

# IYNC2014, July 6th - 12th 2014, Burgos, Spain



## TECHNICAL PROGRAM

For the most up-to-date schedule, please visit:  
<https://www.conftool.pro/iync2014/sessions.php>

### MONDAY, JULY 7<sup>TH</sup> 2014

#### 8:30 - 9:30 AM Opening Session

Location: Fórum Evolución

**Speaker 1:** Javier Lacalle, Mayor, Burgos City Hall, Spain

**Speaker 2:** Francisco Lopez, President, Spanish Nuclear Society, Spain

#### 9:30 - 10:30 AM Keynote Session

Location: Fórum Evolución

**Manager:** Shengke Zhi, Business Manager, AMEC, UK

**Speaker 1:** Danny Roderick, CEO & President, Westinghouse, USA

**Speaker 2:** Alejo Vidal-Quadras, former VP European Parliament, Spain

#### 10:30 - 11:00 AM Coffee Break Forum

Location: Fórum Evolución

#### 11:00 - 12:30 AM Country Reports

Location: Fórum Evolución

#### 12:30 - 1:00 PM Transfer to ABBA Hotel

#### 1:00 - 2:30 PM Lunch at ABBA Hotel

### TECHNICAL SESSIONS

#### 2:30 - 4:00 PM TS01A: Technical Session 1, Track 1: Operation & Maintenance, Design Modifications, Radiation Protection

Location: Antecesor 1 | 1<sup>st</sup> floor (70 people)

Manager: Mateo Ramos, Tecomat, Spain

Co-Managers: Timothy Rownes, ANSTO, Australia and Mayank Sood, AMEC, Canada

##### Automation of ORIGIN ARP applications in CNAT

Roberto Plaza<sup>1</sup>, Juan Antonio Bermejo<sup>2</sup>, Alberto Ortego<sup>3</sup>

<sup>1</sup>ASECAL, Gas Natural Fenosa Engineering, Spain; <sup>2</sup>Iberdrola Ingeniería y Construcción, Spain; <sup>3</sup>CNAT, Spain

##### New Seismic Fire Protection System

Julián Martín de Eugenio<sup>1</sup>, Javier Cueto<sup>1</sup>

<sup>1</sup>Empresarios Agrupados, Spain

#### Guideline for the Improved Technical Specifications of Almaraz, Asco and Vandellós Nuclear Power Plants

Amparo Alcover<sup>1</sup>, Samuel Bellver<sup>1</sup>, Silvia García<sup>1</sup>

<sup>1</sup>Empresarios Agrupados, Spain

#### Protection of the Nuclear Supplier Chain against Suspect Counterfeit and Fraudulent Items

Philisile Munetsi<sup>1</sup>, Sthembile Tshikosi<sup>1</sup>, Anthea Timotheus<sup>1</sup>

<sup>1</sup>Koberg Nuclear Power Station, South Africa

#### 2:30 - 4:00 PM TS02A: Technical Session 1, Track 2: Generation 3 Reactors and SMRs

Location: Atapuerca 2 | Ground floor (50 people)

Manager: Jeffrey Menard, Westinghouse, USA

Co-Manager: Denys Zeniuk, Energoatom, Ukraine

#### Radioactive Material Reduction in Containment Building for SMR

Kyung Jun Kang<sup>1</sup>, Young In Kim<sup>1</sup>, Keung Koo Kim<sup>1</sup>

<sup>1</sup>Korea Atomic Energy Research Institute, South Korea

#### The Structure Design of Subcritical Energy Blanket for Fusion-Fission Hybrid Reactor Based on ITER Device

Herong Zeng<sup>1</sup>, Shilin Duan<sup>1</sup>, Shangming Liang<sup>2</sup>

<sup>1</sup>Institute of Nuclear Physics and Chemistry, People's Republic of China; <sup>2</sup>School of Manufacture Science and Engineering, Sichuan University, People's Republic of China

#### Application for Automatic Calculation of Measurement Channel Uncertainties in NPPs

Francisco Rivero<sup>1</sup>

<sup>1</sup>Empresarios Agrupados, Spain

#### 2:30 - 4:00 PM TS31A: Technical Session 1, Track 3.1: Reactor Physics and Materials - Thermal-hydraulics

Location: Gran Dolina 1 | 1<sup>st</sup> floor (70 people)

Manager: Federica Secondi, Westinghouse, Belgium

Co-Manager: Alexandre Guion, MIT, USA

#### Investigation of Surface Vortex Formation at Pump Intakes in PWR Sumps

Péter Pandazis<sup>1</sup>, Frank Blömeling<sup>1</sup>

<sup>1</sup>TÜV NORD SysTec GmbH & Co. KG, Germany



#### **OECD/NEA Rosa-2 Test 4 SGTR Simulation With Trace 5.0**

Emma Sara Lopez-Alonso<sup>1</sup>, Gonzalo Jimenez<sup>1</sup>, Cesar Queral<sup>1</sup>

<sup>1</sup>Universidad Politecnica de Madrid, Spain

#### **Gradient Heat Flux Measurement for Reflux Condensation Phenomena Investigation**

Filip Janasz<sup>1</sup>, Detlef Suckow<sup>1</sup>, Andrey Mityakov<sup>2</sup>, Michel Furrer<sup>1</sup>, Sergey Sapozhnikov<sup>2</sup>, Vladimir Mityakov<sup>2</sup>

<sup>1</sup>Paul Scherrer Institut, Switzerland; <sup>2</sup>Saint-Petersburg State Polytech University, Russia

#### **2:30 - 4:00 PM TS04A: Technical Session 1, Track 4: Safety, PRA, Severe Accidents and Fukushima**

Location: Silex | Ground floor (110 people)

Manager: Jonathan Scott, Atkins, UK

#### **A Study of Hybrid SIT Operation Strategy in Nuclear Power Plant**

In Seop Jeon<sup>1</sup>, Hyun Gook Kang<sup>1</sup>

<sup>1</sup>KAIST, South Korea

#### **A visit to Fukushima Daini plant**

Igor Trisic<sup>1</sup>

<sup>1</sup>OKG AB, Sweden

#### **Application of Dynamic Event Tree Methodology with multiple Damage Criteria in a Steam Generator Tube Rupture**

María José Rebollo<sup>1</sup>

<sup>1</sup>UPM, Spain

#### **Chemistry studies for radioactive aerosol release in simulated severe accidents**

Fidelma Giulia Di Lemma<sup>1,2</sup>, Jean Yves Colle<sup>1</sup>, Ondrej Benes<sup>1</sup>, Stefaan Van Winckel<sup>1</sup>, Rudy Konings<sup>1,2</sup>

<sup>1</sup>JRC-ITU, European Commission, Karlsruhe, Germany; <sup>2</sup>DELFT, University of Technology, the Netherlands

#### **2:30 - 4:00 PM TS05A: Technical Session 1, Track 5: Fuel Cycle Front-End and Non-Proliferation**

Location: Antecessor 2 | 1<sup>st</sup> floor (50 people)

Manager (acting): Alberto Foronda, Almaraz-Trillo NPPs, Spain

#### **Mining the Spent Fuel Pools at Koeberg Nuclear Power Station**

Ruan Steyn<sup>1</sup>

<sup>1</sup>Eskom, Koeberg Nuclear Power Plant, South Africa

#### **The added value of a long-term surveillance strategy of nuclear fuel**

Luz Fuentes-Pacheco<sup>1</sup>, Cristina Muñoz-Reja<sup>1</sup>

<sup>1</sup>ENUSA Industrias Avanzadas S.A, Spain

#### **Capacity Building in Safeguard Implementation Focusing on the Support to the Small Quantities Protocols States**

Yukiko Okumura<sup>1</sup>

<sup>1</sup>Japan Atomic Energy Agency, Japan

#### **2:30 - 4:00 PM TS06A: Technical Session 1, Track 6: Decommissioning, Fuel Cycle Back-End and Waste Management**

Location: Atapuerca 1 | Ground floor (70 people)

Manager: Christoph Rirschl, GNS, Germany

Co-Manager: Alejandro Palacio, ENSA, Spain

#### **Developing Database of Spent fuel and Special Waste**

Natalia Gomez Castaño<sup>1</sup>, Rosa Gonzalez Gandal<sup>2</sup>, Miguel Rodriguez Gomez<sup>2</sup>, Gonzalo Serrano<sup>3</sup>

<sup>1</sup>ASECAL; <sup>2</sup>GNFe, Spain; <sup>3</sup>Enresa

#### **Spent Nuclear Fuel Classification: the main step for waste nuclear management in long term**

Paloma Viñas Peña<sup>1</sup>, Juan M. García de la Infanta Belío<sup>1</sup>

<sup>1</sup>ENUSA Industrias Avanzadas S.A, Spain

#### **High Radioactive Spent Fuel Management. Dual Purpose Metal Casks as a Current Optimal Solution**

Alejandro Palacio<sup>1</sup>, David Garrido<sup>1</sup>, David Castrillón<sup>1</sup>, Víctor Gómez<sup>1</sup>, Raúl Muñoz<sup>1</sup>, Guillermo Calleja<sup>1</sup>

<sup>1</sup>ENSA, Spain

#### **Analysis for a Spent Fuel Canister End Drop**

Jose Garcia Laurelo<sup>1</sup>, Luis Fernando Elias Martin<sup>1</sup>

<sup>1</sup>ENUSA Industrias Avanzadas S.A, Spain

#### **4:00 - 4:30 PM Coffee Break**

#### **4:30 - 6:00 PM TS01B: Technical Session 2, Track 1: Operation and Maintenance, Design Modifications, Radiation Protection**

Location: Antecessor 1 | 1<sup>st</sup> floor (70 people)

Manager: Mateo Ramos, Tecnatom, Spain

Co-Managers: Timothy Rownes, ANSTO, Australia and Mayank Sood, AMEC, Canada

#### **Plant process computer replacement at Cofrentes NPP**

Ricardo Garcia<sup>1</sup>, Javier Lasiera<sup>1</sup>

<sup>1</sup>Tecnatom, Spain

#### **Electromagnetic Compatibility: A Moving Target**

Christopher Daniel Carver<sup>1</sup>

<sup>1</sup>Comanche Peak Nuclear Power Plant/Luminant, USA

#### **Verification of new instrumentation and control functions with closed-loop tests**

Josef Sebastian Heinz<sup>1</sup>

<sup>1</sup>AREVA GmbH, Germany

#### **New Feedwater Heater Level Transmitters for Nuclear Power Systems**

Abdul-Karim Barrie<sup>1</sup>

<sup>1</sup>Entergy, USA

#### **4:30 - 6:00 PM TS02B: Technical Session 2, Track 2: Generation 3 Reactors and SMRs**

Location: Atapuerca 2 | Ground floor (50 people)

Manager: Jeffrey Menard, Westinghouse, USA

Co-Manager: Denys Zeniuk, Energoatom, Ukraine

#### **Assessing Seismic Isolation of an ADS Reactor Building**

Jaime VEGA<sup>1</sup>, Jaime GALLEGU<sup>1</sup>

<sup>1</sup>Empresarios Agrupados, Spain

#### **Nuclear Hybrid Energy Systems:**

##### **Molten Salt Energy Storage**

Michael Green<sup>1</sup>, Piyush Sabharwal<sup>1</sup>, SuJong Yoon<sup>1</sup>, Shannon-Bragg Sitton<sup>1</sup>, Carl Stoots<sup>1</sup>

<sup>1</sup>Idaho National Laboratory, USA

#### **Nuclear Hybrid Energy Systems:**

##### **Challenges and Opportunities**

Shannon-Bragg Sitton<sup>1</sup>, Piyush Sabharwal<sup>1</sup>, Richard Boardman<sup>1</sup>

<sup>1</sup>Idaho National Laboratory, USA

#### **Advanced Reactors Thermal Energy Transport for Process Industries**

Piyush Sabharwal<sup>1</sup>, Su Jong Yoon<sup>1</sup>, Michael George McKellar<sup>1</sup>, George Griffith<sup>1</sup>, Carl Stoots<sup>1</sup>

<sup>1</sup>Idaho National Laboratory, USA

#### **Progress in Neutronic and Thermalhydraulic Conceptual Design of Fusion-Fission Hybrid Energy Reactor**

Haibing Guo<sup>1</sup>, Jimin Ma<sup>1</sup>, Xiao Liu<sup>1</sup>

<sup>1</sup>Institute of Nuclear Physics and Chemistry, People's Republic of China

#### **4:30 - 6:00 PM TS31B: Technical Session 2, Track 3.1: Reactor Physics and Materials - Thermal-hydraulics**

Location: Gran Dolina 1 | 1<sup>st</sup> floor (70 people)

Manager: Federica Secondi, Westinghouse, Belgium

Co-Manager: Alexandre Guion, MIT, USA



### Transient Analyses for Molten Salt Fast Reactor with Optimised Core Geometry

Rui Li<sup>1</sup>, Shisheng Wang<sup>1</sup>, Andrei Rineiski<sup>1</sup>, Dalin Zhang<sup>1</sup>, Elsa Merle-Lucotte<sup>2</sup>

<sup>1</sup>Institute for Nuclear and Energy Technologies, Karlsruhe Institute of Technology, Germany; <sup>2</sup>Laboratoire de Physique Subatomique et de Cosmologie – IN2P3 – CNRS / Grenoble INP / UJF, France

### A Microscale View of Nucleate Boiling: Evaporation of a Liquid Microlayer underneath a Vapor Bubble

Alexandre Guion<sup>1</sup>, D Langewisch<sup>1</sup>, J Buongiorno<sup>1</sup>

<sup>1</sup>Massachusetts Institute of Technology, USA

### Fuel assembly drop accident simulation with CFD

Ricardo Corpa Masa<sup>1</sup>, Beatriz Montero García<sup>2</sup>

<sup>1</sup>ENUSA Industrias Avanzadas S.A., Spain; <sup>2</sup>Universidad Politécnica de Madrid

### Influence of heat transfer mechanisms in the thermal behaviour analysis for the Spanish Interim Nuclear Waste Storage Facility

José Rubén Pérez<sup>1</sup>, María García<sup>1</sup>, Eusebio Huélamo<sup>1</sup>

<sup>1</sup>Empresarios Agrupados AIE, Spain

### 4:25 - 6:15 PM TS04B: Technical Session 2, Track 4: Safety, PRA, Severe Accidents and Fukushima

Location: Silex | Ground floor (110 people)

Manager: Jonathan Scott, Atkins, UK

### Containment GOTHIC model and Passive Autocatalytic Recombiners (PARs) for Almaraz NPP

María García<sup>1</sup>, Mario Martínez<sup>1</sup>, Jose Rubén Perez<sup>1</sup>, Eusebio Huélamo<sup>1</sup>

<sup>1</sup>Empresarios Agrupados, Spain

### Decision Support Systems for nuclear emergencies

Marta Zancada Diaz<sup>1</sup>, Eduardo Gallego Diaz<sup>1</sup>, Milagros Montero Prieto<sup>2</sup>

<sup>1</sup>Universidad Politécnica de Madrid, Spain; <sup>2</sup>CIEMAT, Spain

### Design Modification Projects for Severity Lessening of Beyond Design Basis Accidents in Siemens-KWU and Westinghouse PWR NPPs

Luis Antonio Cano-Rodríguez<sup>1</sup>, Germán Domínguez-González<sup>1</sup>, Ángel Argüello-Tara<sup>1</sup>

<sup>1</sup>Empresarios Agrupados AIE, Spain

### Fire Analysis as part of the transition to NFPA-805 standard

Tomas Villar Sanchez<sup>1</sup>, Antonio Garcia Romero<sup>2</sup>, Pedro Fernandez Ramos<sup>3</sup>, Isaac Fuente Prieto<sup>4</sup>

<sup>1</sup>Empresarios Agrupados A.I.E., Spain; <sup>2</sup>Empresarios Agrupados A.I.E., Spain; <sup>3</sup>Empresarios Agrupados A.I.E., Spain; <sup>4</sup>Centrales Nucleares Almaraz Trillo A.I.E., Spain

### Reliability Evaluation of Digital I&C Systems in NPPs

Seung Jun Lee<sup>1</sup>, Wondea Jung<sup>1</sup>

<sup>1</sup>KAERI, South Korea

### 4:30 - 6:00 PM TS05B: Technical Session 2, Track 5: Fuel Cycle Front-End and Non-Proliferation

Location: Antecessor 2 | 1<sup>st</sup> floor (50 people)

Manager (acting): Alberto Foronda, Almaraz-Trillo NPPs, Spain

### Dry Process Research on UO<sub>2</sub> Powder Production With GFX-200 Devices

Bangwu Wang<sup>1</sup>, Shangxiang Zhou<sup>1</sup>

<sup>1</sup>CNNC Jianzhong Nuclear fuel Co., Ltd., People's Republic of China

### Flow control in a Lean production environment: a nuclear fuel manufacturing case study

Diego Fernández<sup>1</sup>, Rubén García<sup>1</sup>, Ana Rodríguez<sup>1</sup>

<sup>1</sup>Enusa Industrias Avanzadas, Spain

### 4:30 - 6:00 PM TS06B: Technical Session 2, Track 6: Decommissioning, Fuel Cycle Back-End and Waste Management

Location: Atapuerca 1 | Ground floor (70 people)

Manager: Christoph Rirschl, GNS, Germany

Co-Manager: Alejandro Palacio, ENSA, Spain

### Major Contributions To Nuclear Waste And Disposal Techniques: Plans For Nigeria Nuclear Power Plant Programme

Jeremiah Chinonso Mbazor<sup>1</sup>, Lawrence Anikwe Dim<sup>2</sup>,

Timothy Chigozie Akpa<sup>3</sup>

<sup>1</sup>Nigeria Atomic Energy Commission, Nigeria; <sup>2</sup>Centre for Energy Research and Training, Ahmadu Bello University, Zaria, Kaduna State, Nigeria; <sup>3</sup>Nigerian Nuclear Regulatory Authority, Abuja FCT, Nigeria

### Uncertainty in decommissioning

Vincent François-Julien Testard<sup>1</sup>, Ines Marine Scoto Di Suoccio<sup>1</sup>, Luc Ardellier<sup>1</sup>

<sup>1</sup>OREKA SUD, France

### Monitoring of deep groundwaters to maintain favourable conditions in geological repository for safe disposal of spent nuclear fuel

Lauri Pellervo Parviainen<sup>1</sup>, Petteri Pitkänen<sup>1</sup>, Tiina Lamminmaki<sup>1</sup>

<sup>1</sup>Posiva Oy, Finland

### Emissions management in La Hague recycling plant

Philippe Doumerc<sup>1</sup>, Benjamin Drazek<sup>1</sup>

<sup>1</sup>AREVA NC La Hague, France

## TUESDAY, JULY 8<sup>TH</sup> 2014

### TECHNICAL SESSIONS

### 8:30 - 10:00 AM TS01C: Technical Session 3, Track 1: Operation and Maintenance, Design Modifications, Radiation Protection

Location: Antecessor 1 | 1<sup>st</sup> floor (70 people)

Manager: Mateo Ramos, Tecnatom, Spain

Co-Managers: Timothy Rownes, ANSTO, Australia and Mayank Sood, AMEC, Canada

### Condition Assessments Scoping and Screening

Mayank Singh<sup>1</sup>, Satyam Sahi<sup>2</sup>

<sup>1</sup>AMEC NSS, Canada; <sup>2</sup>Ontario Power Generation, Canada

### Economic impact of the equipment classification in Seismic Qualification

Juan Antonio Munoz Tirado<sup>1</sup>

<sup>1</sup>NUCLEONOVA, Spain

### Comparison between ASME B31.1 and ASME B31.3 for application in stress analysis

Mohammad Minhajuddin Malik<sup>1</sup>, Karamjit Atwal<sup>1</sup>

<sup>1</sup>AMEC NSS, Canada

### Parametric Study on Weld Residual Stress of Weld Overlay

Chang Hoon Ha<sup>1</sup>, Yun Chang Jang<sup>1</sup>, Byeong Wook Noh<sup>1</sup>, Hwa Gyu Park<sup>1</sup>

<sup>1</sup>Doosan Heavy Industries and Construction, South Korea

### 8:30 - 10:00 AM TS32A: Technical Session 3, Track 3.2: Reactor Physics and Materials - Neutronics

Location: Gran Dolina 2 | 1<sup>st</sup> floor (50 people)

Manager: Nicolas Stauff, Argonne National Lab, USA

Co-Manager: Mohammed Alrwashdeh, Tsinghua University, China

### Experimental investigation of the axial neutron flux distribution in an Accelerator Driven System

Antonin Krasa<sup>1</sup>

<sup>1</sup>SCK-CEN, Belgium





### Extension of the SIMMER code for the assesment of core thermal expansion feedbacks for transient analysis

Lena Andriolo<sup>1</sup>, Andrei Rineiski<sup>1</sup>, Xue-Nong Chen<sup>1</sup>,  
Werner Maschek<sup>1</sup>, Fabrizio Gabrielli<sup>1</sup>, Fabienne Delage<sup>2</sup>,  
Elsa Merle-Lucotte<sup>3</sup>

<sup>1</sup>Karlsruhe institute of Technology, Germany;

<sup>2</sup>Commissariat à l'Energie Atomique et aux Energies Alternatives, France;

<sup>3</sup>Centre National de la Recherche Scientifique, France

### Reactivity Monitoring in Accelerator-Driven Systems

Wim Uyttenhove<sup>1,2</sup>, Peter Baeten<sup>1</sup>, Danny Lathouwers<sup>2</sup>,  
Jan-Leen Kloosterman<sup>2</sup>, Anatoly Kochetkov<sup>1</sup>, Antonin Krása<sup>1</sup>,  
Gert Van den Eynde<sup>1</sup>, Tim H.J.J. van der Hagen<sup>2</sup>,  
Guido Vittiglio<sup>1</sup>, Jan Wagemans<sup>1</sup>

<sup>1</sup>SKC-CEN, Belgian Nuclear Research Centre, Belgium; <sup>2</sup>Delft University of Technology, The Netherlands

### SIMMER extension for cross-section collapsing introduction

Mattia Massone<sup>1</sup>, Fabrizio Gabrielli<sup>1</sup>, Andrei Rineiski<sup>1</sup>

<sup>1</sup>Karlsruhe Institute of Technology, Germany

### 8:30 - 10:00 AM TS33A: Technical Session 3, Track 3.3

Location: Gran Dolina 1 | 1<sup>st</sup> floor (70 people)

Manager: Xinfu He, CIAE, China

Co-Manager: Luca Capriotti, JRC-TUM, Germany

### Optimization of the Molten Salt Fast Reactor fuel based on thermodynamic modelling

Elisa Capelli<sup>1,2</sup>, Ondrej Benes<sup>1</sup>, Rudy Konings<sup>1,2</sup>

<sup>1</sup>JRC-ITU, Germany; <sup>2</sup>TU, Delft

### Post Irradiation Examination of Fast Reactor Metallic Fuel for Minor Actinides Transmutation

Luca Capriotti<sup>1</sup>, Kenta Inagaki<sup>2</sup>, Dimitrios Papaioannou<sup>1</sup>,  
Stephane Bremier<sup>1</sup>, Hirokazu Ohta<sup>1</sup>, Takanari Ogata<sup>2</sup>, Vincenzo  
Rondinella<sup>1</sup>, Rafael Macian-Juan<sup>3</sup>

<sup>1</sup>Institute for Transuranium Elements - European Commission, JRC, Germany; <sup>2</sup>Central Research Institute of Electric Power Industry, Japan; <sup>3</sup>Technische Universität München, Germany

### The role of point defects on defect production in $\beta$ -SiC

Deepak Ranjan Sahoo<sup>1</sup>, Izabela Szlufarska<sup>2</sup>, Dane Morgan<sup>2</sup>,  
Narasimhan Swaminathan<sup>1</sup>

<sup>1</sup>Indian Institute of Technology, Madras, Chennai, India; <sup>2</sup>University of Wisconsin, United States of America

### Dissimilar Welds During Manufacturing

Pedro Veron<sup>1</sup>

<sup>1</sup>Equipos Nucleares S.A., Spain

### 8:30 - 10:00 AM TS04C: Technical Session 3, Track 4: Safety, PRA, Severe Accidents and Fukushima

Location: Silex | Ground floor (110 people)

Manager: Jonathan Scott, Atkins, UK

### Enusa, Juzbado Plant. Stress Test Approach and Actions Taken

Enrique Escandon<sup>1</sup>, Marcos Luis<sup>1</sup>

<sup>1</sup>ENUSA Industrias Avanzadas S.A, Spain

### Extending SBO Coping Capability: An Improved Auxiliary Feedwater System

Constantin Alin Tatu<sup>1</sup>

<sup>1</sup>KEPCO International Nuclear Graduate School (KINGS), South Korea

### External flooding event analysis in a PWR-W with MAAP-5

Kevin Fernández<sup>1,2</sup>, Gonzalo Jimenez<sup>1</sup>, Pilar Barreira<sup>2</sup>

<sup>1</sup>UPM, Spain; <sup>2</sup>Gas Natural Fenosa Engineering, Spain

### Complex simulation suit "VEB" used for dynamic processes analysis. Codes and software tools.

Alexander Savchenko<sup>1</sup>, Oleg Tokar<sup>1</sup>, Vladimir Kukhtevich<sup>1</sup>,  
Vitaliy Sokolov<sup>1</sup>, Anna Potekhina<sup>1</sup>, Evgeny Obratsov<sup>1</sup>

<sup>1</sup>JSC "Atomproekt", Russian Federation

### 8:30 - 10:00 AM TS06C: Technical Session 3, Track 6: Decommissioning, Fuel Cycle Back-End and Waste Management

Location: Atapuercia 1 | Ground floor (70 people)

Manager: Christoph Rirschl, GNS, Germany

Co-Manager: Alejandro Palacio, ENSA, Spain

### Reduction of radioactive waste by improvement of conditioning facilities

Eileen Radde<sup>1</sup>

<sup>1</sup>Nuclear Engineering Seibersdorf, Austria

### Reactor Vessel Internals Segmentation at José Cabrera NPP

Rafael Rojo Lopez<sup>1</sup>

<sup>1</sup>Westinghouse Electric Spain SAU, Spain

### Resins characterization strategy at Kozloduy Nuclear Power Plant in Bulgaria

Rosa Gonzalez Gandal<sup>1</sup>, Alvaro Fenoy Cruz<sup>1</sup>, Leandro Sanchez<sup>2</sup>

<sup>1</sup>Gas Natural Fenosa Engineering S.L.U., Spain; <sup>2</sup>Equipos Nucleares S.A., Spain

### Hydrological model of the area surrounding the Loviisa low and intermediate level waste repository

Karita Anneli Kajanto<sup>1</sup>

<sup>1</sup>Fortum Power and Heat, Finland

### 8:30 - 10:00 AM TS09A: Technical Session 3, Track 9: Politics and Economics, Social Acceptance

Location: Antecessor 2 | 1<sup>st</sup> floor (50 people)

Manager: Gaopalelwe Sanstwere, Eskom, South Africa

### Nuclear Cycle Length Economics and Fuel Burnup Optimization Strategy using Stochastic and Deterministic Monte Carlo Computation

Tae Wook Ahn<sup>1</sup>

<sup>1</sup>Constellation Energy Nuclear Group, United States of America

### Component Design Basis Inspections: Interfacing with the United States Nuclear Regulatory Commission

Lauren Marie Neuburger<sup>1</sup>

<sup>1</sup>Luminant Power, United States of America

### To the social acceptance and development

Laure Chambellant<sup>1</sup>

<sup>1</sup>EDF / ISTP, France

### Worlds without Nuclear

Ben Paul Heard<sup>1</sup>

<sup>1</sup>University of Adelaide, Australia

### 10:00 - 10:30 AM Coffee Break

## PLENARY AND PANEL SESSIONS

### 10:30 - 12:00 AM PLYS1: Plenary session 1: Nuclear Safety

Location: Auditorium

**Manager:** Arnaud Meert, Senior Safety Analyst, GDF-Suez, Belgium

**Speaker 1:** Ken Ellis, Managing Director, WANO, Canada

**Speaker 2:** Shunsuke Kondo, Chairman, NWMO, Japan

**Speaker 3:** Mike Weightman, Former HM Chief Inspector, ONR, UK

### 12:00 - 1:30 PM Lunch





**1:30 - 3:00 PM PNLS1: Panel Session 1: Decommissioning and Waste Management**

Location: Auditorium

**Manager:** Kristine Madden, Project Engineer, Holtec, USA

**Speaker 1:** George Beveridge, Deputy Managing Director and Chief Business Officer, Sellafield, UK

**Speaker 2:** Harukuni Tanaka, Senior Managing Executive Officer, Japan Nuclear Fuel Ltd., Japan

**Speaker 3:** Claus Thegerstrom, Senior Advisor, Former SKB CEO, Sweden

**Speaker 4:** David Garrido, Manager, Licensing and Design of Spent Nuclear Fuel Casks, ENSA

## WORKSHOP SESSIONS

**1:30 - 3:00 PM WORKSHOP SESSION 1**

**1:30 - 3:00 PM WS01A: Workshop 1 - New Build or Refurbishment?**

Location: Gran Dolina 1 | 1<sup>st</sup> floor

**Manager:** Jose-Luis Perez, Commercial Director, Areva, Spain

**Speaker 1:** Ramiro Marcos, Life Extension Manager, Nudenor, Spain

**Speaker 2:** Frederic Lelievre, Vice Chief Commercial Officer, Areva, France

**1:30 - 3:00 PM WS02A: Workshop 2 - Nuclear Science and Nanotechnology**

Location: Atapuerca 2 | Ground floor

**Manager:** Hyungdae Kim, Asst. Professor, Kyung Hee University, South-Korea

**Speaker 1:** Raquel González Arrabal, Associate Professor, IFN, Spain

**1:30 - 3:00 PM WS03A: Workshop 3 - Nuclear Energy Sustainability**

Location: Atapuerca 1 | Ground floor

**Manager:** Wim Uyttenhove, Research Engineer, SCK-CEN, Belgium

**Speaker 1:** Ben Heard, Director, ThinkClimate Consulting, Australia

**Speaker 2:** Suzanne Hobbs, Director, The Nuclear Literacy Project, USA

**1:30 - 3:00 PM WS04A: Workshop 4 - Fuel Cycle Game**

Location: Antecessor 1 | 1<sup>st</sup> floor

**Manager:** Daniel Urjan, Shift Manager, Cernavoda NPP, Romania

**Co-manager:** Nicolas Stauff, Scientist, ANL, France

**1:30 - 3:00 PM WS05A: Workshop 5 - Thorium reactors and the Next Nuclear Fuel**

Location: Silex | Ground floor

**Manager:** Nitendra Singh, PhD Student, BARC, India

**Co-manager:** Luca Capriotti, PhD Student, EC-JRC, Italy

**Speaker 1:** Manuele Aufiero, Post-Doc Researcher, CNRS, France

**Speaker 2:** Uddharan Basak, Adv. Nuclear Fuel Cycle Specialist, IAEA, Austria

**1:30 - 3:00 PM WSM1A: Workshop Media Training 1 - Are we communicating or are we managing a complex interactive process?**

Location: Antecessor 2 | 1<sup>st</sup> floor

**Speaker:** Hugo Marynissen, Founder, CIP-institute, Belgium

**1:30 - 3:00 PM WSM2A: Workshop Media Training 2 - How to deal with media in a broad organization context?**

Location: Gran Dolina 2 | 1<sup>st</sup> floor

**Speaker:** Daniel Alonso, Associate, CIP-institute, Spain

**3:00 - 3:30 PM Coffee Break**

## PLENARY AND PANEL SESSIONS

**3:30 - 5:00 PM PNLS2: Panel Session 2: Nuclear Non-Proliferation**

Location: Auditorium

**Manager:** Fidelma Giulia Di Lemma, EC-JRC, Italy

Technical University Kharkiv Polytechnical Institute, Ukraine

**Speaker 1:** Willem Janssens, Head of Unit Nuclear Security, European Commission, Italy

**Speaker 2:** Saleta González-Escalada Mena, Head of Safeguards, Deputy Directorate-General for Nuclear Energy, Ministry of Industry, Energy and Tourism, Spain

**Speaker 3:** Yusuke Kuno, Dep. Director, Prime Scientist, ISCN of JAEA, Japan

## WORKSHOP SESSIONS

**3:30 - 5:00 PM WORKSHOP SESSION 1 (continued)**

**WS01B: Workshop 1 - New Build or Refurbishment (cont.)**

Location: Gran Dolina 1 | 1<sup>st</sup> floor

**WS02B: Workshop 2 - Nuclear Science and Nanotechnology (cont.)**

Location: Atapuerca 2 | Ground floor

**WS03B: Workshop 3 - Nuclear Energy Sustainability (cont.)**

Location: Atapuerca 1 | Ground floor

**WS04B: Workshop 4 - Fuel Cycle Game (cont.)**

Location: Antecessor 1 | 1<sup>st</sup> floor

**WS05B: Workshop 5 - Thorium Reactors (cont.)**

Location: Silex | Ground floor

**WSM1B: Workshop Media Training 1 (cont.)**

Location: Antecessor 2 | 1<sup>st</sup> floor

**WSM2B: Workshop Media Training 2 (cont.)**

Location: Gran Dolina 2 | 1<sup>st</sup> floor

**5:00 - 6:30 PM Special Session: Fukushima**

Location: Silex | Ground floor (100 people)

**Manager:** Kenta Horio, National Representative to IYNC, YGN Japan, Japan

**Speaker 1:** Hiroshi Kainuma, Project Researcher, Fukushima University

**Speaker 2:** Akinori Yamaguchi, Chief Associate, TEPCO, Japan

**Speaker 3:** Yukihiya Sanada, Assistant Principal Engineer, Japan Atomic Energy Agency, Japan

## WEDNESDAY, JULY 9<sup>TH</sup> 2014

**8:30 - 10:00 AM ENEN1: ENEN Event**

Location: Silex | Main floor (100 people)

**Processing and Microstructural Characterisation of UO<sub>2</sub>-based Ceramic**

Zoltan Hiezl<sup>1</sup>

<sup>1</sup>Imperial College, UK

**Reactivity Monitoring in Accelerator-Driven Systems**

Wim Uyttenhove<sup>1</sup>

<sup>1</sup>SCK CEN, Belgium

**Large Scale Applicability of a Full Adaptive Non-Intrusive Spectral Projection Technique: S&U Analysis of a Transient**

Zoltan Perko<sup>1</sup>

<sup>1</sup>TU Delft, Netherlands

**(to be confirmed)**

Marta Nervo<sup>1</sup>

<sup>1</sup>CIRTEN, Italy



## TECHNICAL SESSIONS

### 8:30 - 10:00 AM TS01D: Technical Session 4, Track 1

Location: Antecessor 1 | 1st floor (70 people)

Manager: Mateo Ramos, Technat, Spain

Co-Managers: Timothy Rownes, ANSTO, Australia and Mayank Sood, AMEC, Canada

#### Ageing management of the BR2 research reactor

Jarne Rogier Verpoorten<sup>1</sup>, Steven Van Dyck<sup>1</sup>

<sup>1</sup>SCK-CEN, Belgium

#### Wireless Sensor Network for Radiation Monitoring at Argentinean Nuclear Research Reactor RA-6

Rodrigo José Carbajales<sup>1</sup>, Martín René Vilugrón<sup>2</sup>

<sup>1</sup>Bariloche Atomic Center, CNEA; <sup>2</sup>Balseiro Institute, Argentina

#### Improvement on Environmental Radiation Monitoring System of China after Fukushima Nuclear Accident

Wei Zhang<sup>1</sup>

<sup>1</sup>China Nuclear Power Engineering CO. LTD, People's Republic of China

#### Safety related valves design based on EPRI Performance Prediction Program Methodology

Rosa Prats Lozano<sup>1</sup>

<sup>1</sup>Iberdrola Ingeniería y Construcción, Spain

### 8:30 - 10:00 AM TS32B: Technical Session 4, Track 3.2: Reactor Physics and Materials - Neutronics

Location: Gran Dolina 2 | 1st floor (50 people)

Manager: Nicolas Stauff, Argonne National Lab, USA

Co-Manager: Mohammed Alrwashdeh, Tsinghua University, China

#### Stochastic Sampling-Based Tool for Nuclear Data Sensitivity Uncertainty Quantification

Ting Zhu<sup>1</sup>, Alex Vasiliev<sup>1</sup>, Hakim Ferroukhi<sup>1</sup>, Andreas Pautz<sup>1</sup>

<sup>1</sup>Paul Scherrer Institut, Switzerland

#### Simulation of stochastic processes in fission chambers

Zsolt Elter<sup>1</sup>, Christian Jammes<sup>2</sup>, Philippe Filliatre<sup>2</sup>

<sup>1</sup>Chalmers University of Technology, Sweden; <sup>2</sup>CEA, DEN, Cadarache, DER/SPEX/LDCI

#### Neutron Irradiation Damage Estimation in the Internal Elements of a PWR. ZIRP Project

Andrea Mireia Cadenas<sup>1</sup>, Margarita Benito<sup>1</sup>, Pilar Barreira<sup>1</sup>

<sup>1</sup>Gas Natural Fenosa Engineering, Spain

#### 233U Cross Section Comparison Evaluation between SAMMY And FITWR Code Fitting Procedures

Mohammad A.ra'of A.Ghani Alrwashdeh<sup>1</sup>, Aniseh Abdalla<sup>1</sup>, Kan Wang<sup>1</sup>

<sup>1</sup>Tsinghua University, People's Republic of China

### 8:30 - 10:00 AM TS33B: Technical Session 4, Track 3.3: Reactor Physics and Materials - Materials

Location: Gran Dolina 1 | 1st floor (70 people)

Manager: Xinfu He, CIAE, China

Co-Manager: Luca Capriotti, JRC-TUM, Germany

#### Development of Fuels with Enhanced Accident Tolerance

Jeremy Bischoff<sup>1</sup>, Patrick Blanpain<sup>1</sup>, John Strumpell<sup>2</sup>, Pierre Mollard<sup>1</sup>

<sup>1</sup>AREVA NP, France; <sup>2</sup>AREVA Inc., USA

#### Irradiation Property of the China RPV Steel

Yun Lin<sup>1</sup>, Zhenfeng Tong<sup>1</sup>, Changyi Zhang<sup>1</sup>, Guangsheng Ning<sup>1</sup>, Wen Yang<sup>1</sup>

<sup>1</sup>China Institute of Atomic Energy, People's Republic of China

#### Solid state synthesis of UO<sub>2</sub> and ThO<sub>2</sub> doped with Gd<sub>2</sub>O<sub>3</sub>

Angela Maria Baena Velez<sup>1,2</sup>, Thomas Cardinaels<sup>1</sup>, Benedictus Vos<sup>1</sup>, Koen Binnemans<sup>2</sup>, Marc Verwerft<sup>1</sup>

<sup>1</sup>Belgian Nuclear Research Centre, SCK-CEN; <sup>2</sup>Belgium Katholieke Universiteit Leuven

#### Applying Methods of Functional Electrophysical Diagnostics and Nondestructive Testing in Inner-Reactor Tests of Uranium Nitride

Ekaterina Ryabikovskaya<sup>1</sup>

<sup>1</sup>National Research Nuclear University, Moscow Engineering Physics Institute, Russia

#### Gamma-Ray Irradiation Response of Silicon Carbide Semiconductor Devices: Extremely High Radiation Resistance

Shin-ichiro Sato<sup>1</sup>, Shinobu Onoda<sup>1</sup>, Takahiro Makino<sup>1</sup>, Fujuta Natsuko<sup>1</sup>, Takeshi Ohshima<sup>1</sup>, Takashi Yokoseki<sup>2</sup>, Kazuya Tanaka<sup>2</sup>, Yasuto Hijikata<sup>2</sup>, Yuki Tanaka<sup>3</sup>, Mikio Kandori<sup>3</sup>, Toru Yoshie<sup>3</sup>

<sup>1</sup>Japan Atomic Energy Agency, Japan; <sup>2</sup>Saitama University, Japan; <sup>3</sup>Sanken Electric Industry Co. LTD., Japan

### 8:30 - 10:00 AM TS04D: Technical Session 4, Track 4: Safety, PRA, Severe Accidents and Fukushima

Location: Atapuerca 1 | Ground floor (70 people)

Manager: Jonathan Scott, Atkins, UK

#### Research Program for the Evaluation of FP Release and Transport Behaviour in the BWR System

Shuhei Miwa<sup>1</sup>, Masahiko Osaka<sup>1</sup>

<sup>1</sup>Japan Atomic Energy Agency, Japan

#### Stratification and heat transfer of molten corium pool at Loviisa nuclear power plant

Taisto Johannes Laato<sup>1</sup>

<sup>1</sup>Fortum, Finland

#### Tidal and Wind Energy to Improve Safety of Coast Nuclear Power Plant

Hao Zhang<sup>1</sup>, Ning Cao<sup>1</sup>, Yanfeng Qin<sup>1</sup>, Jun Chen<sup>1</sup>, Chuangbin Zhou<sup>1</sup>

<sup>1</sup>China General Nuclear Power Group, People's Republic of China

#### Validation of the Integral Code ASTEC Using the QUENCH-08 Experiment

Ignacio Gómez García-Toraño<sup>1</sup>, Víctor Sánchez<sup>1</sup>, Robert Stieglitz<sup>1</sup>

<sup>1</sup>Karlsruhe Institute of Technology, Germany

### 8:30 - 10:00 AM TS09B: Technical Session 4, Track 9: Politics and Economics, Social Acceptance

Location: Antecessor 2 | 1st floor (50 people)

Manager: Gaopalelwe Sanstwere, Eskom, South Africa

#### Global Culture and Acceptance of Nuclear Age

Muhammad Fahrian Yovantra<sup>1</sup>, Megawati Rosalio Putri<sup>1</sup>

<sup>1</sup>President University, Indonesia

#### The myth of tomorrow: nuclear power in public art

Nicholas Anthony Thorley<sup>1</sup>

<sup>1</sup>Nuclear Institute Young Generation Network, United Kingdom

#### The Necessity of Developing Nuclear Power in China

Chao Fang<sup>1</sup>

<sup>1</sup>Institute of Nuclear & New Energy Technology, Tsinghua University, People's Republic of China

#### The Polish way to nuclear power

Lukasz Koszuk<sup>1,2</sup>

<sup>1</sup>National Centre for Nuclear Research, Poland; <sup>2</sup>Atomic Forum Foundation, Poland

### 8:30 - 10:00 AM TS11A: Technical Session 4, Track 11: YGN Best Practice

Location: Atapuerca 2 | Ground floor (50 people)

Manager: Tae Wook Ahn, Exelon, USA

#### Activities of the German YGN after the phase-out decision

Thomas Winkler<sup>1</sup>

<sup>1</sup>German Young Generation Network (KTG Junge Generation)



## Communication Best Practices for YGN Chapters

Ayesha Athar<sup>1</sup>

<sup>1</sup>AREVA TN, United States of America

## Overview of the Spanish Fuel Cycle: Technical Tours

Alfonso Vinuesa<sup>1</sup>, Raquel Ochoa<sup>1</sup>, Patricia Rubio<sup>1</sup>

<sup>1</sup>Jóvenes Nucleares, Spain

## UK YGN Best Practice (Moving with the Times!)

Nathan Paterson<sup>1</sup>, Leanne Hodgson<sup>2</sup>

<sup>1</sup>Rolls-Royce, United Kingdom; <sup>2</sup>Sellafield Ltd, United Kingdom

## Talent graduates & Universities cooperation activity

Veronika Loseva<sup>1</sup>

<sup>1</sup>ROSATOM Corporate Academy, Russian Federation

### 10:00 - 10:30 AM Coffee Break

### 10:30 - 12:00 AM ENEN2: ENEN Event

Location: Silex | Main floor (100 people)

## Novel Approaches to the Analysis of Alpha-Particle-Emitting Nuclear Materials

Sakari Ihantola<sup>1</sup>

<sup>1</sup>Aalto University, Finland

## Core Physics and Safety Analyses of GEN-IV Sodium Fast Reactors Using Existing and Newly Developed Computational Tools

Raquel Ochoa<sup>1</sup>, Tobias Wright<sup>2</sup>

<sup>1</sup>UPM, Spain; <sup>2</sup>Manchester University, United Kingdom

## Development of a Model-based approach for Studying the system dynamics and Control of GenIV Lead-cooled Fast Reactors

Roberto Poncioli<sup>1</sup>

<sup>1</sup>Pol. Milano, Italy

## PLENARY AND PANEL SESSIONS

### 10:30 - 12:00 AM PLYS2: Plenary Session 2 – Training, Education and Leadership

Location: Auditorium | Main floor

**Manager:** Isis Leslie, Project Manager, WNA, UK

**Speaker 1:** Donald R. Hoffman, President and CEO/Immediate Past President, Excel Services Corporation/ANS, USA

**Speaker 2:** Frederic Lelievre, Vice Chief Commercial Officer, Areva, France

**Speaker 3:** Elena Nagibina, Senior Manager, Rosatom, Russia

### 12:00 - 1:30 PM Lunch Break

### 1:30 - 3:00 PM PNLS3: Panel Session 3: New Energy Markets & Economics

Location: Auditorium | Main floor

**Manager:** Juan Gonzalez, Project Manager, EDF, France

**Speaker 1:** Jeff Archie, Senior VP and Chief Nuclear Officer, SCANA, USA

**Speaker 2:** Tan Ke, Branch Director, CGNPC, China

**Speaker 3:** Valerie Faudon, Executive Director, French Nuclear Society, France

## WORKSHOP SESSIONS

### 1:30 - 3:00 PM WORKSHOP SESSION 2

### 1:30 - 3:00 PM WS06A: Workshop 6 – Small Nuclear Power Reactors

Location: Atapuerca 1 | Ground floor

**Manager:** Piyush Sabharwall, Research Scientist, INL, USA

**Co-Manager:** Adam Fitzmaurice, Mechanical Engineer, Nucleargraduates, UK

**Speaker 1:** Chad Lee Painter, Consultant/Scientist, IAEA, USA

**Speaker 2:** Mikko Kallas, Safety Engineer, Fortum, Finland

### 1:30 - 3:00 PM WS07A: Workshop 7 – Fusion: A 50-Year Story

Location: Atapuerca 2 | Ground floor

**Manager:** Jacob Stout, Nuclear Operator, Exelon, USA

**Co-Manager:** Abdul-Karim Barrie, Engineer, Entergy, USA

**Speaker 1:** Yves Peysson, Scientist, CEA, France

**Speaker 2:** Jose Manuel Perlado, Scientist, Universidad Politecnica Madrid - Instituto Fusion Nuclear, Spain

**Speaker 3:** Francesco Romanelli, Scientist, EFDA-JET, Italy

### 1:30 - 3:00 PM WS08A: Workshop 8 – Balancing Nuclear Power's Global Expansion and Proliferation

Location: Antecessor 1 | 1st floor

**Manager:** Fidelma Giulia Di Lemma, Researcher, EC-JRC, Italy

**Speaker 1:** Yusuke Kuno, Dep. Director, Prime Scientist, ISCN of JAEA, Japan

**Speaker 2:** Klaas Van der Meer, Scientific Coordinator, SCK-CEN, Belgium

### 1:30 - 3:00 PM WS09A: Workshop 9 – Women Going Critical in Nuclear

Location: Silex | Main floor

**Manager:** Ana Pisani, Engineer, Duke Energy, USA

**Co-Manager:** Munazzah Noreen, Assistant Registrar, Virtual University of Pakistan, Pakistan

**Speaker 1:** Khalida Gill, Deputy Chief Scientist, Pakistan Atomic Energy Commission, Pakistan

**Speaker 2:** Kirsty Gogan, Visiting Researcher, Dalton Nuclear Institute, UK

**Speaker 3:** August Fern, Partner, Radiant Capital Partners, USA

**Speaker 4:** Ramatsemela Masango, CEO, Mzesi Energy Ltd, South Africa

**Speaker 5:** Gabrielle Voigt, Director of the Office of Safeguards Analytical Services, IAEA, Austria

**Speaker 6:** Sara Mongelli, Project Manager, Axpo Power AG Nuclear Energy, Italy

### 1:30 - 3:00 PM WS10A: Workshop 10 – Nuclear Waste Challenges and Your Solutions

Location: Grand Dolina 1 | 1st floor

**Manager:** Alejandro Palacio, Project Engineer, ENSA, Spain

**Co-Manager:** Henri Ormus, Project Engineer, Pöyry, Finland

**Speaker 1:** Lauri Parviainen, Research Coordinator, Posiva, Finland

**Speaker 2:** David Garrido, Licensing and Design of Spent Nuclear Fuel Casks, ENSA, Spain

**Speaker 3:** Merja Pukar, Research Associate, KTH, Sweden

### 1:30 - 3:00 PM WSM3A: Workshop Media Training 3 – Why do people have the wrong risk perceptions, and how to address them?

Location: Antecessor 2 | 1st floor

**Speaker:** Juan Manuel Dominguez, Associate, CIP-institute, Spain

### 1:30 - 3:00 PM WSM4A: Workshop Media Training 4 – How to communicate when things are going wrong?

Location: Grand Dolina 2 | 1st floor

**Speaker:** Stijn Pieters, Founder, CIP-institute, Belgium

### 3:00 - 3:30 PM Coffee Break

## PLENARY AND PANEL SESSIONS

### 3:30 - 5:00 PM PNLS4: Panel Session 4 – Nuclear Communication

Location: Auditorium | Main floor

**Manager:** Suzanne Hobbs, Director, The Nuclear Literacy Project, USA

**Speaker 1:** David Hess, Subeditor, World Nuclear Association, UK

**Speaker 2:** Valérie Faudon, Executive Director, French Nuclear Society, France





**Speaker 3:** Kirsty Gogan, Head of Communications,  
Nuclear Industry Association, UK  
**Speaker 4:** Felix Meissner, President, North American YGN, USA  
**Speaker 5:** Ben Heard, Director, ThinkClimate Consulting, Australia

## WORKSHOP SESSIONS

### 3:30 - 5:00 PM WORKSHOP SESSION 2 (continued)

#### **WS06B: Workshop 6 – Small Nuclear Power Reactors (cont.)**

Location: Atapuerca 1 | Ground floor

#### **WS07B: Workshop 7 – Fusion: A 50 Years Story (cont.)**

Location: Atapuerca 2 | Ground floor

#### **WS08B: Workshop 8 – Balancing Nuclear Power's Global Expansion and Proliferation (cont.)**

Location: Antecessor 1 | 1st floor

#### **WS09B: Workshop 9 – Women Going Critical in Nuclear (cont.)**

Location: Silex | Main floor

#### **WS10B: Workshop 10 – Nuclear Waste Challenges (cont.)**

Location: Grand Dolina 1 | 1st floor

#### **WSM3B: Workshop Media Training 3 (cont.)**

Location: Antecessor 2 | 1st floor

#### **WSM4B: Workshop Media Training 4 (cont.)**

Location: Grand Dolina 2 | 1st floor

### 5:30 - 8:00 PM Pandora's Promise Projection

Location: Auditorium | Main floor

**Manager:** Suzanne Hobbs, Director, The Nuclear Literacy Project, USA

**Speaker 1:** Robert Stone (via Video), Director, Pandora's Promise, USA

## THURSDAY, JULY 10<sup>TH</sup> 2014

### 8:30 - 10:00 AM ENEN3: ENEN Event

Location: Silex | Main floor (100 people)

#### **Advanced Simulation Tools for Circulating-fuel Nuclear Reactors**

Manuele Aufiero<sup>1</sup>

<sup>1</sup>Pol. Milano, Italy

#### **Segregation-induced Embrittlement in RPV steels: Assessment by Atomistic Simulations**

Alexander Bakaev<sup>1</sup>

<sup>1</sup>SCK-CEN, Belgium

#### **Stochastic Sampling-Based Tool for Nuclear Data Sensitivity Uncertainty Quantification**

Ting Zhu<sup>1</sup>

<sup>1</sup>Paul Scherrer Institute, Switzerland

#### **Monte Carlo Neutronics and Thermal-hydraulics Coupling Applied to Fast Reactors**

Miriam Vazquez<sup>1</sup>

<sup>1</sup>UPM, Spain

## TECHNICAL SESSIONS

### 8:30 - 10:00 AM TS01E: Technical Session 5, Track 1: Operation and Maintenance, Design Modifications, Radiation Protection & Track 3.2: Reactor Physics and Materials - Neutronics

Location: Antecessor 1 | 1st floor (70 people)

Track 1 Manager: Mateo Ramos, Tecnatom, Spain

Track 1 Co-Managers: Timothy Rownes, ANSTO, Australia and Mayank Sood, AMEC, Canada

Track 3.2 Manager: Nicolas Stauff, Argonne National Lab, USA

Track 3.2 Co-Managers: Mohammed Alrwashdeh, Tsinghua University, China

#### **NordERF**

Tapani Kullervo Karjanlahti<sup>1</sup>

<sup>1</sup>Teollisuuden Voima Oyj, Finland

#### **Detectability of U-235 Fission Chambers in Case of Inadvertent Control Rod Withdrawal in a French Sodium-cooled Fast Reactor**

Vasudha Verma<sup>1</sup>, Carl Hellesen<sup>1</sup>, Christian Jammes<sup>2</sup>

<sup>1</sup>Uppsala University, Sweden; <sup>2</sup>CEA Cadarache, France

#### **Influence of Local Spectral Variations on Control-rod Homogenization**

Mikael Andersson<sup>1</sup>, David Blanchet<sup>2</sup>, Henrik Nylén<sup>1</sup>, Robert Jacqmin<sup>2</sup>

<sup>1</sup>Chalmers University of Technology, Sweden; <sup>2</sup>Cea Cadarache, France

#### **Effective Use of Thorium Blankets in Sodium Cooled Fast Reactor Cores for Burning of LWR Spent Fuel TRU**

WuSeung You<sup>1</sup>, Ser Gi Hong<sup>1</sup>

<sup>1</sup>Kyung Hee University, South Korea

### 8:30 - 10:00 AM TS04E: Technical Session 5, Track 4: Safety, PRA, Severe Accidents and Fukushima

Location: Atapuerca 1 | Ground floor (70 people)

Manager: Jonathan Scott, Atkins, UK

#### **Post-Fukushima Assessment of the AP1000® Plant**

Adam David Malinowski<sup>1</sup>, Phillip A. Mathewson<sup>1</sup>, Bryan N. Friedman<sup>1</sup>, John E. Glavin<sup>1</sup>

<sup>1</sup>Westinghouse Electric Company, United States of America

#### **Preliminary Assessment of Population Dose during Nuclear Power Plant Normal Operation**

Sang Hun Lee<sup>1</sup>, Hyun Gook Kang<sup>1</sup>

<sup>1</sup>Korea Advanced Institute of Science and Technology, South Korea

#### **Reaction Hazards in Reprocessing SNF**

Alexey Rodin<sup>1</sup>, Evgeniy Nazin<sup>1</sup>, Elena Belova<sup>2</sup>, Boris Maysoedov<sup>2</sup>

<sup>1</sup>Scientific and Engineering Centre for Nuclear and Radiation Safety, Russian Federation; <sup>2</sup>A.N. Frumkin Institute of Physical Chemistry and Electrochemistry, Russian Academy of Sciences

#### **Dynamic Modelling of Radionuclide Transfer in Perennial Ecosystems: a SVAT Approach**

Sienke Gielen<sup>1</sup>, Jordi Vives i Batlle<sup>1</sup>

<sup>1</sup>SCK-CEN, Belgium

### 8:30 - 10:00 AM TS007: Technical Session 5, Track 7: Fusion

Location: Antecessor 2 | 1st floor (50 people)

Manager: Paul Wouters, Fusion for Energy, Europe

#### **Temperature Control of Silica Final Lenses In HiPER**

Angel Rodriguez Páramo<sup>1</sup>, David Garoz<sup>1</sup>, Jose Manuel Perlado<sup>1</sup>, Fernando Sordo<sup>1,2</sup>, Antonio Rivera<sup>1</sup>

<sup>1</sup>Instituto Fusión Nuclear, Spain; <sup>2</sup>ESS-Bilbao, Spain

#### **Assembly of the Sectors and Ports of the ITER Vacuum Vessel**

Aldara Martinez<sup>1</sup>, Sofia Corino<sup>1</sup>, Ruben Moreno<sup>1</sup>

<sup>1</sup>Ensa, Spain





### Structural Materials for MCF Reactors

Andrea Impagnatiello<sup>1</sup>, Dr. Enrique Jiménez Melero<sup>1</sup>

<sup>1</sup>University of Manchester, United Kingdom

### 8:30 - 10:00 AM TS008: Technical Session 5, Track 8: Training, Human Resources and Human Factors

Location: Gran Dolina 1 | 1st floor (70 people)

Manager (acting): Alberto Foronda, Almaraz-Trillo NPPs, Spain

#### Redesign of a Pilot International Online Course on Accelerator Driven Systems for Nuclear Transmutation to Implement a Massive Open Online Course

Mercedes Alonso-Ramos<sup>1</sup>, Ángel J. Fernández-Luna<sup>1</sup>, Enrique M. González Romero<sup>2</sup>, Ángeles Sánchez-Elvira<sup>1</sup>, Manuel Castro Gil<sup>1</sup>, Francisco Ogando<sup>1</sup>, Javier Sanz<sup>1</sup>

<sup>1</sup>Universidad Nacional de Educación a Distancia (UNED), Madrid, Spain; <sup>2</sup>Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas (CIEMAT), Madrid, Spain

#### Human Resource Aspects to Organization Readiness in Fennovoima NPP Project

Jussi Matias Näveri<sup>1</sup>

<sup>1</sup>Fennovoima, Finland

#### Tokyo Institute of Technology Program for Leading Graduate Schools - Academy for Global Nuclear Safety and Security Agent

Jun Nishiyama<sup>1</sup>, Masaki Saito<sup>1</sup>

<sup>1</sup>Tokyo Institute of Technology, Japan

#### A New Full Scope Simulator For The Angra I Brazilian NPP

Alfonso Vinuesa<sup>1</sup>, Mateo Ramos<sup>1</sup>

<sup>1</sup>Tecnatom, Spain

### 8:30 - 10:00 AM TS010: Technical Session 5, Track 10: Medicine and Other Applications & Track 8: Training, Human Resources and Human Factors

Location: Grand Dolina 2 | 1st floor (65 people)

Manager (acting): Luca Capriotti, JRC-TUM, Germany

#### Study of Deuteron-induced Reactions for Nuclear Design of Accelerator Neutron Sources for Medical Application

Shinsuke Nakayama<sup>1</sup>, Shouhei Araki<sup>1</sup>, Takaya Kawagoe<sup>1</sup>, Tadahiro Kin<sup>1</sup>, Yukinobu Watanabe<sup>1</sup>

<sup>1</sup>Kyushu University, Japan

#### Useful Energy of Radioisotopes

Josef Svoboda<sup>1</sup>, Miriama Brunciakova<sup>1</sup>, Karel Katovsky<sup>1</sup>

<sup>1</sup>Brno University of Technology, Faculty of Electrical Engineering and Communication, Czech Republic

#### Addressing the Nuclear Skills Gap in the United Kingdom

Robert McAuley Meechan<sup>1</sup>, Jamie Culshaw<sup>1</sup>

<sup>1</sup>Nucleargraduates, United Kingdom

#### Use of Continuous Improvement Techniques in Core Design

Álvaro Garcés Alonso<sup>1</sup>, Cristina Pérez Burgos<sup>1</sup>

<sup>1</sup>ENUSA, Spain

#### Student opportunities in the European Project GENTLE

Rudy Konings<sup>1</sup>, Óscar Cabellos de Francisco<sup>2</sup>

<sup>1</sup>Delft University of Technology; <sup>2</sup>Universidad Politécnica de Madrid, Spain

### 8:30 - 10:00 AM TS11B: Technical Session 5, Track 11:

#### YGN Best Practice

Location: Atapuerca 2 | Ground floor (50 people)

Manager: Tae Wook Ahn, Exelon, USA

#### Young generation's initiative in Poland – The Atomic Forum Foundation

Lukasz Koszuk<sup>1</sup>

<sup>1</sup>Atomic Forum Foundation, Poland

#### Beginning of IYNC and Founding Principles

Alexander Tsibulya<sup>1</sup>

<sup>1</sup>IYNC

### AJENM, Mexican Nuclear Youth

Jerson Sánchez<sup>1</sup>, Aída Contreras<sup>2</sup>, Lorena Monroy<sup>2</sup>, Roberto López<sup>3</sup>, Francisco Chaparro<sup>4</sup>

<sup>1</sup>National Commission of Nuclear Safety and Safeguards, Mexico; <sup>2</sup>Instituto Nacional de Investigaciones Nucleares; <sup>3</sup>Universidad Nacional Autónoma de México; <sup>4</sup>Instituto Politécnico Nacional

### Young Professionals Board of JSC Leading Institute VNIPIET

Anton Feygin<sup>1</sup>

<sup>1</sup>JSC Atomproekt, Russian Federation

### 10:00 - 10:30 AM Coffee Break

### 10:30 - 12:30 AM ENEN4: ENEN Event

Location: Silex | Main floor (100 people)

Jury discussion

## PLENARY AND PANEL SESSIONS

### 10:30 - 12:30 AM PNLS5: Panel Session 5: New Nuclear Systems

Location: Auditorium | Main floor

**Manager:** Abdul-Karrim Barrie, Engineer, Entergy, USA

**Speaker 1:** David Powell, Vice President, GE Hitachi, UK

**Speaker 2:** Chad Lee Painter, Consultant/Scientist, IAEA, Austria

**Speaker 3:** Takeo Shimizu, Senior Fellow, Toshiba Corporation, Japan

**Speaker 4:** Lixin Shen, Deputy Secretary-General (Chair), Chinese Nuclear Society, China

**Speaker 5:** Jean-Paul Grouiller, Senior Manager, CEA, France

## WORKSHOP SESSIONS

### 10:30 - 12:30 AM WORKSHOP SESSION 3

#### 10:30 - 12:30 AM WS011: Workshop 11 – Tools to Use in Your Local YGN

Location: Atapuerca 2 | Ground floor

**Manager:** Calvin Holston, Auxiliary Operator, Constellation Energy Nuclear Group, USA

**Co-Manager:** Pamella Kageliza Kilavi, Physics Lecturer, University of Nairobi, Kenya

#### 10:30 - 12:30 AM WS012: Workshop 12 – Will Nuclear Kill Cancer?

Location: Atapuerca 1 | Ground floor

**Manager:** Entissar Al Suhaibani, Associate Professor, King Saud University

**Co-Manager:** Jeremiah Mbazor, Student, Kepco International Nuclear Graduate School, Nigeria

**Speaker 1:** David Lloyd, Scientist, Health Protection Agency, UK

**Speaker 2:** Ahmed Ahidjo, Consultant/Associate Professor, University of Maiduguri Teaching Hospital, Nigeria

#### 10:30 - 12:30 AM WS013: Workshop 13 – Entrepreneurship & New Ventures in Nuclear

Location: Antecessor 1 | 1st floor

**Manager:** Gelani Dladla, PMO Coordinator, National Nuclear Regulator, South-Africa

**Co-Manager:** Cristina Rodriguez, Student, IMDEA Networks Institute, Spain

**Speaker 1:** August Fern, Partner, Radiant Capital Partners, USA

**Speaker 2:** Seponono Kekana, Director, Sites Alpha Ltd, South-Africa

**Speaker 3:** Ramatsemela Masango, CEO, Mzesi Energy Ltd, South-Africa

#### 10:30 - 12:30 AM WS014: Workshop 14 – The Trouble with Justification

Location: Antecessor 2 | 1st floor

**Manager:** Martin Boissavit, Engineer, EDF, France

**Speaker 1:** Gaston Meskens, Researcher, CEVI, University of Ghent, Belgium





**10:30 AM - 1:00 PM WS015: Workshop 15 – Knowledge Transfer  
Between Generations**

Location: Gran Dolina 1 | 1st floor

**Manager:** Jonathan Scott, Assistant Engineer, Atkins, UK  
**Co-Manager:** Jeffrey Riley, Senior Technical Instructor, Exelon, USA  
**Speaker 1:** John Hurst, Management, Atkins, UK  
**Speaker 2:** Julie Sickle, Senior Director of Training, Exelon, USA  
**Speaker 3:** Anastasia Zhukova, Consultant, IAEA, Austria

**12:30 - 2:00 PM Lunch break**

## PLENARY AND PANEL SESSIONS

**2:00 - 3:30 PM PLYS3: Plenary Session 3 – Energy &  
Nuclear Power Development**

Location: Auditorium | Main floor

**Manager:** Jerrod Ewing, Licensing Engineer, Westinghouse, USA  
**Speaker 1:** Moon-Hee Chang, Vice-President, KAERI, South Korea  
**Speaker 2:** Luis Echevarri, Former Director-General, OECD/NEA, Spain  
**Speaker 3:** Myriam Colacicco, Deputy Director, EDF Nuclear Engineering  
Division, France  
**Speaker 4:** Zengguang Lei, Chief Technology Officer, CNNC, China

**3:30 - 4:00 PM Coffee break**

## POSTER SESSION

**4:00 - 5:00 PM Poster Session**

Location: Hall, Antecessor 1&2, Gran Dolina 1&2

**Analysis of Human-Related Events for Domestic Nuclear  
Power Plants using a Root Cause Analysis Method**

Ji Tae Kim<sup>1</sup>

<sup>1</sup>Korea Institute of Nuclear Safety, Korea, Republic of South Korea

**The Current Gap between Academic Studies at University  
and Professional Experience in the Nuclear Sector**

<sup>1</sup>Gadea Martínez Asensio, Pablo Cepero Rodríguez

<sup>1</sup>ENUSA, Spain

**Determination of Cs-135 in Coolant and Waste Samples**

Peter Nagy<sup>1</sup>, Nora Vajda<sup>2</sup>, Ibolya Sziklai-Laszlo<sup>1</sup>, Eva Szeles-Kovacs<sup>1</sup>

<sup>1</sup>HAS Centre for Energy Research, Hungary; <sup>2</sup>Radanal Ltd., Hungary

**Standardization of 129I Activity Concentration Using CIE-  
MAT/NIST Efficiency Tracing Method**

Andrej Rozkov<sup>1</sup>

<sup>1</sup>EC JRC IRMM, Belgium

**Study of Mechanisms Involved in the Tetravalent Uranium  
Oxalate Precipitation at Low Supersaturations in a MSMPR**

Alexandra Gutiérrez Chavida<sup>1</sup>

<sup>1</sup>CEA Marcoule, France

**Engineering Aspect of Spent Fuel Interim Storage Facility  
in South Korea**

Dongjin Lee<sup>1</sup>

<sup>1</sup>KEPCO-E&C, South Korea

**Estimation of Radioactive Material Inventory of the MITRR  
under Decommissioning**

Naoto Hagura<sup>1</sup>, Takafumi Uchiyama<sup>1</sup>, Tomio Tanzawa<sup>1</sup>, Ishi  
Mitsuhashi<sup>1</sup>, Yukiko Okada<sup>1</sup>, Tetsuo Matsumoto<sup>1</sup>

<sup>1</sup>Tokyo City University, Japan

**Aspects of the Product Quality Control of Intermediate  
Level Vitrified Nuclear Waste from Radioactive Rinsing  
Solutions from the Reprocessing of Spent Nuclear Fuel**

Marc Weidenfeld<sup>1</sup>, Holger Tietze-Jaensch<sup>1</sup>, Dirk Bosbach<sup>1</sup>

<sup>1</sup>Forschungszentrum Jülich GmbH, Germany

**Cost Estimation Database at Bohunice NPP**

Rafael Rojo Lopez<sup>1</sup>

<sup>1</sup>Westinghouse Electric Spain SAU, Spain

**Chemical Composition and Isotopic Age Determination of  
Mine Water from the Rožná Locality, Czech Republic**

Marek Venc<sup>1</sup>, Tereza Becvarikova<sup>1</sup>, Marketa Dvorakova<sup>1</sup>,

Irena Hanusova<sup>1</sup>

<sup>1</sup>Radioactive Waste Repository Authority, Czech Republic

**Spanish Interim Nuclear Waste Storage Facility – ATC**

Sara Reyes<sup>1</sup>, Rodrigo Andujar<sup>1</sup>, Álvaro Diaz<sup>1</sup>, Ángel Dilla<sup>1</sup>, Re-  
beca Haro<sup>2</sup>, Jose Ramon Gonzalez<sup>2</sup>

<sup>1</sup>Empresarios Agrupados A.I.E., Spain; <sup>2</sup>WESTINGHOUSE, Spain

**Extraction of Co Ions from Ion-exchange Resin by Super-  
critical Carbon Dioxide**

Min-Su Ju<sup>1</sup>, Dong-Hyeok Jeong<sup>1</sup>, Yeong-Rok Kang<sup>1</sup>

<sup>1</sup>Dongnam Institute of Radiological & Medical Science, South Korea

**Qualification of Protective Coatings in NPP**

Borja Nuñez<sup>1</sup>, Javier Bárcena<sup>1</sup>, Natalia Pascual<sup>1</sup>, Andrea Mas-  
grau<sup>1</sup>

<sup>1</sup>Empresarios Agrupados, Spain

**Wireless Sensor Network for Radiation Monitoring at Ar-  
gentinean Nuclear Research Reactor RA-6**

Rodrigo José Carbajales<sup>1</sup>, Martín René Vilugrón<sup>1</sup>

<sup>1</sup>Bariloche Atomic Center, CNEA Balseiro institute

**The Application of PSA-HRA in Main Control Room Design**

Yu Zhou<sup>1</sup>, Xingwei Jiang<sup>1</sup>

<sup>1</sup>China Nuclear Power Engineering Co., Ltd, CNNC, People's Republic of China

**Load Following Nuclear Power Plants for Future Sustain-  
able Energy Production in Regions with Less Developed  
Power Grid**

Nils Haneklaus<sup>1</sup>, Harikrishnan Tulsidas<sup>1</sup>

<sup>1</sup>IAEA, Austria

**Low Frequency Neutron Noise Phenomenon in a PWR**

Juan A. Bermejo Piñar<sup>1</sup>, Alberto Ortego<sup>2</sup>

<sup>1</sup>Iberdrola Engineering & Construction S.A.U, Spain; <sup>2</sup>CNAT AIE

**Preliminary Study of 24-Month Fuel Management Strategy  
For CNP600 of China**

Dan Wang<sup>1</sup>, Jinyu Wang<sup>1</sup>, Zhonghua Guan<sup>1</sup>

<sup>1</sup>Science and Technology on Reactor System Design Technology Laboratory; Nuclear  
Power Institute of China, People's Republic of China

**Muon Imaging Reconstruction Algorithm for Core Debris in  
Severe Accident**

Yuan Yuan Liu<sup>1</sup>, Huiguo Yue<sup>1</sup>, Jianping Cheng<sup>2</sup>, Xuewu Wang<sup>2</sup>,  
Ziran Zhao<sup>2</sup>, Peng Zheng<sup>1</sup>

<sup>1</sup>Nuclear and Radiation Safety Center, MEP P. R. CHINA, Beijing, China; <sup>2</sup>Department of  
Engineering Physics, Tsinghua University, Beijing, China

**The Neutron Capture Rate of 232Th in a Graphite Moder-  
ated Spallation Neutron Field**

Nicola Louise Asquith<sup>1</sup>, Reza Hashemi-Nezhad<sup>1</sup>, Wolfram West-  
meier<sup>2</sup>, Sergey Tyutyunnikov<sup>3</sup>, Jindra Adam<sup>3</sup>

<sup>1</sup>University of Sydney, Australia; <sup>2</sup>Phillips-Universität, Marburg, Germany; <sup>3</sup>Joint  
Institute for Nuclear Research, Dubna, Russia

**Reactivity Monitoring for Subcritical Systems Using Euler-  
Maclaurin Formula**

Edson Henrice Junior<sup>1</sup>, Alessandro da Cruz Gonçalves<sup>1</sup>, Daniel  
Artur Pinheiro Palma<sup>2</sup>, Maurício Quelhas Antolin<sup>3</sup>



<sup>1</sup>UFRJ/COPPE, Brazil; <sup>2</sup>Comissão Nacional de Energia Nuclear - CNEN, Brazil; <sup>3</sup>Centro Setorial de Computação e Matemática Aplicada - UEZO, Brazil

### Investigation of Challenging Reactor Concepts for Spent Fuel Transmutation

Petr Jarchovský<sup>1</sup>, Karel Katovský<sup>1</sup>  
<sup>1</sup>Brno University of Technology, Czech Republic

### Analysis of Radiation Damage on Fe-Cr Alloy Using Monte Carlo Method

San Chae<sup>1</sup>, Sang Hwan Jeon<sup>1</sup>, Yong Soo Kim<sup>1</sup>  
<sup>1</sup>Hanyang Univ, South Korea

### Steam Injector as Alternate Pumping Device in Pressurized Water Reactor (PWR) Nuclear Plants – CFD Analysis of the Direct Condensation Phenomena and Comparison with 0D/1D Modeling

Amélie Ruelle<sup>1</sup>, Stéphane Weissaupt<sup>2</sup>, Daniel Calvo<sup>3</sup>, Gonzalo Jiménez<sup>4</sup>

<sup>1</sup>Westinghouse, Belgium; <sup>2</sup>Westinghouse, Belgium; <sup>3</sup>Universidad Politécnica de Madrid; <sup>4</sup>Universidad Politécnica de Madrid

### Study on the Base-Isolation for Nuclear Power Buildings

Jian Chen<sup>1</sup>, Yumin Li<sup>1</sup>, Fei Lu<sup>1</sup>  
<sup>1</sup>China Nuclear Power Engineering Co., Ltd.

### Self-sufficient and Energy Neutral Phosphate Fertilizer Production using High Temperature Gas-cooled Reactors

Nils Haneklaus<sup>1</sup>, Hari Krishnan Tulsidas<sup>1</sup>, Ewald Schnug<sup>2</sup>, Bismark Tyobeka<sup>1</sup>  
<sup>1</sup>IAEA, Austria; <sup>2</sup>Technical University Braunschweig, Germany

### Perspectives on Fuel Fabrication Process Technological Development at Enusa

Fernando Cabrera Carrasco<sup>1</sup>  
<sup>1</sup>ENUSA Industrias Avanzadas S.A, Spain

### A Review of Noncondensable Gas Effects on Condensation Heat Transfer Inside and Outside Vertical and Horizontal Tubes

Sangeun Kim<sup>1</sup>, Hyungdae Kim<sup>1</sup>  
<sup>1</sup>Kyung Hee University, South Korea

### Simulation of Two-Phase Flow in Narrow Annular Channels

Xiu Xiao<sup>1</sup>, Yajun Zhang<sup>1</sup>, Haijun Jia<sup>1</sup>, Liu Yang<sup>1</sup>  
<sup>1</sup>Tsinghua University, People's Republic of China

### Design Evaluation Criteria for the Decay Tank of a Research Reactor

Namgyun Jeong<sup>1</sup>, Gyuhyong Roh<sup>1</sup>, Seonghoon Kim<sup>1</sup>, Dae-young Chi<sup>1</sup>  
<sup>1</sup>Korea Atomic Energy Research Institute, South Korea

### Ice Condenser Containment and Challenges for its Future

Miriama Brunciakova<sup>1</sup>, Josef Svoboda<sup>1</sup>, Karel Katovsky<sup>1</sup>, Jiri Martinec<sup>2</sup>  
<sup>1</sup>Brno University of Technology, Faculty of Electrical Engineering and Communication, Czech Republic; <sup>2</sup>Brno University of Technology, Faculty of Mechanical Engineering

### Czech Young Generation Activities in Nuclear Training and Education Framework in the Czech Republic

Jitka Matejkova<sup>1,2</sup>, Stepan Foral<sup>1</sup>, Jan Varmuza<sup>1</sup>, Karel Katovsky<sup>1</sup>  
<sup>1</sup>Brno University of Technology, Czech Republic; <sup>2</sup>Young Generation of the Czech Nuclear Society

### Thermal Ageing Effects on Properties of Grain Boundaries in RPV Model Alloy: an Atomic Study

Jia Lixia<sup>1</sup>, He Xinfu<sup>1</sup>, Yang Wen<sup>1</sup>  
<sup>1</sup>China Institute of Atomic Energy, People's Republic of China

### Discussion about Regional Nuclear Emergency Rescue Team

Xin Wei<sup>1</sup>, Tao Chen<sup>1</sup>, Hui Zhang<sup>1</sup>  
<sup>1</sup>Tsinghua University, People's Republic of China

### Study on In-Vessel Retention of Molten Core Debris during PWR Severe Accident

Zhonghua Guan<sup>1</sup>, Dan Wang<sup>1</sup>  
<sup>1</sup>National Key Laboratory of Reactor System Design Technology, Nuclear Power Institute of China, People's Republic of China

### Identification of peaks in Ambient Dose Equivalent Rate monitoring data in routine conditions

Miguel Angel Hernandez Ceballos<sup>1</sup>, Giorgia Cinelli<sup>1</sup>, Konstantins Bogucarskis<sup>1</sup>, Luca De Felice<sup>1</sup>, Montserrat Marin Ferrer<sup>1</sup>, Aleksey Nishev<sup>1</sup>, Tore Tollefsen<sup>1</sup>, Stratos Valakis<sup>1</sup>, Ignacio Sánchez<sup>2</sup>, Marc De Cort<sup>1</sup>

<sup>1</sup>European Commission, DG Joint Research Centre, Institute for Transuranium Elements, Nuclear Security Unit, Ispra (VA), Italy; <sup>2</sup>European Commission, DG Joint Research Centre, Institute for Protection and Security of the Citizen, Digital Citizen Security Unit, Ispra (VA), Italy

### Scenario Development of Aircraft Crash on Interim Storage with Nuclear Spent Fuel

Min Yoo<sup>1</sup>, Hyun Gook Kang<sup>1</sup>  
<sup>1</sup>KAIST, South Korea

### Traces of Radioactive Leakage from Marine Life Near the Coast of Fukushima

Jaehwan Kim<sup>1</sup>  
<sup>1</sup>Université Pierre et Marie Curie, France

### The Fabrication of Silicon Carbide Coating on the Surface of Zirconium Alloy

Bangyue Yin<sup>1</sup>, Xinhai Zheng<sup>1</sup>  
<sup>1</sup>China Institute Of Atomic Energy, People's Republic of China

### Leak-Tightness of The RBMK-1000 SNF Storage Wells During Dry Storage

Ivan Melkumov<sup>1</sup>  
<sup>1</sup>JSC Leading institute VNIPIET, Russian Federation

### The analysis of temperature and stress on UMo/Al dispersion fuel

Xiao Liu<sup>1</sup>, Jifeng Li<sup>2</sup>  
<sup>1</sup>Institute of Nuclear Physics and Chemistry; <sup>2</sup>Institute of Computer Application, People's Republic of China

## CLOSING SESSION

**5:00 - 6:30 PM Closing Session**

Location: Auditorium | Main floor

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# CONFERENCE SCHEDULE



	SUNDAY 06 July 2014	MONDAY 07 July 2014	TUESDAY 08 July 2014	WEDNESDAY 09 July 2014	THURSDAY 10 July 2014	FRIDAY 11 July 2014	SATURDAY 12 July 2014
08:30		Opening Session <i>Forum Evolucion</i>	TS01C C1	TS01D C1	TS01E C1		
09:00			TS02A G2	TS02B G2	TS04E A1		
09:30		Keynote Session <i>Forum Evolucion</i>	TS03A G1	TS03B G1	TS007 C2		
10:00		Coffee Break <i>Forum Evolucion</i>	TS04C S0	TS04D A1	TS008 G1		
10:30			TS06C A1	TS09A C2	TS010 G2		
11:00		Country Reports <i>Forum Evolucion</i>	WS05A S0	Plenary Session 2 <i>Auditorium</i>	WS012 C1		
11:30			WS05A S0		WS013 C1		
12:00			WS05A S0		WS014 C2		
12:30		Transfer to ABBA			WS015 G1		
13:00		Lunch <i>Restaurant</i>					
13:30							
14:00							
14:30							
15:00	Registration <i>Hall</i>	TS01A C1	WS01A G1	WS01A G1			
15:30		TS02A A2	WS02A A2	WS02A A2			
16:00		TS03A G1	WS03A A1	WS03A A1			
16:30		TS04A S0	WS04A C1	WS04A C1			
17:00		TS05A C2	WS05A S0	WS05A S0			
17:30		TS06A A1	WS06A C2	WS06A C2			
18:00		TS07A C1	WS07A A2	WS07A A2			
18:30		TS08A G1	WS08A A1	WS08A A1			
19:00		TS09A S0	WS09A C1	WS09A C1			
19:30		TS10A A1	WS10A C2	WS10A C2			
20:00		TS11A C1	WS11A G1	WS11A G1			
20:30		TS12A G2	WS12A A2	WS12A A2			
21:00		TS13A S0	WS13A S0	WS13A S0			
21:30		TS14A C1	WS14A A1	WS14A A1			
22:00		TS15A G2	WS15A C2	WS15A C2			
22:30		TS16A S0	WS16A S0	WS16A S0			
23:00		TS17A C1	WS17A A1	WS17A A1			
23:30		TS18A G2	WS18A C2	WS18A C2			