

## LUCRARI STIINTIFICE PUBLICATE / PREZENTATE LA CONFERINTE NATIONALE SI INTERNATIONALE IN ANUL 2012

1. **CS. Roth, D. Barbos, D. E. Gugiu, A. Datcu, D. Dobrea, M. Preda, M. Gligor, M B. Mweetwa** - *Irradiation and measurement devices and methods development for LSNA applications at the TRIGA-ACPR core* – Journal of Radioanalytical and Nuclear Chemistry 291:461-466 DOI 10.1007/s10967-011-1231-7, ianuarie 2012
2. **D. Sporea, A. Sporea, M. Ancuta, D. Barbos, M. Mihalache, M. Mladin** - *Evaluation of UV optical fibers behavior under neutron irradiation* - Advances in Materials Physics and Chemistry, Vol. 2 No. 4B, 2012, pp. 115-118. doi: 10.4236/ampc.2012.24B031, 2012
3. **I. Ionita, C. Paunoiu, V. Florescu** - *New Trenes in Termal Neutrons Spectrometry Getting High-Resolution Performances in Thermal Neutrons Spectrometry by Using Inverse Space Focusing* – Journal of Physics: Conference Series, 340, 012026, 2012
4. **D. Stefanescu** - *Management of Candu 6 secondary circuit water chemistry using several amines* - Nuclear Engineering International, Vol.57 No.701, decembrie 2012
5. **A. Dinu** - *The Influence of the Oxide Layer on the Stress Corrosion Cracking Initiation in the Case of Incoloy 800 in the Alkaline Environment* – Journal of Nuclear Engineering & Technology Volume 2, Issue, Pages 11-19, august 2012
6. **M. Nitoi, A. Rodionov** - *Ageing Probabilistic Safety Assessment Network – Recent Developments* - Progress in Nuclear Energy Journal, Vol. 56, Iss.1, pp 71-78, DOI 10.1016/j.pnucene.2012, Elsevier ISSN: 0149-1970, 2012
7. **V. Radu, M. Roth** - *Probabilistic fracture mechanics applied for DHC assessment in the cool - down transients for CANDU pressure tubes* - Nuclear Engineering and Design 253 (2012) 211– 218, 2012
8. **M. Dianu** - *Tritium analysis in hydraulic oil waste by oxidation technique* - Fusion Engineering and Design, 87, (7-8), 2012, p. 1443-1446, iunie 2012
9. **M. Farcasiu, I. Prisecaru** - *The man-machine-organization system analysis in accident conditions for nuclear installations* - UPB Scientific Bulletin, Series C, Vol.74, Iss. 2, ISSN 1454 – 234x, pp. 299-310, 2012
10. **M. Farcasiu, I. Prisecaru** - *Study on the main factors influencing human performance in NPP operation* - UPB Scientific Bulletin, Series D, Vol.74, Iss. 1, ISSN 1454-2358, pp. 163-170, 2012
11. **M. Mladin, D. Mladin** - *MCNP5 Calculations Compared to Experimental Measurements in CEA-Minerve Reactor* - UPB Scientific Bulletin, Series D, Vol.74, Issue 1, ISSN 1454-2358, 2012
12. **I. Prodea, I. Prisecaru** - *Core Neutronic Effects at the Use of Burnable Absorbers in CANDU Fuel Bundles* - UPB Scientific Bulletin, Series D, Vol.74, Iss. 1, ISSN 1454-2358, pp. 179-185, 2012
13. **G T. Gyongyosi, I. Prisecaru, V. N. Panaitescu** - *Experimental determination of the mechanical compression strength for CANDU type experimental fuel bundle* - Buletinul Stiintific al Universitatii Politehnica Bucuresti, 2012
14. **M. Nitoi** - *Considerations about components ageing - Identification methods, consequences and mitigation strategies* - LAP Lambert Academic Publish. GmbH & Co. KG, Germany, ISBN 978-3-8484-0331-8, book, 100 pages, martie 2012
15. **G. Horhoianu, D. V. Ionescu, E. Pauna** - *Analytical Assessment for Stress Corrosion fatigue of CANDU Fuel elements under load following conditions* - KERntechnik Journal, Vol.76, 2012
16. **G. Horhoianu, M. Serbanel, C. Diaconu** - *Investigation of the RU-43LV fuel behavior under LOCA conditions in a CANDU reactor* - KERntechnik Journal, Vol. 77, No.5, pp.356, 2012
17. **G. Horhoianu, I. Sorescu, M. Parvan** - *Irradiation tests on PHWR type fuel elements in TRIGA research reactor INR Pitesti* - I KERntechnik Journal, Vol. 77, No.6, pp.418, 2012
18. **D. Lucan, L. Velciu, M. Mihalache, A. Dinu** - *INR Experience Concerning The Assessment Of The CANDU Steam Generator Tubing Material Degradation* - Asian Nuclear Prospect, Energy Procedia, 2012

19. **A. Dinu, V. Radu, D. Ionescu, L. Velciu, G. Bucşa** - *Stress Corrosion Cracking Behaviour OF CANDU Fuel Claddings* - Progress of Cryogenics and Isotopes Separation, Issue 1/2012 vol. 15, 2012
20. **Dinu, L. Velciu, I. Chicinas, D. Ionescu** - *Considerations on the CANDU steam generators tubes fracture behavior in the case of Stress Corrosion Cracking* - Journal of Nuclear Research and Development, No. 3, pp. 41-46, mai 2012
21. **D. E. Gugiu** - *Preliminary Analysis of Tantalum Behavior in Fast Reactors* - Journal of Nuclear Research and Development - JNRD, Nr.3, pg. 3-7 ISSN 2247 - 191X, ISSN-L 2247 - 191X, 2012
22. **D. E. Gugiu, Carlo Petrovich** - *Neutronic Analysis of the Structural Materials Used in Heavy Liquid Cooled Fast Reactors* - Journal of Nuclear Research and Development - JNRD, No. 3, ISSN 2247 - 191X, ISSN-L 2247 - 191X, mai 2012
23. **M. Constantin, D. Diaconu, A. Constantin** - *Construction of a Democratic Dialogue on the Radioactive Waste Repository in the case of the Saligny Site* - Journal of Nuclear Research and Development – JNRD, Nr.3, pg. 22-28 ISSN 2247 - 191X, ISSN-L 2247 - 191X, mai 2012
24. **A. Constantin, D. Diaconu, C. Bucur** - *Performance assessment for disposal of irradiated graphite from research reactors in a near surface repository* - Journal of Nuclear Research and Development, No. 4, 2012
25. **T. Meleg, M. Deaconu, I. Dumitrescu** - *Thermophysical Properties of UZrH Fuel between 300 and 1400 K* - Journal of Nuclear Research and Development – JNRD, Nr.4, pg. 9-19, ISSN 2247 - 191X, ISSN-L 2247 - 191X, decembrie 2012
26. **R. Dobrin, M. Pavelescu, C. Dulama, Al. Toma** - *A Method for Low-Level Gross Alpha Activity Determination in Liquid Effluents* - Journal of Nuclear Research and Development – JNRD, Nr.4, pg. 46-52 ISSN 2247 - 191X, ISSN-L 2247 - 191X, decembrie 2012
27. **M. Nitoi, J. Holy, I. P. Dinu** - *Investigating the relation between common cause coupling factors and ageing* - Journal of Nuclear Research and Development – JNRD, Nr.4, pg. 46-52 ISSN 2247 - 191X, ISSN-L 2247 - 191X, decembrie 2012
28. **G. Glinatsis, D. E. Gugiu** - *Long-Lived Small LMFR. Core Design Challenges* - Journal of Nuclear Research and Development – JNRD, Nr.4, pg. 3-8, ISSN 2247 - 191X, ISSN-L 2247 - 191X, decembrie 2012
29. **C Roth, D Gugiu, D Barbos, C Paunoiu, A Datcu, L Aioanei, D Dobrea, I.E Visan, M Gligor, A Ghinescu, M. B. Mweetwa** - *Large Sample NAA Facility and Methodology Development* – The 3<sup>rd</sup> RCM of CRP on Application of Large Sample Neutron Activation Analysis Techniques for Inhomogeneous Bulk Archaeological Samples and Large Objects – Lima, Februarie 2012
30. **M. Constantin** - *Networking Activities for Advanced Cohesion in NMS and OMS Nuclear Research* - 1st National Meeting, project FP7-NEWLANCER, Romania, februarie 2012
31. **M. Constantin** - *National expert groups creation (defining common rules for their composition and functioning)* - 1st National Meeting, project FP7-NEWLANCER, Romania, februarie 2012
32. **D. Diaconu, M. Constantin, A. Constantin** - *Methods to be used by Saligny community in LIL waste disposal* - Project FP7-IPPA Meeting, Slovacia, martie 2012
33. **M. Farcasiu** - *Study on the main factors influencing human performance in the research reactor operation* - Workshop on Consideration of Human Factors in Different Phases of Research Reactors Lifetime; IAEA Vienna, martie 2012
34. **A. Craciunescu, G. Ciumbulea, M. Media** - *Phase-Modulus Diagram of Instantaneous Current's Space Phasor as Diagnosis Tool of Induction Motor's Stator Windings* - International Conference on Renewable Energies and Power Quality (ICREPQ'12)-Santiago de Compostela (Spain), pp. 809-812, 28 – 30 martie 2012
35. **D. E. Gugiu** - *Generation III & IV Systems –Romania* - 1st Regional Meeting, project FP7-NEWLANCER, Ungaria, Aprilie 2012
36. **M. Constantin** - *WP2 Networking, Country Report- Romania* -1st Regional Meeting, project FP7-NEWLANCER, Ungaria, aprilie 2012
37. **M. Constantin** - *WP2 Regional Meeting – Conclusions & Next Tasks* - 1st Regional Meeting, project FP7-NEWLANCER, Ungaria, aprilie 2012
38. **M. Apostol, M. Constantin** - *WP2 Nuclear Safety - National Group Report & Expectations* - 1st Regional Meeting, project FP7-NEWLANCER, Ungaria, aprilie 2012

39. **V. Radu** - *INR Contributions to STYLE Project* - Plenary Meeting and Seminar on LBB”, in cadrul Proiectului STYLE: "Structural integrity for lifetime management– non-RPV components, („Integritatea structurala pentru managementul timpului de viata a componentelor nucleare, exceptand vasele sub presiune”), Proiect No. 249648 EURATOM, FP7, University of Manchester in colaborare cu SERCO UK, Anglia, 16 – 20 aprilie 2012
40. **V. Radu** - *WP3.3 State-of-Art overview and Case studies on probabilistic approach* - Plenary Meeting and Seminar on LBB”, in cadrul Proiectului STYLE: "Structural integrity for lifetime management– non-RPV components, („Integritatea structurala pentru managementul timpului de viata a componentelor nucleare, exceptand vasele sub presiune”), Proiect No. 249648 EURATOM, FP7, University of Manchester in colaborare cu SERCO UK, Anglia, 16 – 20 aprilie 2012
41. **D. E. Gugiu** - *DPA and Radiological Protection for LFR and ETDR* - Project FP7 – LEADER Meeting, Spain, mai 2012
42. **I. Turcu, M. Constantin** - *Contribution of INR to Generation IV Development* - ESNII Task Force Meeting, France, mai 2012
43. **Gh. Radu, D. Ciobanu, M. Mocanasu, L. Gruia, A. Pulpa** - *INR Pitesti Experience in Design, Manufacturing and Installation of Digital Control System for TRIGA 14 MW Reactor Modernization* - The International Atomic Energy's (IAEA's) Technical Meeting on Digital Instrumentation and Control System for New Facilities and Modernization of Existing Research Reactors, Viena, Austria, 14 – 18 mai 2012
44. **L. Aioanei, D. Dobrea** - *Instrumentation Specific Core C&I devices* - Project FP7 – LEADER Meeting, Spain, mai 2012
45. **L. Aioanei, D. Dobrea** - *Simulation of Coupled Core, Steam Generator & Secondary Circ. Dynamics* - Project FP7 – LEADER Meeting, Spain, mai 2012
46. **A. Nitu, V. Pitigoi** - *Investigation of Mechanical Properties of Nuclear Structural Materials* – NUCLEAR 2012 - Proceedings of The 5th Annual International Conference on Sustainable Development through Nuclear Research and Education, Pitesti, Romania, 16 – 18 mai 2012
47. **A. Dinu, M. Stanciulescu** - *Crystallographic texture of zircaloy-4 claddings* - Proceedings of The 5th Annual International Conference on Sustainable Development through Nuclear Research and Education, Pitesti, Romania, 16 – 18 mai 2012
48. **D. Diaconu** - *New Member States Linking for AdvANced Cohesion in Euratom Research* - Proceedings of, The 5th Annual International Conference on Sustainable Development through Nuclear Research and Education, Pitesti, Romania, 16 -18 mai 2012
49. **D. Lucan, L. Velciu, M. Mihalache, A. Dinu, D. Astefanesei, M. Pantiru** - *Corrosion of the CANDU Steam Generator Tubing* – Proceedings of The 5th Annual International Conference on Sustainable Development through Nuclear Research and Education, Pitesti, Romania, 16 – 18 mai 2012
50. **D. Astefanesei, D. Lucan, M. S. Stoica** - *Corrosion Tests of In 600 at the Specific Parameters of the Steam Generator Primary Circuit* - Proceedings of The 5th Annual International Conference on Sustainable Development through Nuclear Research and Education, Pitesti, Romania, 16 – 18 mai 2012
51. **D. Stefanescu** - *Inhibition of Mild Steel Corrosion in Simulated Pore Solution by Some Organic Inhibitors* - Proceedings of, The 5th Annual International Conference on Sustainable Development through Nuclear Research and Education, Pitesti, Romania, 16 – 18 mai 2012
52. **D. Stefanescu, L. Velciu, M. Mincu** - *Inhibition of Mild Steel Corrosion in Simulated Pore Solution by Some Organic Inhibitors* - Proceedings of The 5th Annual International Conference on Sustainable Development through Nuclear Research and Education, Pitesti, Romania, 16 – 18 mai 2012
53. **L. Popa, M. Tunaru, L. Velciu** - *The Evaluation of Organic Inhibitors for the Protection of Grade 2 Titanium Alloys in Chloride Media* - Proceedings of The 5th Annual International Conference on Sustainable Development through Nuclear Research and Education, 2012 Pitesti, Romania, 16 – 18 mai 2012
54. **M. Stanciulescu, A. Dinu, M. Mihalache** - *Microstructural characterization of oxide layers formed on carbon steels in secondary circuit conditions on CANDU Reactors* - Proceedings of The 5th Annual International Conference on Sustainable Development through Nuclear Research and Education, Pitesti, Romania, 16 – 18 mai 2012
55. **M. Stanciulescu, A. Dinu, D. Ohai, R. Mihaiu** - *Fuel cladding materials for Lead-cooled Fast Reactors* - Proceedings of The 5th Annual International Conference on Sustainable Development through Nuclear Research and Education, Pitesti, Romania, 16 – 18 mai 2012

56. **M. Tunaru, L. Popa** - *The Use of MD-40 Biocide in the Inhibition of the Microbiologically Induced Corrosion in Raw Water* - Proceedings of The 5th Annual International Conference on Sustainable Development through Nuclear Research and Education, Pitesti, Romania, 16 – 18 mai 2012
57. **L. Velciu, D. Astefanesei, L. Popa, A. Nitu** - *Metallographic Examination of Two Nickel-Based Alloys* - Proceedings of, The 5th Annual International Conference on Sustainable Development through Nuclear Research and Education, Pitesti, Romania, 16 – 18 mai 2012
58. **A. F. Bucsa, D-tru Barbos** - *The determination of environment pollution using neutron activation analysis –K0 method on mosses* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
59. **A. Constantin, D. Diaconu, C. Bucur** - *Performance assessment for disposal of irradiated graphite from research reactors in a near surface repository* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
60. **A. Catana, M. Ioan, E. Pauna** - *CFD Analysis for some Components of an HLM Material Testing Loop* – The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
61. **A. Nitu, V. Pitigoi** - *Investigation of Mechanical Properties of Nuclear Structural Materials* - The 5th Annual International Conference on Sustainable Development through Nuclear Research and Education – NUCLEAR 2012, Pitesti, Romania, 16 -18 May 2012
62. **A. Dinu, M. Stanciulescu** - *Crystallographic texture of zircaloy-4 claddings* - The 5th Annual International Conference on Sustainable Development through Nuclear Research and Education – NUCLEAR 2012, Pitesti, Romania, 16 – 18 mai 2012
63. **C. Doca** - *The Quasistatic Bending of a Bernoulli-Euler Beam - Some Generalized Analytical Models* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
64. **C. Iorga, S. C. Valeca** - *Improving the Monitoring System for F/M Test Rig Heater* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
65. **A. Rizoiu, G. Horhoianu** - *Using Low Void Reactivity Bundles in CANDU® Reactors* - The 5th Annual International Conference on Sustainable Development through Nuclear Research and Education – NUCLEAR 2012, Pitesti, Romania, 16 – 18 mai 2012
66. **C. Dulama, R. Dobrin, A. Toma, R. Toma, S. Stoica** - *Experimental Tests for Separation of Actinides from Aqueous Samples* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
67. **C. A. Margeanu, A. Rizoiu, Gh. Olteanu** - *Study of Spent Fuel Parameters for Low Void Reactivity Bundles in CANDU Reactors* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
68. **C. Ciocirlan, C. Dulama, R. Dobrin, A. Toma, O. Hirica, S. Stoica** - *Participation of The CROWN Laboratory in The Intercomparison Exercises Organized by IAEA* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 - 18 May 2012
69. **I. Cretu, E. Dragan, M. Ionila, M. Petra** – *The Public's Knowledge and Perception on the Nuclear Field – SCN Pitesti Opinion Survey* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
70. **C. Bucur, D. Diaconu, M. Olteanu** - *Sorption Effect on the Radionuclides Mobility in Vadose Zone* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
71. **C. Arsene** - *Testing the capacity of liquide membranes for extraction of Cs-137 and Co-60* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
72. **C. Talpalariu, J. Talpalariu** - *Radiation Measurements Computerised System for Spent Nuclear Fuel Transport Monitoring* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
73. **D. E. Gugiu, C. Petrovich** - *Neutronic Analysis of the Structural Materials Used in Heavy Liquid Cooled Fast Reactors* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012

74. **D. Puiu, T. Gyongyosi, F. Voicu, E. Dinu** - *The Development of practical techniques to quantify the ageing degree for the power cables, breaking elongation tests* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
75. **E. Coaca, G. Oncioiu, S. Florea, C. Lungu, V. Andrei** - *Microstructure and Properties Induced by Surface Engineering Treatments Including Plasma Electrolytic Nitriding/ Carburizing/ Boriding of Iron Based Structural Materials* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
76. **E. Pauna, A. Catana, M. Ioan** - *CFD Simulation of an Air-Based Heat Exchanger in a Heavy Liquid Metal Test Loop* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
77. **E. Banches, C. A. Margeanu** - *Status of National Participation in the INPRO Project of IAEA* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
78. **J. Talpalariu, C. Talpalariu, C. Matei** - *Fault Detection and Isolation Modeling Methods Implemented in Gamma Dosimetric Network Triga Reactor* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
79. **G. C. Lazar, M. Tatarascu, A. Benga** - *Separation And Determination Of Lanthanides Using High Performance Liquid Chromatography* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
80. **G. Radu, I. Prisecaru** - *The Flame Front Behaviour Following A Severe Accident in a Generic CANDU 6 Containment* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
81. **G. Budriman, M. Mladin, S. Dulugeac** - *MCNP Calculation of Burn-up Credit Criticality and Isotopic Composition Benchmark* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
82. **G. Glinatsis, D. E. Gugiu** - *Long-Lived Small LMFR. Core Design Challenges* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
83. **Gh. Florescu** - *The new nuclear technologies and associated latent risk for accidents* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
84. **I. Prodea** - *Effects of Low Void Reactivity Fuel Using On Core Integral Parameters in a CANDU 6 Reactor* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
85. **I. E. Visan, Cs. Roth** - *Neutron Activation Analysis Cross Sections Library Upgrading* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
86. **L. Bujoreanu, C. D. Bujoreanu** - *Study of efficiency recovery of 3h from spent ion exchange resins from Cernavoda NPP using liquid scintillation analyzer* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
87. **M. Minca, Gh. Oncioiu, C. Lungu, S. Florea, O. Rusu, E. Coaca, V. Andrei** - *XPS characterisation of the surface structures developed on the surface engineered materials for advanced nuclear systems* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
88. **M. Olteanu, C. Bucur, M. Dragomir** - *Separation of 99Tc from aqueous liquid samples* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
89. **M. Tatarascu, C. Lazar, D. Ilinca, M. Mincu, O. Ichim, R. Negrea** - *Separation And Determination Of Plutonium Out Of Liquid Waste From Post-Irradiation Examination Of Nuclear Fuel* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
90. **M. Serbanel** - *The Influence of Heat Generated by the Zr-Steam Reaction on Thermalhyd. Behav. of CANDU 6 Core* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012

91. **M. Constantin, A. Rizoiu, M. Apostol, A. Constantin** - *CANDU Severe Accident Phenomena Simulated by ASTEC Code* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
92. **M. Apostol** - *Identification of components susceptible to ageing by probabilistic technique and quantification of ageing effects* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
93. **M. Nitoi, J. Holy, I. P. Dinu** - *Investigating the relation between common cause coupling factors and ageing* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
94. **O. Ichim, M. Mincu, G. Androne, C. Lazar, O. Uta, R. Negrea, M. Tatarascu, D. Ilinca, A. Benga** - *Comparative Measurements Of Alpha Sources Activity From Liquid Effluents And Wash/Decontamination Waters From Cernavoda NPP* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
95. **O. Rusu, M. Minca, E. Coaca, S. Florea, Gh. Oncioiu, C. Diaconu, V. Andrei** - *Electro - deposition as a Surface Engineering Solution for the Future Gen IV Reactors* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
96. **R. F. Negrea, O. Uta, M. Tatarascu, D. Ilinca, G. Gheorghe, O. Ichim** - *Microstructural Characterization of Irradiated CANDU Pressure Tube Samples* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
97. **R. M. Mihaiu, V. M. Nistor** - *Studiu privind Metodele de Indepartare a Poloniului din Agentul de Racire pentru Reactoare Rapide racite cu Plumb sau cu Eutecticul Pb-Bi* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
98. **R. Dobrin, M. Pavelescu, C. Dulama, A. Toma** - *A Method for Low-Level Gross Alpha Activity Determination in Liquid Effluents* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
99. **S. Ionescu, O. Uta, C. Gentea, M. Mincu, M. Parvan, L. Dinu** - *Destructive Examination Of Irradiated CANDU Fuel Elements* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
100. **S. C. Valeca, I. Turcu, C. Paunoiu, M. Constantin** - *ALFRED: Current Status and Future Developments in Romania* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
101. **S. Stoica, M. Valeca, A. Toma, C. Ciocirlan, G. Zavoianu, C. Dulama, S. Mihai** - *Bioaccumulation Assessment of radionuclides in aquatic plants. Experimental tests* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
102. **T. Gyongyosi, S. C. Valeca, V. N. Panaitescu, I. Prisecaru** - *Plugging of demineralized water flow into horizontal high diameter pipeline(Dn 200 mm) with artificial ice plug* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
103. **T. Gyongyosi, I. Prisecaru, V. N. Panaitescu** - *The experimental installation of the first plug(M1-M.E. Version) using an unconventional plastic deformation technique* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
104. **T. Meleg, M. Deaconu, I. Dumitrescu** - *Thermophysical Properties of U<sub>2</sub>ZrH Fuel between 300 and 1400K* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
105. **V. Balaceanu, L. M. Georgescu, C. Valache, C. Tiron** - *1st Year Results of "Study Case: Development & Implementation of the Knowledge Transfer and Preservation Process at Cernavoda NPP" Research Contract* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012
106. **V. M. Nistor, R. M. Mihaiu** - *Cresterea Sigurantei Transportului de Materiale Radioactive si Problematica Refuzului unui Transport* - The 5th International Conference on Sustainable Development through Nuclear Research & Education, Nuclear 2012, Romania, 16 -18 May 2012

107. **D. Barbos, A. F. Bucsa** - *Methods used for PT sample measurement: Information on sample preparation, measurement details and Quality Control applied* - Regional Workshop on Intercomparison Feedback of Neutron Activation Analysis Proficiency Tests Performed in 2011-2012, UT Delft, Olanda, 22-25 Mai 2012
108. **T. Gyongyosi, V.N. Panaitescu, I. Prisecaru** - *Tehnica neconventionala a obturarii tevi defecte la generatorul de abur. Model de calcul* - A 7<sup>a</sup> editie a Conferintei Hidroenergeticienilor „Profesorul Dorin Pavel”, Universitatea Politehnica Bucuresti, Romania, 24 – 25 mai 2012
109. **T. Gyongyosi, V. N. Panaitescu, I. Prisecaru** - *Metoda de evaluare a fortei de reactie la jet la duza colectorului de stropire* – A 7<sup>a</sup> editie a Conferintei Hidroenergeticienilor „Profesorul Dorin Pavel”, Universitatea Politehnica Bucuresti, Romania, 24 – 25 mai 2012
110. **A. Toma, C. Dulama, R. Dobrin** - *INR Experience in Developing Techniques and Methods for Sampling and Determination of Tritium in Air* - Workshop – International and National Experience and Lessons Learned Related to Designing and Operation of tritium Removal Facilities, Rm. Valcea, 6 – 8 iunie 2012
111. **T. Gyongyosi, V.N. Panaitescu, I. Prisecaru** - *Tehnologie de evaluare experimentală a rezistenței mecanice la sarcini de impact a fascicului combustibil experimental tip CANDU* - A XII –a Conferinta Nationala multidisciplinara cu participare internationala „Profesorul Dorin Pavel - fondatorul hidroenergeticii romanesti, Sebes, 7 – 8 iunie 2012
112. **M. Media, F. Martin, A. Craciunescu, G. Ciumbulea and Alejandro Rodriguez** - *Induction Motor's Broken Bars Detection by using Stockwell Transform*, *International Symposium on Power Electronics, Electrical Drives, Automation and Motion-SPEEDAM* - International Symposium on Power Electronics, Electrical Drives, Automation and Motion-SPEEDAM, 21<sup>st</sup> Edition , Sorrento-Italy, pp.1023-1026, 20 – 22 iunie 2012
113. **V. Balaceanu, M. Constantin, M. Apostol** - *The risk management of knowledge loss in the Institute for Nuclear Research* - Technical Meeting on Practical Approaches to Risk Manag. of Knowledge Loss in Nuclear Organizations, IAEA Vienna, iunie 2012
114. **D. Lucan, L. Velciu, M. Mihalache, A. Dinu** - *Experimental Research Regarding Corrosion of the CANDU Steam Generator Tubing Material* - WEC Central & Eastern Europe Energy Forum – FOREN 2012, Neptun - Olimp, Romania, 17 – 21 iunie 2012
115. **I. Turcu, S. C. Valeca, C. Paunoiu, M. Constantin** - *The Role of Innovative Systems Research in Sustainable Development of Nuclear Power* - International Conference FOREN 2012, Romania, iunie 2012
116. **S. Ionescu, O. Uta** - *Fuel Sheath Behaviour In Under Hydriding Effect* - FOREN 2012 - Forumul Energiei Pentru Europa Centrala si De Est, 17 – 21 iunie 2012
117. **C. A. Margeanu, E. Banches** - *Expression of Interest - Romania* - CP INPRO SYNERGIES, Kick-off Meeting, IAEA Vienna, Iunie, 2012
118. **A. Nitu, D. Ohai, V. Pitigoi, F. Voicu** - *INR Methodology Concerning Thermo-Mechanical Testing of Gen IV Candidate Materials* - The Joint GETMAT- MATTER International School on Materials Under Extreme Condition (MUNECO), “La Cristalera” en Miraflores de la Sierra, Madrid, Spain, 11 - 15 iunie 2012
119. **I. E. Visan, Cs. Roth** - *Improvement of cross section library for Neutron Activation Analysis* - Annual Scientific Conference, Faculty of Physics, University of Bucharest, Romania, 22 - 23 iunie 2012
120. **M. Constantin, D. Diaconu** - *Metode participative in contextul depozitarii deseurilor rad. din Romania* - FP7-IPPA Aarhus Convention National Round, Romania, iunie 2012
121. **C. Doca** - *About some generalized analytical models for the quasistatic bending of a Bernoulli-Euler beam* - Balcan Physical Union 2012, Constanta, Romania, 5-7 Iulie 2012
122. **A. Pulpa** - *INR Pitesti Experience in Design, Manufacturing, Installation and Servicing of Failed Fuel Localization System For Cernavoda Candu 600 NPP* - Regional Workshop on the Advanced Instrumentation and Control Modernization and Technology, Germania, 9 – 14 iulie 2012
123. **C. A. Margeanu, A. Rizea, E. Banches, Gh. Ionita** - *Towards Sustainable Nuclear Energy Systems* - INPRO Dialogue Forum “Drivers and Impediments for Regional Cooperation on the Way to Sustainable NES”, IAEA Vienna, august 2012
124. **C. A. Margeanu, S.Y. Raza** - *Cooperation on the Way to Sustainable NES/ By sharing we win together; NG2 Perspective* - INPRO Dialogue Forum “Drivers and Impediments for Regional Cooperation on the Way to Sustainable NES”, IAEA Vienna, august 2012

125. **D. Dobrea, L. Aioanei, C. Truta** - *Welding Techniques for In-Pile Instrumentation at INR Pitesti* - IAEA Tech. Meeting on In-Pile Test.& Instrumentation for Devices of Gen-IV Fuels & Structural Materials, Norvegia, august 2012
126. **A. Constantin, D. Diaconu, A.Genty** - *Unsaturated Hydraulics Simple Test Model For Alliance FEHM Benchmark* - Progress report prezentat la 2nd Meeting of CRP Bench marking of structural materials pre-selected for advanced nuclear reactors, Roma organizator IAEA, 2012
127. **A. Rizoiu, G. Horhoianu** - *Using Advanced Fuel Bundles in CANDU Reactors* - IAEA Tech. Meeting on Fuel Integrity during Normal Operating and Accident Conditions in PHWRs, Romania, Septembrie 2012
128. **G. Horhoianu, Gh. Olteanu, D. V. Ionescu** - *Irradiation Behaviour of PHWR type Fuel Elements containing UO<sub>2</sub> and (Th,U)O<sub>2</sub> Pellets* - IAEA Tech. Meeting on Fuel Integrity during Normal Operating and Accident Conditions in PHWRs, Romania, septembrie 2012
129. **I. Prodea** - *Slightly Enriched Uranium Core Burnup Study in a CANDU 6 Reactor* - IAEA Technical Meeting on Fuel Integrity during Normal Operating and Accident Conditions in PHWRs, Romania, septembrie 2012
130. **L. Cilzelj, D. Diaconu, P. Ghitescu, I. Ivanov, I. Tiselj** - *NEWLANCER Project Advancing National and Joint Nuclear Research and Higer Education in European Union* – The 21<sup>st</sup> International Conference Nuclear Energy NEW Europe-NENE, Ljubljana, 5 – 7 septembrie 2012
131. **M. Mincu, C. Gentea, G. Androne, L. Dinu, C. Lazar, M. Tatarascu** - *Methods for Characterization of Radioactive Waste and Spent Nuclear Fuel. Results Obtained During the Validation* - HOTLAB 2012 – Hot Laboratories And Remote Handling, 24 - 27 septembrie 2012
132. **S. Ionescu, M. Mincu, O. Uta, C. Gentea, M. Parvan, L. Dinu** - *Post Irradiation Examination Of Experimental CANDU Fuel Elements Irradiated In TRIGA-SSR Reactor* - International Atomic Energy Agency (IAEA) - Technical Meeting On Fuel Integrity During Normal Operating And Accident Conditions In Pressurized Heavy Water Reactors (PHWRs),Bucuresti, Romania, 24 – 27 septembrie 2012
133. **T. Meleg, D. Ohai** - *Degradation Mechanism's of Zy-4 Cladding During High Temperature Steam Oxidation* - International Atomic Energy Agency (IAEA) - Technical Meeting On Fuel Integrity During Normal Operating And Accident Conditions In Pressurized Heavy Water Reactors (PHWRs), Bucuresti, Romania, 24 – 27 septembrie 2012
134. **M. Constantin, D. Diaconu** - *Aarhus Convention Seminar in Romania* - Project FP7-IPPA W3.3 European Workshop, Ungaria, septembrie 2012
135. **M. Fulger, M. Mihalache, D. Ohai** - *Corrosion behaviour of austenitic alloys – main candidate materials for SCWRs* - Workshop "Materiale in conditii extreme -procesare, proprietati si aplicatii “ Conferinta Diaspora in cercetarea stiintifica, Bucuresti, 26 -27 septembrie 2012
136. **M. Stanciulescu** - *Ferritic/martensitic steels - candidate materials for operation under the extreme conditions of LFR systems* - Workshop "Materiale in conditii extreme -procesare, proprietati si aplicatii “ Conferinta Diaspora in cercetarea stiintifica, Bucuresti, 26 – 27 septembrie 2012
137. **M. Mihalache, A. Dinu, M. Fulger, M. Roth, M. Pantaru, Gh. Oncioiu** - *Benchmarking of advanced materials pre-selected for innovative nuclear reactors* - Progress report prezentat la 2nd Meeting of CRP Bench marking of structural materials pre-selected for advanced nuclear reactors, Roma organizator IAEA, 8 – 12 octombrie 2012
138. **M. Constantin** - *WP2 Review of the Activities* - 2nd Regional Meeting, project FP7-NEWLANCER, Bulgaria, octombrie 2012
139. **M. Constantin** - *National Expert Groups Activity, Country Report - Romania* - 2nd Regional Meeting, project FP7-NEWLANCER, Bulgaria, octombrie 2012
140. **M. Constantin, M. Apostol** - *Nuclear Safety Activities in Romania* - 2nd Regional Meeting, project FP7-NEWLANCER, Bulgaria, octombrie 2012
141. **M. Nitoi** - *Overview on ageing risk assessments* - Workshop on Investigation of Ageing Effects using the Probability Safety Assessment, APSA project, Olanda, octombrie 2012
142. **Gh. Florescu** - *Propagandistic versus probabilistic risk level of accidents in nuclear safety analyses* - The 18<sup>th</sup> ICIT Conference, Romania, octombrie 2012
143. **D. Sporea, A. Sporea, M. Ancuta, D. Barbos, M. Mladin, M. Mihalache** - *Evaluation of UV optical fibres behavior under irradiation* - CET 2012 Congress on Engineering and Technology, Beijing, China, Octombrie 2012



144. **D. Lucan, Gh. Jinescu** - *Synergistic Effect Of Impurities On Corrosion Of The Candu Steam Generator Tubing* - A XXXII-a Conferinta Nationala de Chimie, Calimanesti – Caciulata, Valcea, Romania, 3 -5 octombrie 2012
145. **L. Popa, M. Tunaru, L. Velciu** - *Experimental Results on Chemical Cleaning of Filmed SA 106 Steel* - Proceedings of The 18th Conference , Progress in Criogenics and Isotopes Separation, Calimanesti - Caciulata, 25 – 26 octombrie 2012
146. **L. Velciu, M. Mihalache, L. Popa, A. Dinu, A. Nitu** - *Behaviour Evaluation of Some Structural Materials for Heavy Water Plant Exposed to Sulphuretted Hydrogen Environment* - Proceedings of The 18th Conference “Progress in Cryogenics and Isotopes Separation” Calimanesti - Caciulata, Valcea, Romania, 25 – 26 octombrie 2012
147. **M. Roth, V. Pitigoi, M. Mihalache, A. Nitu** - *INR Experimental Contributions to the FP7 – “STYLE” Project* - Proceedings of The 18-th Conference “Progress in Criogenics and Isotopes Separation”, Calimanesti-Caciulata, Valcea, Romania, 25 – 26 octombrie 2012
148. **M. Mihalache, M. Fulger, C. Paunoiu, Gh. Oncioiu** - *Investigation of Oxides formed on 304L SS in supercritical Water Environment* - Proceedings of The 18th Conference “Progress in Cryogenics and Isotopes Separation” Calimanesti - Caciulata, Valcea, Romania, 25 – 26 octombrie 2012
149. **R. M. Voiculescu, V. M. Nistor, M. C. Olteanu** - *Generatia a IV-a de Sisteme Energetice Nucleare – Prezentare Generala* - The 18th Conference “Progress in Cryogenics and Isotopes Separation” Calimanesti - Caciulata, Valcea, Romania, 25 – 26 octombrie 2012
150. **C. Voiculescu, E. A. Dragan** – *The Why What and How in Nuclear Knowledge Management* - The 18th Conference “Progress in Cryogenics and Isotopes Separation” Calimanesti - Caciulata, Valcea, Romania, 25 – 26 octombrie 2012
151. **C. A. Margeanu** - *Overview on the Multinational Collaborative Waste Storage and Disposal Solutions* – The 10<sup>th</sup> Radiation Physics and Protection Conf. RPPC 2012, Egypt, noiembrie 2012
152. **C. A. Margeanu, E. Banches** - *Activities in SYNERGIES Project; June – November 2012; ROMANIA* - CP INPRO SYNERGIES Consultative Meeting, IAEA Vienna, noiembrie 2012
153. **Cs. Roth, M. Mladin** - *Contribution of INR in WP 5* - FP7-MAXSIMA Project kick off Meeting, Brussels, noiembrie 2012
154. **L. Aioanei, D. Dobrea** - *Simulation of ALFRED control involving a more detailed model of the secondary circuit* - Project FP7 – LEADER Meeting, Germany, noiembrie 2012
155. **L. Aioanei, D. Dobrea** - *Instrumentation Specification Core and Primary coolant. Control and Instrumentation Devices* - Project FP7 – LEADER Meeting, Germany, noiembrie 2012
156. **M. Constantin, D. Diaconu** - *Proiectul IPPA - Metode participative in Romania* - NuclInfo Day 2012, Romania, noiembrie 2012
157. **V. Radu** - *WP 3.3 Stress corrosion cracking: SCC evaluation – suggestions for a prospective reliability model* - Joint meeting of WP 1.4 - Material characterization under environmental conditions” si „Joint meeting of WP 2.3 - Stress corrosion cracking modelling”, in cadrul Proiectului STYLE, "Structural integrity for lifetime management– non-RPV components, EURATOM, FP7, Proiect No. 249648. SCK-Mol, Belgia, 28 – 30 noiembrie 2012
158. **V. Deaconu, D. Ionescu, M. Deaconu** - *Challenges for Weld Repair Residual Stress Modelling* - 9th NeT Enlargement & Integration Workshop, Netherlands, noiembrie 2012
159. **Gh. Florescu** - *Method for monitoring and reducing the accidents risk in power units* - A 7-a conf. a hidroenerg. din Romania “Dorin Pavel, UPB, Romania, decembrie 2012
160. **L. Cilzelj, D. Diaconu, P. Ghitescu, I. Ivanov, I. Tiselj, N. Zeleznik** - *Advancing national and joint nuclear research in the European Union: The NEWLANCER project* - Conferinta Europeana din domeniul nuclear - ENC 8 – 13 decembrie 2012
161. **V. Radu** - *Structural reliability approach in thermal fatigue crack growth by stochastic modeling* - XVIII-lea Simpozion National de Mecanica Ruperii, decembrie 2012.

## CARTI PUBLICATE IN ANUL 2012

1. **D. Lucan** - *Diminuarea coroziunii prin optimizarea chimiei apei in echipamentele de transfer termic* - Editura Universitatii din Pitesti, ISBN 978-606-560-303-5, 2012
2. **D. Lucan** - *Nuclear Power Plants, Chapter 9 – “Corrosion of the Secondary Side Steam Generator in the Presence of Impurities”* pp.197-226, Nova Science Publishers, New York, USA, ISBN 978-1-61470-150-7, 2012. - capitol in carte
3. **P. Cirlan** - *Materiale Compozite – Cermeti cu Alumina* - Editura Universitatii din Pitesti, ISBN 978-606-560-295-3, 2012
4. **P. Cirlan** - *Materiale pentru Conditii Extreme* - Editura Universitatii din Pitesti, ISBN 978-606-560-248-9, 2012
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14. **Ion Ionita** - *Noi directii in spectrometria de neutroni de inalta rezolutie - Instrumente cu focalizare in spatiul invers* – Editura Juventus Press, ISBN 978-606-8350-48-6, 2012