced Fuels in Different Reloading Schemes of a CANDU Reactor* - IAEA Technical Meeting on "Reload Design and Core Management in Operating Nuclear Power Plants: Experiences and Lessons Learned", Viena, Austria, 04-06.12. 2018
65. **M.Constantin** - *Development of Gen IV LFR Technology – Considerations on the Non-Electric Applications* - IAEA, INPRO meeting, Vienna, December 2018

## CĂRȚI DE SPECILALITATE SAU CAPITOLE DE CARTE PUBLICATE ÎN ANUL 2018

1. **Cristina Alice Mărgeanu** - "*Romanian Experience on Nuclear Energy System Modelling with MESSAGE*", capitol inclus în "Experience on Modelling Nuclear Energy Systems with MESSAGE: Case studies" IAEA TECDOC No. 1837, ISBN 978-92-0-109417-9, ISSN 1011-4289, IAEA, Viena, Ianuarie 2018;
2. **Csaba Roth** - "*Large Sample NAA facility and methodology development*", capitol inclus în "Advances in Neutron Activation Analysis of Large Objects with Emphasis on Archaeological Examples. Results of a Coordinated Research project", IAEA TECDOC No. 1838, ISBN 978-92-0-100618-9, ISSN 1011-4289, IAEA, Viena, Martie 2018;
3. **Cristina Alice Mărgeanu, Minodora Apostol, Iosif Prodea** - "*National Romanian scenarios with reliance on domestic and imported U/fuel supply, by considering regional collaboration in nuclear fuel cycle and including economic analysis*", capitol inclus în "Enhancing Benefits of Nuclear Energy Technology Innovation through Cooperation among Countries: Final Report of the INPRO Collaborative Project SYNERGIES", IAEA Nuclear Energy Series Tech. Report No. NF-T-4.9, ISBN 978-92-0-101118-3, ISSN 1995-7807, IAEA, Viena, Noiembrie 2018;
4. **Silviu Florea, Gheorghe Olteanu, Alina Cristina Răduț** - "*Aspecte deterministe și probabiliste în evaluarea, prin metoda elementului finit, a comportării ansamblului canal combustibil de tip CANDU 600 în regim normal de exploatare*", Ed. SITECH, Colecția Institutul de Cercetări Nucleare, ISBN 978-606-11-6603-9, Craiova, Noiembrie 2018;
5. **Lucan Dumitra** - "*Factori care contribuie la degradarea materialelor structurale ale Generatorului de Abur*", Editura SITECH, Craiova, 2018, ISBN 978-606-11-6615-2;
6. **Dumitrescu Iulia, Mihalache Maria** - "*Contribuții la studiul fragmentării combustibilului nuclear de  $UO_2$  în condiții de accident sever*", Editura SITECH, Craiova, 2018, ISBN 978-606-11-6618-3.