



## Sunday 19 April 2015

**17:00 - 19:00 Pre-registration**

**18:00 - 19:00 Welcome Drink**

## Monday 20 April 2015

### **Mo 8.30 - 9.30 Opening Session**

Chair: E. Koonen, SCK-CEN, Belgium; Co-Chair: Mihaela Stiopol, AREN

#### **Welcome Address**

Mihaela Stiopol, President of AREN and former Vice-president of ENS

#### **Key-Note Speeches**

Daniela Lulache, CEO, Nuclearelectrica SA, Romania

Maria ROTH, Strategy Development Manager, Institute for Nuclear Research, Romania

### **Mo 9.30 - 11.10 International Topics**

Chair: E. Koonen, SCK-CEN, Belgium; Co-Chair: Mihaela Stiopol, AREN

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| RRFM2015-A0169 | Feedback Report from the last IGORR Conference, held jointly with the IAEA Technical Meeting on Low Power Research Reactors | Ridikas, D. (1); Borio, A. (2); Bignan, G. (3)<br>1 - Department of Nuclear Sciences and Applications, IAEA, Austria<br>2 - Department of Nuclear Energy, IAEA, Austria<br>3 - CEA, Centre d'études nucléaires de Cadarache, France |
| RRFM2015-A0083 | IAEA DESIGNATED INTERNATIONAL CENTRE BASED ON RESEARCH REACTOR (ICERR)  | Borio di Tigliole, A. (1); Adelfang, P. (1); Bradley, E. (1); Khoroshev, M. (1); Marshall, F. (1); Morris, C. (1); Tozser, S. (1)<br>1 - International Atomic Energy Agency - Research Reactor Section (NEFW - NE), Austria         |
| RRFM2015-A0142 | THE U.S. DEPARTMENT OF ENERGY'S OFFICE OF MATERIAL MANAGEMENT AND MINIMIZATION - UPDATE AND FUTURE PLANS                    | Chamberlin, J. (1)<br>1 - U.S. Department of Energy, United States  |
| RRFM2015-A0138 | U-MO MONOLITHIC FUEL DEVELOPMENT FOR CONVERSION OF HIGH PERFORMANCE RESEARCH REACTORS                                       | Landers, C. (1)<br>1 - U.S. Department of Energy, National Nuclear Security Administration, United States   |

# RRFM

EUROPEAN RESEARCH  
REACTOR CONFERENCE 2015



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| RRFM2015-<br>A0137 | AN UPDATE ON NNSA'S EFFORTS TO<br>ESTABLISH RELIABLE SUPPLIES OF MO-<br>99 PRODUCED WITHOUT HEU | Chamberlin, J. (1); Howell, R. (1);<br>Hanlon, T. (1); Fitzwater, S. (1)<br>1 - National Nuclear Security Administration,<br>United States |
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## 11.10 – 11.30 Coffee break

### Mo 11.30 - 13.10 Parallel Session: LEU Fuel Development & Qualification I

Chair: J. Roglans, ANL, United States

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| RRFM2015-<br>A0070 | IMPROVEMENTS OF U-MO/AL DISPERSION<br>FUEL PERFORMANCE   | Kim, Y. S. (1); Park, J. M. (2);<br>Jeong, G. Y. (3)<br>1 - Argonne National Laboratory, USA<br>2 - Korea Atomic Energy Research Institute,<br>Korea, Republic of<br>3 - Ulsan National Institute of Science and<br>Technology, Korea, Republic of   |
| RRFM2015-<br>A0025 | MICROSTRUCTURAL CHARACTERIZATION<br>OF IRRADIATED U-7MO: REGIONS<br>AROUND GRAIN BOUNDARIES AND<br>REGIONS WITH DIFFERENT MO<br>CONCENTRATIONS | Gan, J. (1); Keiser, D. (1); Jue, J.-F.<br>(1); Miller, B. (1); Robinson, A. (1);<br>Madden, J. (1); Medvedev, P. (1)<br>1 - Idaho National Laboratory, United States  |
| RRFM2015-<br>A0040 | MATERIAL SELECTION OF UMO FUEL AT<br>THE FRM II  | Chiang, H.-Y. (1); Park, S. (2);<br>Mayer, M. (3); Schimd, K. (3);<br>Balden, M. (3); Bosenberg, U. (4);<br>Falkenberg, G. (4); Wiss, T. (5);<br>Dieste-blanco, O. (5); Petry, W. (1)<br>1 - Heinz Maier-Leibnitz Zentrum (MLZ),<br>Technische Universität München, Germany<br>2 - Sektion Kristallographie, Ludwig-<br>Maximilians-Universität München, Germany<br>3 - Max-Planck-Institut für Plasmaphysik,<br>Germany<br>4 - Deutsches Elektronen-Synchrotron DESY,<br>Germany<br>5 - Institute of Transuranium Elements (ITU),<br>European Commission, Germany |
| RRFM2015-<br>A0111 | U.S. PROGRESS IN THE DEVELOPMENT OF<br>U-MO MONOLITHIC RESEARCH REACTOR<br>FUELS   | Meyer, M. (1); Rabin, B. (1);<br>Glagolenko, I. (1); Ozaltun, H. (1);<br>Medvedev, P. (1); Woolstenhume, N.<br>(1); Robinson, A. (1); Keiser, D. (1);<br>Rice, F. (1); Wachs, D. (1); Hofman,<br>G. (2); Kim, Y. S. (2)<br>1 - Idaho National Laboratory, United States<br>2 - Argonne National Laboratory, USA  |

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**Mo 11.30 - 13.10 Parallel Session:  
Utilisation of Research Reactors I**

Chair: H. Gerstenberg, TU Munich, Germany

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| RRFM2015-A0028 | NEUTRON SCATTERING IN VERY HIGH MAGNETIC FIELD THE NEW HYBRID MAGNET AT HELMHOLTZ CENTRE BERLIN | Smeibidl, P. (1); Ehmler, H. (1); Prokhnenko, O. (1); Lake, B. (1)<br>1 - Helmholtz Centre Berlin, Germany<br>2 - National High Magnetic Field Laboratory, USA   |
| RRFM2015-A0030 | CHARACTERIZATION OF A QUASI-VERTICAL NEUTRON BEAM FROM THE BRAZILIAN TRIGA IPR-R1 REACTOR       | Leal, A. (1); Guerra, B. (2); Lemos, B. (1)<br>1 - Centre for Development of Nuclear Technology (CDTN), Brazilian Nuclear Energy Commission (CNEN), Brazil<br>2 - Federal University of Minas Gerais, Dept. of Nuclear Engineering, Brazil |
| RRFM2015-A0043 | RECENT IRRADIATION TESTS FOR FUTURE NUCLEAR SYSTEM AT HAHARO                                    | Cho, M. S. (1); Choo, K. N. (1); Yang, S. W. (1); Park, S. J. (1)<br>1 - Korea Atomic Energy Research Institute (KAERI), Korea, Republic of  |
| RRFM2015-A0050 | EXPERIMENTAL POSSIBILITIES OF RESEARCH FAST REACTOR BOR-60                                      | Kalygin, V. (1); Izhutov, A. (1); Krashennnikov, Y. (1); Zhemkov, I. (1); Naboyshchikov, Y. (1); Varivtsev, A. (1)<br>1 - JSC "State Scientific Center Research Institute of Atomic Reactor", Russian Federation                           |
| RRFM2015-A0161 | OVERVIEW OF RESEARCH REACTOR UTILIZATION AND RELATED TECHNOLOGY DEVELOPMENT IN KAERI            | Lim, I.-C. (1); Lee, C.-H. (1); Seong, B.-S. (1); Park, S.-J. (1); Lee, C.-S. (1)<br>1 - Korea Atomic Energy Research Institute, Korea, Republic of  |

**13.10 - 14.10 Lunch break**

**Mo 14.10 - 15.50 Parallel Session:  
LEU Fuel Development & Qualification II**

Chair: Sven Van den Berghe, SCK•CEN, Belgium

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| RRFM2015-A0090 | THE THERMAL PROPERTIES OF FRESH AND SPENT U-MO FUELS: AN OVERVIEW | Huber, T. (1); Breikreutz, H. (1); Petry, W. (1); Reiter, C. (1); Elgeti, S. (2); Burkes, D. (3); Casella, A. (3); Casella, A. (3); Smith, F. (3); Wachs, D. (4)<br>1 - Forschungs-Neutronenquelle Heinz Maier-Leibnitz (FRM II), Technische Universität München, Germany<br>2 - Max-Planck-Institute for Plasma Physics, Germany<br>3 - Pacific Northwest National Laboratory, United States<br>4 - Idaho National Laboratory, United States |
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| RRFM2015-A0095 | COATING U(MO) FUEL PARTICLES USING ATOMIC LAYER DEPOSITION  | Yacout, A. (1); Pellin, M. (1); Bhattacharya, S. (2); Mohamed, W. (1); Wiencek, T. (1); Yun, D. (1); Hofman, G. (1)<br>1 - Argonne National Laboratory, United States<br>2 - Northwestern University, United States  |
| RRFM2015-A0099 | Thermodynamic and Kinetic Study of Nitrides and Transition-metals as Diffusion Barriers for U-Mo/Al Dispersion Fuel | Mei, Z.-G. (1); Yacout, A. (1); Kim, Y. S. (1); Hofman, G. (1)<br>1 - Argonne National Laboratory, United States   |
| RRFM2015-A0102 | 84 MEV XE IRRADIATION ON U-MO/AL DISPERSION FUEL  | Ye, B. (1); Bhattacharya, S. (2); Mo, K. (1); Yun, D. (1); Mahomed, W. (1); Kim, Y. S. (1); Hofman, G. (1); Fortner, J. (1); Yacout, A. (1); Pellin, M. (1); Van den Berghe, S. (3); Leenaers, A. (3); Jamison, L. (1)<br>1 - Argonne National Laboratory, United States<br>2 - Northwestern University, United States<br>3 - SCK CEN, Belgium |
| RRFM2015-A0146 | THE POTENTIAL FOR DIFFERENCES IN AS-FABRICATED MONOLITHIC FUEL PLATE MICROSTRUCTURE TO AFFECT FUEL PERFORMANCE      | Keiser, D. (1); Jue, J.-F. (1); Perez, E. (1); Rice, F. (1); Robinson, A. (1); Williams, W. (1); Meyer, M. (1)<br>1 - Idaho National Laboratory, United States   |

### Mo 14.10 - 15.50 Parallel Session: Utilisation of Research Reactors II

Chair: D. Ridikas, IAEA

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| RRFM2015-A0056 | JULES HOROWITZ REACTOR: UPDATE OF THE EXPERIMENTAL CAPACITY  | Blandin, C. (1); Jaeccki, P. (1); Colin, C. (1); Dousson, T. (1); Ferry, L. (1); Pierre, J. (1); Gonnier, C. (1); Estrade, J. (1)<br>1 - CEA Cadarache/DEN/DER/SRJH, France |
| RRFM2015-A0084 | ACTIVITIES AT TRIGA RC-1 ENEA REASERCH REACTOR   | Sepielli, M. (1); Carta, M. (1); Palomba, M. (1); Falconi, L. (1); Innarella, C. (1)<br>1 - ENEA, Italy   |
| RRFM2015-A0171 | STATUS OF THE FLUORIDE SALT HIGH TEMPERATURE REACTOR MATERIALS IRRADIATION TESTS AT THE MIT RESEARCH REACTOR | Carpenter, D. (1); Ames, M. (1); Ostrovsky, Y. (1); Kohse, G. (1); Hu, L.-W. (1)<br>1 - Nuclear Reactor Laboratory, Massachusetts Institute of Technology, United States    |



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| RRFM2015-A0015 | RESEARCH REACTORS FOR REGIONAL NUCLEAR EDUCATION: EXPANDING THE EASTERN EUROPEAN RESEARCH REACTOR INITIATIVE MODEL. | Ames, C. (1); Böck, H. (2); Villa, M. (2); Vyshniauskas-Gomez, J. (1); Borio di Tigliole, A. (1); Bradley, E. (1)<br>1 - Department of Nuclear Energy, International Atomic Energy Agency, Austria<br>2 - Atominstytut, Technical University of Vienna, Austria |
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### 15.50 – 16.10 Coffee break

#### Mo 16.10 - 17.30 Parallel Session: LEU Fuel Development & Qualification III

Chair : B. Rabin, INL, United States

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| RRFM2015-A0132 | ADVANCED PIE ON IRRADIATED U(MO) FUEL PLATES                 | Leenaers, A. (1); Van den Berghe, S. (1); Wachs, D. (2)<br>1 - SCK-CEN, Belgium<br>2 - INL, United States   |
| RRFM2015-A0052 | FOUR-POINT BEND TESTING OF IRRADIATED MONOLITHIC U-10MO FUEL | Rabin, B. (1); Lloyd, R. (1); Schulthess, J. (1); Wright, J. (1); Lind, P. (1); Scott, L. (1); Wachs, K. (1)<br>1 - Idaho National Laboratory, United States                          |
| RRFM2015-A0098 | MODELING OF U-MO/AL DISPERSION FUEL MEAT SWELLING            | Hofman, G. (1); Ye, B. (1); Kim, Y. S. (1); Jamison, L. (1)<br>1 - Argonne National Laboratory, United States   |
| RRFM2015-A0179 | UMo Fuel-Powder Production Process and Results               | R. Schenk (1), R. Schauer (1), W. Petry (1), B. Stepnik (2), C. Moyroud (2), M. Grasse (2), C. Coullomb (2), G. Bourdat (2), C. Jarousse (2)<br>1 - TUM - Germany; (2) AREVA - France |

#### Mo 16.10 - 17.30 Parallel Session: Innovative Methods in Research Reactor Analysis and Design I

Chair: H. Böck, TU Vienna, Austria

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| RRFM2015-A0017 | ESTIMATING BURNUP OF MTR FUEL USING THE LEAST SQUARE FITTING METHOD | Alawneh, L. (1); Khafaji, S. (1); Abu Saleem, K. (1); Park, C. J. (2)<br>1 - Jordan Atomic Energy Commission, Jordan<br>2 - Sejong University, Korea, Republic of |
| RRFM2015-A0029 | VALIDATION OF THE MCNP6 MODEL AT THE ATOMINSTITUT TRIGA REACTOR     | Cagnazzo, M. (1); Stummer, T. (1); Villa, M. (1); Böck, H. (1)<br>1 - Vienna University of Technology, Austria  |





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| RRFM2015-A0035 | BR2 REACTOR COUPLED MCNPX & MURE SIMULATIONS FOR THE SOLID EXPERIMENT  | Giot, L. (1); Fallot, M. (1); Kalcheva, S. (2); Koonen, E. (2)<br>1 - SUBATECH, Ecole des Mines de Nantes - CNRS/IN2P3 - Université de Nantes, France<br>2 - SCK.CEN, BR2 Reactor Department, Belgium   |
| RRFM2015-A0037 | THERMAL HYDRAULIC AND NEUTRON KINETIC SIMULATION OF THE TRIGA IPR-R1 RESEARCH REACTOR USING A RELAP5/PARCS COUPLED MODEL | Amélia de Lima Reis, P. (1); Pereira, C. (1); Miró Herrero, R. (2); Lombardi Costa, A. (1); Fortini Veloso, M. A. (1); Vitor Soares, H. (1)<br>1 - UNIVERSIDADE FEDERAL DE MINAS GERAIS, Brazil<br>2 - UNIVERSITAT POLITÈCNICA DE VALÈNCIA, Spain |

## Tuesday 21 April 2015

### **Tu 9.00 - 10.00 Parallel Session: LEU Fuel Fabrication & Conversion**

Chair : J. Stevens, ANL, United States

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| RRFM2015-A0106 | FABRICATION OF PIN-TYPE MINI-ELEMENTS CONTAINING U-MO/MG DISPERSION FUEL FOR TEST IRRADIATION IN NRU | Wang, N. (1); Kulakov, M. (1); Hibbins, S. (2)<br>1 - Canadian Nuclear Laboratories - Fuel Development, Canada<br>2 - Canadian Nuclear Laboratories - Nuclear Fuel Fabrication Facility, Canada |
| RRFM2015-A0108 | URANIUM ZIRCONIUM HYDRIDE REPLACEMENT FUEL(SUPPLY, STRATEGY AND STATUS)                              | Veca, A. (1); Boisrame, G. (2); Quinn, A. (1); Geslin, D. (2)<br>1 - General Atomics Inc, United States<br>2 - AREVA - CERCA, France  |
| RRFM2015-A0167 | UMO FOIL FABRICATION DEMONSTRATION LINE AT BABCOCK & WILCOX  | Johnson, R. E. (1); Navolio, D. W. (1); Wight, J. M. (1)<br>1 - Babcock & Wilcox, Nuclear Operations Group, United States   |

### **Tu 9.00 - 10.00 Parallel Session: Innovative Methods in Research Reactor Analysis and Design II**

Chair: M. Delpech, CEA, France

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| RRFM2015-A0049 | IAEA CRP ON "BENCHMARKS OF COMPUTATIONAL TOOLS AGAINST EXPERIMENTAL DATA ON FUEL BURNUP AND MATERIAL ACTIVATION FOR UTILIZATION, OPERATION AND SAFETY ANALYSIS OF RESEARCH REACTORS": UPDATE AFTER THE FIRST RESEARCH COORDINATION MEETING | Ridikas, D. (1); Marshall, F. (2); Kennedy, W. (3)<br>1 - NA/IAEA, Austria<br>2 - NE/IAEA, Austria<br>3 - NS/IAEA, Austria |
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| RRFM2015-A0071 | A FULL CORE HOMOGENIZATION APPROACH USING SERPENT AS A CROSS SECTION GENERATION TOOL FOR THE OSCAR-4 CODE SYSTEM                      | Erasmus, B. (1); Prinsloo, R. (1); Van Heerden, F. (1); GROENEWALD S.A. (1), C. JACOBS (1)<br>1 - South African Nuclear Energy Corporation (Necsa), South Africa<br>2 - University of Johannesburg, South Africa |
| RRFM2015-A0051 | PROPAGATION OF UNCERTAINTY FROM MULTI-GROUP CROSS-SECTION DATA THROUGH LATTICE PHYSICS CALCULATIONS FOR THE SAFARI-1 RESEARCH REACTOR | Groenewald, S. (1); Bokov, P. (1)<br>1 - South African Nuclear Energy Corporation (Necsa), South Africa  |

## 10.00 – 10.30 Coffee break

### Tu 10.30 - 12.30 Parallel Session: Moly99 production

Chair: J. Dix, IAEA

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| RRFM2015-A0163 | STATUS AND FUTURE OF MO-99 SUPPLY   | Ponsard, B. (1)<br>1 - SCK.CEN - BR2 REACTOR, Belgium   |
| RRFM2015-A0069 | CURRENT STATUS ON THE DEVELOPMENT OF DISPERSION LEU TARGETS FOR MO-99 AT KAERI  | Jeong, Y. J. (1); Park, J. M. (1); Lee, K. H. (1); Kim, S. H. (1); Kim, K. N. (1)<br>1 - KOREA ATOMIC ENERGY RESEARCH INSTITUTE, Korea, Republic of |
| RRFM2015-A0079 | THE ROLE OF THE IAEA IN SUPPORTING PRODUCTION OF MO-99 AND/OR TC-99M WITHOUT THE USE OF HEU   | Osso Junior, J. A. (1); Venkatesh, M. (1); Duatti, A. (1); Dix, J. (1); Bradley, E. (1)<br>1 - IAEA, Austria  |
| RRFM2015-A0085 | U.S. DEPARTMENT OF ENERGY NATIONAL LABORATORY RESEARCH AND DEVELOPMENT ACTIVITIES DIRECTED TOWARD MINIMIZING THE USE OF HIGH ENRICHED URANIUM FOR MO-99 PRODUCTION AND DEVELOPING A DOMESTIC SUPPLY | Vandegrift, G. (1)<br>1 - Argonne National Laboratory, United States  |
| RRFM2015-A0088 | Mo-99 PRODUCTION AT FRM II – STATUS OF THE PROJECT  | Müller, C. (1); Gerstenberg, H. (1); Röhrmoser, A. (1); Kastenmüller, A. (1)<br>1 - Technische Universität München, ZWE FRM II, Germany             |
| RRFM2015-A0118 | COATING OF LEU FOIL WITH ELECTRODEPOSITED NICKEL FOR Mo-99 PRODUCTION   | Lisboa, J. (1); Olivares, L. (1); Marin, J. (1); Barrera, M. (1)<br>1 - Chilean Commission for Nuclear Energy, Chile                                |



**Tu 10.30 - 12.30 Parallel Session:**

**Innovative Methods in Research Reactor Analysis and Design III**

Chair: S. Curr, Rolls Royce, UK

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| RRFM2015-A0038 | THERMAL-HYDRAULIC SIMULATION OF SINGLE PIN AND ASSEMBLY SECTOR GEOMETRIES FOR THE IVG.1M RESEARCH REACTOR | Kraus, A. (1); Garner, P. (1); Hanan, N. (1)<br>1 - Argonne National Laboratory, USA  |
| RRFM2015-A0055 | SAFETY ANALYSIS ON BRAZILIAN MULTIPURPOSE REACTOR USING THE RELAP5-3D CODE                                | Vitor Soares, H. (1); Lombardi Costa, A. (1); Dionysio Aronne, I. (2); Pereira, C. (1); Amélia de Lima Reis, P. (1); Fortini Veloso, M. A. (1)<br>1 - UNIVERSIDADE FEDERAL DE MINAS GERAIS, Brazil<br>2 - CENTRO DE DESENVOLVIMENTO DA TECNOLOGIA NUCLEAR CDTN/CNEN, Brazil |
| RRFM2015-A0123 | NEUTRONIC ANALYSIS OF MTR REACTOR CORE USING MONTE CARLO TECHNIQUES                                       | Kahn, R. (1); Ali, R. (1); Boeck, H. (2); Stummer, T. (2)<br>1 - Pakistan Institute of Engineering and Applied Sciences (PIEAS), Pakistan<br>2 - Vienna University of Technology/Atominsttute, Austria  |
| RRFM2015-A0135 | ASSESSMENT OF THE BURNOUT PHENOMENON IN THE SAFARI-1 RESEARCH REACTOR                                     | Belal, M. (1); D'Arcy, A. (1)<br>1 - South African Nuclear Energy Corporation, South Africa   |

**12.30 – 13.30 Lunch break**

**Tu 13.30 - 14.30 Poster Session**

**Tu 14.30 - 16.30 Parallel Session:**

**LEU Fuel Conversion**

Chair : F. Marshall, IAEA

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| RRFM2015-A0129 | HEU MINIMIZATION: THE U.S. ROLE IN CONVERTING CIVILIAN RESEARCH REACTORS FROM HEU TO LEU FUEL | Waud, B. (1); Brusilovsky, V. (1); Peters, K. (1)<br>1 - U.S. DOE/NNSA, United States  |
| RRFM2015-A0174 | THE PHYSICS EXPERIMENTAL STUDY FOR PROTOTYPE MNSR WITH LEU CORE                               | Li, Y. (1); Peng, D. (1); Wu, X. (1); Zou, S. (1); Lu, J. (1); Zhang, Y. (1); Hao, Q. (1)<br>1 - China Institute of Atomic Energy, China |





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| RRFM2015-A0107 | DESIGN OF EMPIRE EXPERIMENT FOR IRRADIATION IN ATR                          | Glagolenko, I. (1); Wachs, D. (1); Keiser jr., D. (1); Pope, M. (1); Woolstenhulme, N. (1); Nielsen, J. (1); Crawford, D. (1); Jones, W. (1); Sprenger, M. (1); Schulthess, J. (1); Holdaway, K. (1); Yacout, A. (2); Hofman, G. (2); Wiencek, T. (2); Dionne, B. (2)<br>1 - Idaho National Laboratory, United States<br>2 - Argonne National Laboratory, United States |
| RRFM2015-A0134 | THE JAMAICAN SLOWPOKE LEU CORE FABRICATION PROJECT                          | Creasy, J. (1); Ham-Su, R. (2)<br>1 - Y-12 National Security Complex, United States<br>2 - Canadian Nuclear Laboratory, Canada  |
| RRFM2015-A0136 | CONVERSION STUDY FOR FRM II WITH BACKUP FUEL U <sub>3</sub> SI <sub>2</sub> | Röhrmoser, A. (1)<br>1 - Technische Universität München, Germany  |
| RRFM2015-A0139 | REPLACEMENT FUEL FOR THE VIENNA AUSTRIA TRIGA RESEARCH REACTOR              | Luke, D. (1); Robb, A. (1)<br>1 - CH2M*Washington Group Idaho, LLC (CWI), United States   |

**Tu 14.30 - 16.30 Parallel Session:  
Safety and Security of Research Reactors I**

Chair: D.V. Rao, IAEA; Co-chair: D. Poliakov, Rosatom, Russia

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| RRFM2015-A0005 | IAEA PROGRAMME ON NUCLEAR SECURITY AT RESEARCH REACTORS  | Lolich, J. (1)<br>1 - Instituto Balseiro, Argentina  |
| RRFM2015-A0006 | INTERFACING NUCLEAR SAFETY AND NUCLEAR SECURITY FOR SITE SELECTION OF A NEW RESEARCH REACTOR PROJECT   | Lolich, J. (1)<br>1 - Instituto Balseiro, Argentina  |
| RRFM2015-A0019 | IAEA PROGRAMME AND ACTIVITIES ON SAFETY OF RESEARCH REACTORS: 2015 UPDATE  | Shokr, A. M. (1); Sears, D. F. (1); Rao, D. (1); Kennedy, W. (1)<br>1 - Research Reactor Safety Section, International Atomic Energy Agency, Austria |
| RRFM2015-A0024 | ENHANCEMENT OF THE SAFETY REQUIREMENTS FOR RESEARCH REACTOR FACILITIES IN THE LIGHT OF THE ACCIDENT AT THE FUKUSHIMA DAIICHI NUCLEAR POWER PLANT | Poliakov, D. (1)<br>1 - Scientific Engineering Center for Nuclear and Radiation Safety, Russian Federation   |



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| RRFM2015-A0026 | Ending Civil HEU: Recommendations for the 2016 Nuclear Security Summit and Beyond | Sokova, E. (1); Pomper, M. (1); Bieniawski, A. (2); Schaper, A. (3); Loukianova, A. (4); Podvig, P. (5); Reistad, O. (6)<br>1 - James Martin Center for Nonproliferation Studies, United States<br>2 - Nuclear Threat Initiative, United States<br>3 - Peace Research Institute Frankfurt, Germany<br>4 - Stanley Foundation, United States<br>5 - International Panel on Fissile Materials, Russian Federation<br>6 - Institute of Energy Technology, Norway |
| RRFM2015-A0074 | SEISMIC IMPACT ON MARIA REACTOR REACTIVITY AND POWER CHANGES                      | Lipka, M. (1)<br>1 - National Centre for Nuclear Research, Poland   |

**16.30 – 16.45 Coffee break**

**Tu 16.45 - 18.25 Parallel Session: Back-end of the Fuel Cycle I**

Chair: I. Vidovszky, Centre for Energy Research, Hungary;

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| RRFM2015-A0170 | GLOBAL THREAT REDUCTION INITIATIVE'S U.S. - ORIGIN NUCLEAR MATERIAL REMOVAL PROGRAM: 2015 UPDATE                           | Galan, J. J. (1)<br>1 - U.S. - Origin Nuclear Material Removal Program, United States   |
| RRFM2015-A0086 | IAEA CRP ON "OPTIONS AND TECHNOLOGIES FOR MANAGING THE BACK END OF THE RESEARCH REACTOR NUCLEAR FUEL CYCLE" CURRENT STATUS | Ames, C. (1); Gouzy-Portaix, S. (1); Marshall, F. (1); Mayer, S. (1)<br>1 - International Atomic Energy Agency, Austria   |
| RRFM2015-A0093 | STATUS ON SILICIDE FUEL REPROCESSING AT AREVA LA HAGUE   | Domingo, X. (1); Valery, J.-F. (1)<br>1 - AREVA NC, France  |
| RRFM2015-A0004 | 6 YEARS OPERATION OF THE NCS 45 PACKAGE FOR IRRADIATED FUEL RODS   | Lefebvre, P. (1); Hilbert, F. (1)<br>1 - DAHER-NCS, Germany   |
| RRFM2015-A0012 | COATINGS TO PROTECT SPENT ALUMINIUM-CLAD RESEARCH REACTOR FUEL DURING WET STORAGE  | Fernandes, S. M. (1); Correa, O. (1); De Souza, J. A. (1); Ramanathan, L. (1); Antunes, R. (2); Oliveira, M. (3)<br>1 - Instituto de Pesquisas Energéticas e Nucleares, Brazil<br>2 - Engineering, Modeling and Applied Social Sciences Center (CECS), Federal University of ABC, Brazil<br>3 - Electrocell Ind. Com. Equip. Elet. LTDA, CIETEC, Brazil |



**Tu 16.45 - 18.25 Parallel Session:  
Safety and Security of Research Reactors II**

Chair: J. Lolich, Universidad Nacional de Cuyo, Argentina;

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| RRFM2015-A0151 | U.S. DEPARTMENT OF ENERGY'S NUCLEAR MATERIAL REMOVAL PROGRAMS - STATUS UPDATE AND NEXT STEPS                         | Blanchard-Case, T. (1)<br>1 - U.S. Department of Energy/National Nuclear Security Administration, United States  |
| RRFM2015-A0087 | A SAFETY ANALYSIS REPORT FOR THE CONVERSION OF THE NIST RESEARCH REACTOR   | Diamond, D. (1); Baek, J.-S. (1); Hanson, A. (1); Cheng, L.-Y. (1); Cuadra, A. (1); Brown, N. (1)<br>1 - Brookhaven National Laboratory, United States   |
| RRFM2015-A0101 | OVERVIEW OF ENVIRONMENTAL MANAGEMENT NONPROLIFERATION AND HIGHLIGHT ENRICHED URANIUM MINIMIZATION MISSION ACTIVITIES | DeLeon, E. (1); Maxted, M. (2)<br>1 - Department of Energy Office of Environmental Management, United States<br>2 - Department of Energy Savannah River Site Office, United States   |
| RRFM2015-A0155 | CONSIDERATIONS IN THE MARINE TRANSPORT OF PLUTONIUM MATERIALS  | Iyer, N. (1); Matzkin-Bridger, R. (2); Dickerson, S. (2); Gray, A. (3); Spedding, T. (3); Mulkern, J. (3); Fox, M. (3)<br>1 - U.S. Department of Energy/Savannah River National Laboratory, United States<br>2 - U.S. Department of Energy - National Nuclear Security Administration, United States<br>3 - International Nuclear Services, United Kingdom |
| RRFM2015-A0153 | LESSONS LEARNED FROM HIGHLY ENRICHED URANIUM SOLIDIFICATION AND SHIPMENT PROJECT                                     | Pfennigwerth, G. (1); Andes, T. (1); Di Gasbarra, F. (2); Proietti, A. (2)<br>1 - Y-12 National Security Complex, United States<br>2 - Societa' Gestione Impianti Nucleari, Italy  |

**Wednesday April 2015**

**Wed 8.10 - 10.30 Parallel Session:  
Back-end of the Fuel Cycle II**

Chair: X. Domingo, AREVA, France

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|----------------|---|---|
| RRFM2015-A0054 | REMOVAL OF FRESH HEU TRIGA FUEL   | Wilhoit, B. (1); Andes, T. (1); Hanlon, T. (1)<br>1 - Y-12 National Security Complex, United States   |
| RRFM2015-A0089 | Handling the Type C Package TUK-145/C During Spent Fuel Removal from DNRI Research Reactor, Vietnam | Ivashchenko, A. (1); Komarov, S. (1); Kashkirov, S. (1); Dien, N. N. (2); Moses, S. (3)<br>1 - SOSNY R&D Company, Russian Federation<br>2 - Dalat Nuclear Research Institute, Vietnam<br>3 - Oak-Ridge National Laboratory, United States |

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| RRFM2015-A0091 | AVAILABLE REPROCESSING AND RECYCLING SERVICES FOR RESEARCH REACTOR SPENT NUCLEAR FUEL - A NEW IAEA REPORT   | Budu, M. (1); Bradley, E. (2); Adelfang, P. (2); Marshall, F. (2); Tozser, S. (2); Chiguer, M. (3)<br>1 - SOSNY R&D Company, Russian Federation<br>2 - International Atomic Energy Agency, Austria<br>3 - AREVA, France   |
| RRFM2015-A0103 | AREVA TN TRANSPORTS AND LOGISITCS ACTIVITIES - FLEET OF TRANSPORT CASKS FOR INTERNATIONAL SHIPMENTS IN SUPPORT OF RESEARCH REACTOR AND LABORATORIES | Guibert, N. (1); Thomas, J. (1)<br>1 - AREVA TN, United States  |
| RRFM2015-A0147 | REMOVAL OF LEGACY PLUTONIUM MATERIALS FROM RESEARCH FACILITIES IN ITALY   | Di Gasbarro, F. (1); Proietti, A. (1); Iyer, N. (2); Dunn, K. (2); Hackney, E. (2); Dickerson, S. (3)<br>1 - SOGIN S.p.A, Italy<br>2 - Savannah River National Laboratory, United States<br>3 - U.S. Department of Energy - National Nuclear Security Administration, United States |
| RRFM2015-A0150 | REMOVAL OF LIQUID HEU SPENT FUEL FROM THE FOTON REACTOR IN UZBEKISTAN   | Bolshinsky, I. (1); Tyacke, M. (1)<br>1 - Idaho National Laboratory, United States  |
| RRFM2015-A0141 | DESCRIPTION OF THE PROCESS FOR FUTURE RETURNS OF IRRADIATED TRIGA FUEL FROM RESEARCH REACTORS TO IDAHO  | Luke, D. (1); Robb, A. (1)<br>1 - CH2M*Washington Group (CWI), LLC, United States   |

## Wed 8.30 - 10.30 Parallel Session: Decommissioning and dismantling of research reactors and waste management

Chair: Francesco Troiani, Sogin, Italy

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| RRFM2015-A0016 | THE DISMANTLING OF THE MONTECUCCOLINO RB3 RESEARCH REACTOR: RADIOLOGICAL CHARACTERISATION OF MATERIALS FOR FREE RELEASE | Capone, M. (1); Cherubini, N. (1); Compagno, A. (1); Dodaro, A. (1); Rocchi, F. (1)<br>1 - ENEA, Italy  |
| RRFM2015-A0046 | THE DECOMMISSIONING PROGRAM OF THE RESEARCH REACTOR RTS-1 "G. GALILEI - ITALY"  | Baldassarre, L. (1); Russo, M. (2); Dodaro, A. (1); Cimini, E. (2)<br>1 - Nucleco SpA, Italy<br>2 - Interforce Center for Studies and Military Applications (CISAM), Italy  |
| RRFM2015-A0092 | DECOMMISSIONING THE IFIN-HH VVR-S NUCLEAR RESEARCH REACTOR DISMANTLING THE PRIMARY COOLING CIRCUIT                      | Dragusin, M. (1); Zorliu, A. (1); Deju, R. (1); Dragolici, C. A. (1); Mincu, I. (1); Stanga, D. (1); Gurau, D. (1); Petran, C. (1); Stoian, I. (1); Mustata, C. (1)<br>1 - National Institute for R&D in Physics and Nuclear Engineering-Horia Hulubei-IFIN-HH, Romania |

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| RRFM2015-A0119 | LEGAL AND CONTRACTUAL FRAMEWORK FOR SPENT FUEL BACK-END MANAGEMENT IN CONNECTION TO THE DECOMMISSIONING OF THE FINNISH TRIGA FIR 1 | Auterinen, I. (1)<br>1 - VTT Technical Research Centre of Finland, Finland                                     |
| RRFM2015-A0127 | ULYSSE REACTOR DISMANTLING: FROM THE DECISION TO THE DECREE  | Foulon, F. (1); Badeau, G. (1); Dubois, M. (1)<br>1 - CEA, France  |
| RRFM2015-A0148 | SAFETY REGULATION OF DECOMMISSIONING OF NUCLEAR RESEARCH FACILITY IN RUSSIA  | Sapozhnikov, A. (1)<br>1 - Federal Environmental, Industrial and Nuclear Supervision Service of Russia, Russia |

### 10.30 – 10.50 Coffee break

### Wed 10.50 - 13.30 Parallel Session: Research Reactor Operation and Maintenance

Chair: J. Estrade, CEA, France

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| RRFM2015-A0003 | NEW CORE CONFIGURATIONS FOR THE IPEN/CNEN-SP IEA-R1 RESEARCH REACTOR USING HIGHER DENSITY FUELS     | Garcia Joao, T. (1); Rossi, P. (1); Teixeira e Silva, A. (1)<br>1 - IPEN/CNEN-SP, Brazil  |
| RRFM2015-A0014 | EFFECT OF THERMAL GRADIENT ON IN REACTOR OXIDATION OF MTR FUEL PLATES.                              | Valdez Tordoya, D. (1); Haddad Andalaf, R. (1)<br>1 - CNEA, Argentina   |
| RRFM2015-A0018 | FRM II: THE TEST AND MAINTENANCE PROGRAM AFTER TEN YEARS OF OPERATION                               | Pichlmaier, A. (1); Gerstenberg, H. (1); Kastenmüller, A. (1); Kusterer, A. (1); Schätzlein, R. (1); Schmidt, M. (1)<br>1 - TU-München, ZWE FRM II, Germany |
| RRFM2015-A0081 | SAFARI-1 POOL LINER LEAKS   | Steynberg, B. (1)<br>1 - SAFARI-1 Research Reactor, South African Nuclear Energy Corporation, South Africa  |
| RRFM2015-A0105 | THE IAEA OPERATIONAL AND MAINTENANCE ASSESSMENT FOR RESEARCH REACTORS FROM A FACILITY'S PERSPECTIVE | O'Kelly, S. (1)<br>1 - National Institute of Standards and Technology, United States  |
| RRFM2015-A0133 | MANUFACTURING CONDITIONS OF FRENCH REACTOR PRESSURE VESSEL STEELS TO AVOID THE OCCURRENCE OF FLAKES | Buisine, D. (1); Champigny, F. (1); Miller, C. (1); Berger, T. (2); Joly, P. (2)<br>1 - Electricité de France, CEIDRE, France<br>2 - AREVA NP, France       |
| RRFM2015-A0159 | MODERNIZATION OF I&C SYSTEMS IN NUCLEAR RESEARCH REACTORS   | Avila, A. (1)<br>1 - INVAP S.E., Instrumentation & Control Department, Argentina  |
| RRFM2015-A0126 | INTERNET PRACTICAL COURSES FROM THE ISIS RESEARCH REACTOR   | Foulon, F. (1); Lescop, B. (1); Badeau, G. (1); Ivanovic, S. (1); Wohleber, X. (1); Huot, N. (1)<br>1 - CEA, France   |





**Wed 10.50 - 13.30 Parallel Session:  
New Research Reactor Projects**

Chair: A. Borio di Tigliole, IAEA

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| RRFM2015-A0013 | OYSTER REACTOR UPGRADE PROJECT: COLD NEUTRONS FOR COOL SCIENCE  | Molag, A. (1); Kaaijk, C. (1)<br>1 - Reactor Institute Delft, Technical University Delft, Netherlands  |
| RRFM2015-A0032 | THE JULES HOROWITZ REACTOR: A NEW HIGH PERFORMANCE MTR (MATERIAL TESTING REACTOR) WORKING AS AN INTERNATIONAL USER FACILITY IN SUPPORT TO NUCLEAR INDUSTRY, PUBLIC BODIES AND RESEARCH INSTITUTES | Estrade, J. (1); Bignan, G. (1); Bravo, X. (1)<br>1 - French Atomic Energy and Alternatives Energies Commission, France  |
| RRFM2015-A0180 | DESIGNING A MULTI-PURPOSE REACTOR, A PALLAS STATUS UPDATE   | Schoenmakers, A. H. (1); Van der Walt, M. (1)<br>1 - Stichting Voorbereiding Pallas-Reactor, Netherlands   |
| RRFM2015-A0039 | THE TUNISIAN SUBCRITICAL ASSEMBLY PROJECT: PRELIMINARY MONTE CARLO RESULTS OF A FIRST PROPOSAL CORE DESIGN  | Dridi, W. (1); Romdhani, I. (2); Benismail, A. (1)<br>1 - National Center of Nuclear Sciences and Technology, Tunisia<br>2 - Faculty of Sciences of Tunis, Tunisia   |
| RRFM2015-A0143 | BUILDING CAPABILITIES FOR NEW REACTORS  | Pavel, G. L. (1); Ghitescu, P. (1); Fosca, D. G. (2)<br>1 - University Politehnica of Bucharest, Romania<br>2 - Research Centre Rez, Czech Republic  |
| RRFM2015-A0158 | NEUTRONIC DESIGN OF THE COQUI REACTOR   | Ferraro, D. (1); Boschetti, F. (2); Villarino, E. (2)<br>1 - INVAP S.E., Nuclear Engineering Department, Buenos Aires, Argentina<br>2 - INVAP S.E., Nuclear Engineering Department, Rio Negro, Argentina   |
| RRFM2015-A0164 | DESIGNS OF MEDICAL ISOTOPE PRODUCTION FACILITIES  | Mazufri, C. M. (1)<br>1 - INVAP S.E., Nuclear Project Division, Argentina  |
| RRFM2015-A0082 | IAEA INTEGRATED RESEARCH REACTOR INFRASTRUCTURE ASSESSMENT (IRRIA) MISSION  | Borio di Tigliole, A. (1); Bradley, E. (1); Shokr, A. (2); Ridikas, D. (3)<br>1 - International Atomic Energy Agency - Research Reactor Section (NEFW-NE), Austria<br>2 - International Atomic Energy Agency - Research Reactor Safety Section (NSNI-NS), Austria<br>3 - International Atomic Energy Agency - Physics Section (NAPC-NA), Austria |

**13.30 – 14.20 Lunch break**



### Wed 14.20 - 15.40 International Topics

Chair: E. Koonen, SCK-CEN, Belgium; Co-Chair: A. Borio di Tigliole, IAEA

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|----------------|---|---|
| RRFM2015-A0036 | ALFRED AND THE LEAD TECHNOLOGY RESEARCH INFRASTRUCTURE  | <p>Alemberti, A. (1); Frignani, M. (1); Agostini, P. (2); Grasso, G. (2); Turcu, I. (3); Constantin, M. (3) Villabruna, G. (1) ; Tarantino, M. (2) ; Di Gabriele, F. (4); Witzanyova, N. (4) ; Krykova, M. (4)</p> <p>1 - Ansaldo Nucleare SpA, Italy<br/>2 - ENEA, Italy<br/>3 - Institute for Nuclear Research, Romania<br/>4 - Centrum Výzkumu Řež, Czech Republic</p>   |
| RRFM2015-A0020 | A NEW IAEA DOCUMENT ON MANAGING THE INTERFACE BETWEEN SAFETY AND SECURITY FOR RESEARCH REACTORS     | <p>Shokr, A. M. (1); Torres Vidal, C. (1); Lolich, J. (2); Clarke, M. (1)</p> <p>1 - Department of Nuclear Safety and Security, International Atomic Energy Agency, Vienna , Austria<br/>2 - Instituto Balseiro/Universidad Nacional de Cuyo, Bariloche, Argentina</p>  |
| RRFM2015-A0154 | LESSONS LEARNED IN THE PACKAGING AND REMOVAL OF LEGACY PLUTONIUM MATERIALS FROM RESEARCH FACILITIES | <p>D'Andrea, L. (1); Negrini, P. (1); Pietrobon, M. (1); Proietti, A. (1); Di gasbarro, F. (1); Maertens, D. (2); Gysemans, M. (2); Noynaert, L. (2); Dunn, K. (3); Iyer, N. (3)</p> <p>1 - SOGIN, S.p.A, Italy<br/>2 - SCK-CEN, Belgium<br/>3 - U.S. Department of Energy - National Nuclear Security Administration/Savannah River National Laboratory, United States</p> |
| RRFM2015-A0048 | DEVELOPING STRATEGIC PLANS FOR EFFECTIVE UTILIZATION OF RESEARCH REACTORS                           | <p>Ridikas, D. (1)</p> <p>1 - IAEA, Austria</p>   |

### Wed 15.40 – 16.00 Closing Session

Chair: E. Koonen, SCK-CEN, Belgium; Co-Chair: N. Camarcat, ENS President

Announcement of the winner of the RRFM 2015 Poster Award



## Poster

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| RRFM2015-A0022 | DEVELOPMENT OF PERFORMANCE ANALYSIS CODE FOR RESEARCH REACTOR FUEL   | Jeong, G. Y. (1); Sohn, D.-S. (1); Kim, Y. S. (2)<br>1 - Ulsan National Institute of Science and Technology, Korea, Republic of<br>2 - Argonne National Laboratory, United States   |
| RRFM2015-A0027 | EVALUATION OF PERFORMED AND PREPARATION OF NEW EXPERIMENTS ON FAST MULTIPLYING SYSTEMS WITH HEU AND LEU FUEL FOR RECEIVING BENCHMARK DATA ON CRITICALITY | Sikorin, S. (1); Mandzik, S. (1); Polazau, S. (1); Kuzmin, A. (1); Damarad, Y. (1); Soltan, I. (1)<br>1 - The Joint Institute for Power and Nuclear Research - Sosny of the National Academy of Sciences of Belarus, Belarus  |
| RRFM2015-A0034 | JRTR INITIAL CRITICALITY CALCULATIONS AND NUCLEAR COMMISSIONING TESTS  | Jaradat, M. (1); Alkhafaji, S. (1); Abu Saleem, K. (1); Park, C. J. (2); Lee, B. (2)<br>1 - Jordan Atomic Energy Commission, Jordan<br>2 - Korea Atomic Energy Research Institute, Korea, Republic of   |
| RRFM2015-A0047 | A COMPREHENSIVE ANALYSIS OF THE TECHNICAL FEASIBILITY OF THE MIR RESEARCH REACTOR CONVERSION TO LOW-ENRICHED URANIUM FUEL                                | Izhutov, A. (1); Starkov, V. (1); Pimenov, V. (1); Maynskov, S. (2); Osipova, T. (2); Uzikov, V. (1); Fedoseev, V. (1)<br>1 - JSC "SSC Research Institute of Atomic Reactors", Russian Federation<br>2 - National Nuclear University MEPhI (Moscow Engineering Physics Institute), Russian Federation |
| RRFM2015-A0053 | NEUTRONIC COMPARISON OF HIGH DENSITY FUELS (U-MO-AL AND U3SI2-AL) FOR RESEARCH REACTORS  | Oliveira Rondon Muniz, R. (1); Teixeira e Silva, A. (1); Borges Domingos, D. (1); Dos Santos, A. (1); Yamaguchi, M. (1)<br>1 - IPEN/CNEN-SP, Brazil   |
| RRFM2015-A0057 | COMPARISON OF LOW ENRICHED URANIUM (UALX-AL AND U-NI) TARGETS WITH DIFFERENT GEOMETRIES FOR THE PRODUCTION OF MOLYBDENUM-99                              | Teixeira e Silva, A. (1); Borges Domingos, D. (1); Garcia João, T. (1); Nishiyama, P. (2); Oliveira Rondon Muniz, R. (1)<br>1 - IPEN/CNEN-SP, Brazil<br>2 - CTMSP, Brazil   |

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| RRFM2015-A0059 | NEUTRONIC AND THERMAL-HYDRAULICS CALCULATIONS FOR THE PRODUCTION OF MOLYBDENUM-99 BY FISSION IN LOW ENRICHED URANIUM UALX-AL TARGETS           | Borges Domingos, D. B. D. (1); Teixeira e Silva, A. (1); Garcia João, T. (1); J.b. de o. Nishiyama, P. (2); Giovedi, C. (2)<br>1 - IPEN-CNEN/SP, Brazil<br>2 - CTMSP, Brazil  |
| RRFM2015-A0060 | LOW ENRICHED URANIUM FOIL TARGETS WITH DIFFERENT GEOMETRIES FOR THE PRODUCTION OF MOLYBDENUM-99  | Borges Domingos, D. (1); Teixeira e Silva, A. (1); Garcia João, T. (1)<br>1 - IPEN/CNEN-SP, Brazil  |
| RRFM2015-A0061 | DEVELOPMENT OF CAN-LESS HIP TECHNOLOGY FOR MP-1 FABRICATION  | Lienert, T. (1); Dvornak, M. (1); Dombrowski, D. (1)<br>1 - Los Alamos National Laboratory, United States   |
| RRFM2015-A0062 | DEVELOPMENT OF PLASMA SPRAYING FOR MP-1 FABRICATION  | Hollis, K. (1); Dombrowski, D. (1)<br>1 - Los Alamos National Laboratory, United States   |
| RRFM2015-A0063 | HORUS3D NEUTRON CALCULATION TOOL DEDICATED TO JHR DESIGN AND SAFETY STUDIES - DEVELOPMENT, VALIDATION, BIASES AND UNCERTAINTIES QUANTIFICATION | Vaglio-Gaudard, C. (1); Jeury, F. (1); Vidal, J.-M. (1); Gaubert, L. (1); Politello, J. (1)<br>1 - CEA, France  |
| RRFM2015-A0064 | PROGRESS IN DEVELOPMENT OF LARGE, FORMED HIP CANS FOR CLADDING OF U-MO FUEL FOR THE MP-1 IRRADIATION TEST                                      | Clarke, K. (1); Tucker, L. (1); Aikin, B. (1); Vargas, V. (1); Dvornak, M. (1); Scott, J. (1); Hudson, R. (1); Mauro, M. (1); Lovato, M. (1); Liu, C. (1); Dombrowski, D. (1)<br>1 - Los Alamos National Laboratory, United States  |
| RRFM2015-A0066 | UNCERTAINTY ASSESSMENT FOR REACTIVITY INDUCED ACCIDENT OF 5-MW POOL-TYPE RESEARCH REACTOR  | Yum, S. (1); Park, S. (1)<br>1 - Korea Atomic Energy Research Institute, Korea, Republic of   |
| RRFM2015-A0072 | CONTRIBUTIONS TO PROBABILISTIC SAFETY ASSESSMENT STUDIES FOR TRIGA RESEARCH REACTORS   | Mladin, D. (1)<br>1 - Institute for Nuclear Research, Romania   |
| RRFM2015-A0073 | INVESTIGATING THE SETUP FOR IRRADIATION OF MATERIAL SAMPLES IN TRIGA ROMANIA   | Mladin, M. (1); Dulugeac, S. (1); Budriman, G. (1)<br>1 - Institute for Nuclear Research, Romania   |
| RRFM2015-A0075 | STUDY OF MOLYBDENUM-99 PRODUCTION POSSIBILITIES IN TRIGA 14 MW REACTOR   | Dulugeac, S. (1); Mladin, M. (1); Budriman, G. (1)<br>1 - Institute for Nuclear Research, Romania   |
| RRFM2015-A0076 | THE 14 MEV NEUTRON IRRADIATION FACILITY IN MARIA REACTOR   | Prokopowicz, R. (1); Pytel, K. (1); Dorosz, M. (1); Zawadka, A. (1); Lechniak, J. (1); Lipka, M. (1); Marcinkowska, Z. (1); Wierzchnicka, M. (1); Małkiewicz, A. (1); Wilczek, I. (1); Krok, T. (1); Migdal, M. (1); Kozieł, A. (1)<br>1 - National Centre for Nuclear Research, Poland |

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| RRFM2015-A0077 | MINI-PLATE IRRADIATION TEST AND NON-DESTRUCTIVE ANALYSE OF U-7MO DISPERSION FUEL FOR KJRR FUEL QUALIFICATION   | Tahk, Y. W. (1); Kim, H. M. (1); Oh, J. Y. (1); Lee, B. H. (1); Kim, H. J. (1); Lee, K. H. (1); Jeong, Y. J. (1); Yim, J. S. (1)<br>1 - Korea Atomic Energy Research Institute, Korea, Republic of   |
| RRFM2015-A0094 | OVERVIEW ON A RRSF REPROCESSING, FROM SPENT FUEL EVACUATION TO VITRIFIED RESIDUES STORAGE  | Domingo, X. (1); Valery, J.-F. (1)<br>1 - AREVA NC, France   |
| RRFM2015-A0109 | MANUFACTURE OF THE DISPERSION TYPE FUEL MINIPLATES AND DIFFUSION COUPLES WITH U7wt%MO AND U10wt%MO ALLOYS WITH ZIRCALOY 4 FOR INTERDIFFUSION STUDIES | Cardoso, K. (1); Gracher Riella, H. (2); Durazzo, M. (1); F.Urano de Carvalho, E. (1)<br>1 - Centro do Combustível Nuclear, Instituto de Pesquisas Energéticas e Nucleares- ipen/cnen-SP, Brazil<br>2 - Departamento de Engenharia Química da Universidade Federal de Santa Catarina, Brazil   |
| RRFM2015-A0104 | COMPARISON BETWEEN U(Mo)/Al(Si) MINIPLATE AND U3Si2/Al MINIPLATE AFTER THE SAME FABRICATION PROCESS.   | Mirandou, M. (1); Aricó, S. (1); Balart, S. (1); Fabro, J. (1)<br>1 - Comisión Nacional de Energía Atómica, Argentina  |
| RRFM2015-A0116 | RESEARCH REACTORS SAFETY, SECURITY AND SAFEGUARDS  | Biro, L. (1)<br>1 - SPAREX Nuclear 3S, Romania   |
| RRFM2015-A0120 | BEAM MODEL CONSTRUCTION OF PLATE-TYPE FUEL ASSEMBLY AND ITS VALIDATION THROUGH OUT-OF-PILE CHARACTERISTIC TEST                                       | Kim, H.-J. (1); Lee, G.-H. (1); Yim, J.-S. (1); Lee, B.-H. (1); Oh, J.-Y. (1); Tahk, Y.-W. (1)<br>1 - Korea Atomic Energy Research Institute, Korea, Republic of   |
| RRFM2015-A0121 | KR IMPLANTATION INTO HEAVY ION IRRADIATED MONOLITHIC U-MO/AL SYSTEMS: SIMS AND SEM INVESTIGATION   | Zweifel, T. (1); Valle, N. (2); Grygiel, C. (3); Beck, L. (4); Palancher, H. (5); Petry, W. (1)<br>1 - Forschungs-Neutronenquelle Heinz Maier-Leibnitz (FRM II), Lichtenbergstr. 1, D-85747 Garching, Germany<br>2 - Centre de Recherche Public - Gabriel Lippmann, Luxembourg<br>3 - CIMAP, CEA - CNRS - Université de Caen - ENSICAEN, France<br>4 - Maier-Leibnitz Laboratorium, Ludwig-Maximilians-Universität München, Germany<br>5 - DEN/DEC/LLCC, CEA Cadarache, France |
| RRFM2015-A0122 | ANALYSIS OF THERMAL INTERACTION BETWEEN MULTI-COATED U-MO AND ALUMINUM BY DIFFUSION COUPLE TEST  | Lee, K. H. (1); Kim, S. (1); Nam, J. M. (1); Jeong, Y. J. (1); Kim, K. N. (1); Park, J. M. (1); Lee, C. T. (1)<br>1 - Korea Atomic Energy Research Institute, Korea, Republic of   |
| RRFM2015-A0130 | ANALYSIS OF MICROSTRUCTURE AND PRECIPITATIONS IN THE U-ZR METALLIC FUEL  | Lee, C.-T. (1); Kim, H. L. (1); Jun, H. J. (1); Yoon, C. G. (1); Lee, H. J. (1)<br>1 - Korea Atomic Energy Research Institutes (KAERI), Korea, Republic of   |
| RRFM2015-      | HEAT TREATMENT OF ATOMIZED U(MO)   | Leenaers, A. (1); Van den Berghe, S.   |



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| A0131          | PARTICLES  | (1)<br>1 - SCK-CEN, Belgium  |
| RRFM2015-A0140 | VIDEO EXAMINATIONS OF SPENT NUCLEAR FUEL AND REACTOR EQUIPMENT AT RESEARCH REACTORS                            | Luke, D. (1); Robb, A. (1)<br>1 - CH2M*Washington Group Idaho (CWI), LLC, United States  |
| RRFM2015-A0144 | DECOMMISSIONING OF ZERO-POWER RESEARCH REACTORS AND STUDY OF SOLUTIONS FOR GRAPHITE TREATMENT AND/OR DISPOSAL. | Campi, F. (1); Canzone, G. (2); Castelli, L. (1); Maio, V. (2)<br>1 - Politecnico di Milano, Italy<br>2 - Sogin, Italy   |
| RRFM2015-A0145 | NEUTRONIC COMPARISON OF RELAP5-3D AND MCNP5 MODELS FOR THE TRIGA IPR-R1  | L. Costa, A. (1); A. M. da Silva, C. (1); A. I. Reis, P. (1); Pereira, C. (1); F. Veloso, M. A. (1); V. Soares, H. (1)<br>1 - UNIVERSIDADE FEDERAL DE MINAS GERAIS, Brazil |
| RRFM2015-A0166 | TRANSPORT OF IRRADIATED FUEL RODS AND SEGMENTS OF IRRADIATED FUEL RODS   | Boeckx, W. (1)<br>1 - Transnubel, Belgium  |
| RRFM2015-A0173 | Y-12 NATIONAL SECURITY COMPLEX U-MO FABRICATION  | Gambrell, M. (1); Langham, C. (1); Moore, A. (1); Demint, A. (1); Henkel, J. (1); Longmire, H. (1)<br>1 - Y-12 National Security Complex, United States                    |
| RRFM2015-A0175 | QUALITY ASSURANCE AND QUALIFICATION OF NEW I&C SYSTEM AFTER REFURBISHMENT OF THE LVR-15 REACTOR                | Herrmann, J. (1); Kochova, M. (1)<br>1 - dataPartner s.r.o, Czech Republic   |
| RRFM2015-A0177 | AN INNOVATIVE DETERMINISTIC NEUTRONIC CALCULATION TOOL FOR RESEARCH REACTORS                                   | Lacombe, J.-G. (1); Koubbi, J. (1); Manificier, L. (1)<br>1 - AREVA TA, France   |
| RRFM2015-A0178 | CREATIVITY IN COLD NEUTRON SOURCES DESIGN  | Manificier, L. (1); Koubbi, J. (1); Beauvais, B. (1); Grémeaux, D. (1); Boyard, M. (1)<br>1 - AREVA TA, France   |