



## CONFERENCE SCHEDULE

June 3-6, 2012, Zadar, Croatia

### MONDAY, June 4<sup>th</sup>

08:30-09:00	Registration of participants
09:00-10:30	<p>OPENING SESSION</p> <p>Chair: Z. Šimić, D. Grgić, I. Vuković (Croatian Nuclear Society)</p> <p>Welcome Addresses</p> <p>Invited Lectures</p> <p>IL-01 <b>Bismark M. Tyobeka</b> The Nuclear Power Landscape in the Post-Fukushima Era: Thoughts on the Current and Future Effects on Nuclear New-Build</p> <p>IL-02 <b>Andrew Hughes</b> The Global Outlook for Small Reactors: Opportunities, Challenges and Implementation</p>
10:30-11:00	Coffee Break
11:00-12:00	<p>Energy Planning and Nuclear Option</p> <p>Chair: B. M. Tyobeka (IAEA, Austria), Ž. Tomšić (FER, Croatia)</p> <p>S1-127 <b>Oleg Purtov, Ludvig Litvinsky, Viktor Vasilchenko</b> Development of Nuclear Energy in Ukraine. Necessity, Advantages and Disadvantages</p> <p>S1-139 <b>Vladimir Knapp, Dubravko Pevec</b> Future without Nuclear Energy; Is it Feasible, is it Sensible?</p> <p>S1-194 <b>Željko Tomšić</b> Nuclear Power as an Option in Electrical Generation Planning for Small Economy and Electricity Grid</p>
12:00-13:00	<p>Power Reactors and Technologies</p> <p>Chair: Z. Stošić (AREVA, Germany), N. Čavlina (FER, Croatia)</p> <p>S2-144 <b>Greg M. Hostetter, David Horvath</b> Accident Monitoring During Severe Accidents</p> <p>S2-146 <b>Sara E. Seamans, David Horvath</b> Lessons Learned from Design and Construction of New US Nuclear Facility</p> <p>S2-148 <b>Philip Young</b> Small Modular Reactors for Countries with Small to Medium Electric Grids – An Economically Sensible Solution</p>
13:00-14:30	Lunch Break

<b>14:30-15:30</b>	<p style="text-align: center;"><b>Invited Lecture</b></p> <p>IL-03 <b>Zoran V. Stošić</b> Nuclear Energy Development and New Build Expansion</p>
<b>15:30-16:30</b>	<p style="text-align: center;"><b>Regulatory Practices and General Papers</b> Chair: N. Novosel, S. Medaković (State Office for Radiological and Nuclear Safety, Croatia)</p> <p>S6-108 <b>Nevenka Novosel</b> Treaty establishing the European Atomic Energy Community (Euratom) and Future Obligations of the Republic of Croatia</p> <p>S6-123 <b>Boris Ilijaš, Saša Medaković</b> Coordination of Croatian National Legislative with EU Commission Regulation on the Application of Euratom Safeguards</p> <p>S6-124 <b>Boris Ilijaš, Saša Medaković</b> Legal Framework and Best Practice for Improving Transport Security of Radioactive and Nuclear Materials in Croatia</p> <p>S6-191 <b>Zdenko Šimić, Vladimir Mikuličić, Davor Šterc</b> Total Risk Management for Low Dose Radiation Exposures</p>
<b>16:30-17:00</b>	<p style="text-align: center;"><b>Coffee Break</b></p>
<b>17:00-18:00</b>	<p style="text-align: center;"><b>Nuclear Energy and Environment</b> Chair: B. Nenkova (Risk Engineering Ltd., Bulgaria), V. Knapp (FER, Croatia)</p> <p>S3-126 <b>Tomas Hrnčir, Vladimir Nečas</b> Assessment of Relevant Exposure Pathways in Scenario of Reuse of Very Low Level Radioactive Steel in Motorway Tunnel Constructions</p> <p>S3-128 <b>Michal Panik, Vladimir Nečas</b> Evaluation of Radiation Exposure during Construction and Operation of Concrete Bridge Reinforced with Very Low Level Radioactive Steel</p> <p>S3-130 <b>Bogomil Manchev, Boyka Nenkova, Emil Tomov</b> Integrated Management System Incorporating Quality Management and Management of Environment, Health and Occupational Safety</p> <p>S3-155 <b>Staša Zovko Čeramilac, Josip Lebegner, Kažimir Vrankić</b> Environmental Protection Issues that Should be Taken in Consideration in the Preparatory Phase of the Croatian Nuclear Power Program</p>
<b>18:00-19:00</b>	<p style="text-align: center;"><b>Round Table: Status and Future of Nuclear Energy</b> Chair: Z. Šimić (FER, Croatia)</p>

# TUESDAY, June 5<sup>th</sup>

<b>9:00-10:30</b>	<b>Invited Lectures</b> IL-04 <b>Hrvoje Perharić</b> NPP Krško Stress Report and Safety Improvements IL-05 <b>Danilo Feretić</b> Some Major Issues Influencing Nuclear Energy Prospective
<b>10:30-11:00</b>	<b>Coffee Break</b>
<b>11:00-13:00</b>	<b>Operation and Maintenance Experience</b> <b>Chair: P. Širola, Z. Heruc (NPP Krško, Slovenia)</b> S4-107 <b>Jan Nano, Zoltan Bazso</b> Severe Accident Management Concerned Plant Modifications at NPPs Operated in the Slovak Republic S4-110 <b>Damir Mandić</b> Establishment of “Internal Rules” and EDMS – Electronic Document Management System at NEK S4-145 <b>Irena Jakić, Nenad Debrecin</b> Aging of Power Cables in Nuclear Power Plant due to Influence of Local Temperature Conditions S4-147 <b>David Horvath</b> Return of IEEE Std 627 and its Value to Equipment Qualification Programs S4-149 <b>David Horvath, Greg M. Hostetter</b> Use of Micro-Void Content Growth Rates to Validate and add Value to Electrical Insulation Tan Delta Aging Testing S4-150 <b>Norbert Wroblewski, David Horvath, Greg M. Hostetter, Sara E. Seamans</b> Unexpected Anomaly Discovered during Qualification Testing of Teflon (PTFE) in Nuclear Sealing Application S4-184 <b>Scott Kulat, Ben Montgomery, Robin Graybeal</b> Targeted In-service Inspections Using Risk Insights
<b>13:00-14:30</b>	<b>Lunch Break</b>

<p><b>14:30-16:00</b></p>	<p style="text-align: center;"><b>Radioactive Waste Management and Decommissioning</b>  <b>Chair: N. Železnik (ARAO, Slovenia),</b>  <b>V. Lokner (APO, Croatia)</b></p> <p>S7-111 <b>Ivica Levanat, Vladimir Lokner, Andrea Rapić, Nadja Železnik, Metka Kralj</b>  Revision 2 of the NPP Krško Decommissioning Program is Stalled</p> <p>S7-112 <b>Vladimir Lokner, Ivica Levanat</b>  Implications of the Croatian Spent Fuel and Radioactive Waste Strategy</p> <p>S7-113 <b>Nadja Železnik, Leon Kegel, Vladimir Lokner</b>  Long Term Management of Spent Fuel from NEK</p> <p>S7-140 <b>Matej Zachar, Vladimir Daniška, Vladimir Nečas</b>  Application of OMEGA Code for Determination of Radiological Parameters for Conditionally Released Decommissioning Materials</p>
<p><b>16:00-16:30</b></p>	<p style="text-align: center;"><b>Coffee Break</b></p>
<p><b>16:30-18:00</b></p>	<p style="text-align: center;"><b>Public Relation   Safety Culture</b>  <b>Chair: D. Kavšek (NPP Krško, Slovenia),</b>  <b>I. Jenčič (IJS, Slovenia)</b></p> <p>S5-125 <b>Igor Jenčič</b>  The Fukushima Accident and the Public Opinion in Slovenia</p> <p>S8-105 <b>Miodrag Stručić</b>  Sharing Lessons Learned between Industries in EU</p> <p>S8-122 <b>Romeo Biščan, Igor Fifnja, Darko Kavšek</b>  Revision of Krško NPP Quality Assurance Plan</p> <p>S8-151 <b>Bruno Bach, Bojan Božin, Rudi Čižmek</b>  Industry Operating Experience Process at Krško NPP</p> <p>S8-153 <b>Sanda Pleslić</b>  Introducing Knowledge Management in Study Program of Nuclear Engineering</p>
<p><b>20:00</b></p>	<p style="text-align: center;"><b>Conference Dinner</b></p>

# WEDNESDAY, June 6<sup>th</sup>

<b>9:00-09:40</b>	<b>Invited Lecture</b> IL-06 <b>Francesco D'Auria</b> The Best-Estimate Plus Uncertainty in Licensing of Current Nuclear Reactors
<b>9:40-10:30</b>	<b>Nuclear Safety Analyses Part I</b> <b>Chair: F. D'Auria (University of Pisa, Italy), D. Grgić (FER, Croatia)</b> S9-116 <b>Filippo Fiori, Andriy Kovtonyuk, Oleksandr Lisovyy, Maryna Kovtonyuk, Alessandro Petruzzi, Francesco D'Auria</b> Supporting Qualified Database for Uncertainty Evaluation S9-117 <b>Raul Gonzalez, Alessandro Petruzzi, Francesco D'Auria, O. Mazzantini</b> Identification of Limiting Case Between DBA and SDDBA (CL Break Area Sensitivity): A New Model for the Boron Injection System S9-120 <b>Bozhana Marinova, Kaliopa Mancheva</b> Main Results and Conclusions of Probabilistic Safety Analysis (PSA) Level 1 for Units 5 and 6 of "Kozloduy" NPP
<b>10:30-11:00</b>	<b>Coffee Break</b>
<b>11:00-12:30</b>	<b>Nuclear Safety Analyses Part II</b> <b>Chair: C. Allison (Innovative Systems Software, USA), Z. Šimić (FER, Croatia)</b> S9-121 <b>Andrej Prošek, Ovidiu-Adrian Berar</b> BETHSY 9.1b Test Calculation with TRACE Using 3D Vessel Component S9-137 <b>Alfredo Raimato, Luca Lamanna, Dino Araneo, Francesco D'Auria</b> Validation of Methodology for Reliability Analysis of Passive Safety Systems S9-154 <b>Ivan Vrbanić, Ivica Bašić</b> Risk Impact of Maintenance and Other Activities with Regard to Plant Areas S9-192 <b>Hrvoje Grganić, Zdenko Šimić</b> On the Estimation and Reduction of the Frequency of the Loss of Offsite Power Event S9-193 <b>Damir Konjarek, Josip Vuković, Tomislav Bajš</b> Validation of EOPs/FRGs Procedures Using LOHS Scenario
<b>12:30-13:30</b>	<b>Poster Session</b> <b>Chair: K. Trontl (FER, Croatia)</b>
<b>13:30-14:30</b>	<b>Lunch Break</b>

<b>14:30-15:10</b>	<b>Invited Lecture</b>
	<p>IL-07 <b>Chris M. Allison</b>  Lessons Learned from Fukushima Daiichi – Are Existing Severe Accident Experiments and Codes Adequate to Assess Core/Vessel Damage States?</p>
<b>15:10-15:30</b>	<b>Coffee Break</b>
<b>15:30-16:30</b>	<p><b>Reactor Physics and Nuclear Fuel Cycle</b>  <b>Chair: M. Kromar (IJS, Slovenia), D. Pevec (FER, Croatia)</b></p> <p>S10-118 <b>Marco Pecchia, Francesco D'Auria, Oscar Mazzantini</b>  Validation of Atucha-2 PHWR RELAP5-3D Control Rod Model by Monte Carlo MCNP5 Core Calculation</p> <p>S10-119 <b>Jan Haščik, Gabriel Farkas, Jakub Luley, Branislav Vrban, Robert Hinca, Martin Petriska, Vladimir Slugen, Jozef Lipka, Peter Urban</b>  Criticality Safety Analysis of Spent Fuel Storage Pool for NPP Mochovce using MCNP5 Code</p> <p>S10-132 <b>Krešimir Trontl, Dubravko Pevec, Mario Matijević</b>  Monte Carlo Codes for Neutron Buildup Factors</p> <p>S10-136 <b>Marjan Kromar, Bojan Kurinčić</b>  Comparison of the SCALE, SERPENT and MCNP Criticality Safety Calculation of the NPP Krško Spent Fuel Pool</p>
<b>16:30-17:00</b>	<p><b>Conference Closing</b>  <b>Z. Šimić, D. Grgić, I. Vuković</b>  <b>(Croatian Nuclear Society)</b></p>

# Poster Session

Wednesday June 6 <sup>th</sup> 12:30-13:30	Poster Session Chair: K. Trontl (FER, Croatia)
S6-104	<b>Ankica Čížmek</b> Transport of Radioactive Material
S7-141	<b>Marek Vaško, Vladimir Daniška, Vladimir Nečas</b> Investigation of Appropriate Applications for Reuse of Conditionally Released Materials from Decommissioning
S7-142	<b>František Ondra, Marek Vaško, Vladimir Nečas</b> Determination of Radiological, Material and Organizational Measures for Reuse of Conditionally Released Materials from Decommissioning
S7-143	<b>Peter Bezak, František Ondra, Vladimir Daniška, Vladimir Nečas</b> Possibilities for the Reuse of Steel from Decommissioning; Selected Scenarios in the Process of Proposal and Evaluation of Manufacturing Processes for Conditional Released Steel and their Application in General and Nuclear Industry
S9-100	<b>Vesna Benčik, Nikola Čavlina, Davor Grgić</b> Analysis of Rod Withdrawal at Power (RWAP) Accident using ATHLET Mod 2.2 Cycle A and RELAP5/mod 3.3 Codes
S9-115	<b>Federico Cantini, Martina Adorni, Francesco D'Auria</b> Nuclear Fuel Modelling During Power Ramp
S9-152	<b>Jiri Macek</b> Utilisation of Best Estimate System Codes and Best Estimate Methods in Safety Analyses
S9-156	<b>Emilien Gros, Bojan Petrović, Davor Grgić</b> Liquid-salt-cooled Reactor Start-up with Natural Circulation
S10-133	<b>Krešimir Trontl, Dubravko Pevec, Tomislav Belavić</b> 24-Month Operating Cycle Containing Gadolinium Integral Burnable Absorbers for NPP Krško
S10-134	<b>Mario Matijević, Dubravko Pevec, Krešimir Trontl, Radomir Ječmenica</b> Full Core Criticality Modeling of Gas-Cooled Fast Reactor using the SCALE6.0 and MCNP5 Code Packages
S10-157	<b>Abiodun Adeniyi, Bojan Petrović, Bo Feng, Taek K. Kim</b> Comparing Nuclear Material Utilization in Advanced Fuel Cycles



# Croatian Nuclear Society

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