

Monday September 6	Tuesday September 7	Wednesday September 8	Thursday September 9
	Invited (Merzari, Pe Uni) 8:30 - 9:10	Invited (Stoll, GRS) 8:30 - 9:10	Invited (Bigot, ITER) 8:30 - 9:10
	Thermal-hydraulics & CFD I 9:10 - 10:10	Severe accidents II 9:10 - 10:10	Nuclear fusion and plasma technology 9:10 - 10:10
<b>ENEN &amp; OECD-NEA Workshop 10:00 - 12:30</b>	Poster session <b>RED</b> 10:10 - 11:00	Poster session <b>GREEN</b> 10:10 - 11:00	Poster session <b>BLUE</b> 10:10 - 11:00
	Severe accidents I 11:00 - 12:00	Reactor physics & research reactors II 11:00 - 12:00	NARSIS special session 11:00 - 12:30
Nuclear power plant operation 12:00 - 13:00	Thermal-hydraulics & CFD II 12:00 - 13:00	Materials and ageing management 11:00 - 12:00	
	Lunch 13:00 - 14:20	Lunch 13:00 - 14:20	Lunch 13:00 - 14:20
	Invited (Haghighat, Virginia Tech) 14:20 - 15:00	<b>Conference trip 14:30 - 17:30</b>	Environment and back end of the fuel cycle 12:00 - 13:00
Opening ceremony and panel discussion 14:30 - 16:00	Reactor physics & research reactors I 15:00 - 16:00		Education, training and outreach 14:20 - 15:20
Coffee break 16:00 - 16:30	Coffee break 16:00 - 16:20		Environment and back end of the fuel cycle II 15:20 - 16:20
Invited (Najder, ENS YGN) 16:30 - 17:10	Nuclear regulations 16:20 - 17:20		<b>Closing session 16:20 - 16:30</b>
Invited (Abdelouas, SARENA) 17:10 - 17:50			
Coffee break 17:50 - 18:10			
Advances in nuclear technology 18:10 - 19:30			
<b>Welcome reception 19:30</b>		<b>Conference dinner 19:30</b>	

# Preliminary Program of the 30th International Conference NENE2021

## Monday, September 6, 2021

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**10:00 ENEN& OECD NEA Workshop**

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**14:30 Opening ceremony**

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**16:30 Invited lecture**

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*Chairperson: Pavel Gabriel Lazaro*

No. 101 16:30

**Building the Future on Solid Foundation - The Value of Multigenerational Nuclear Community**

Jadwiga Najder - Belgium

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**17:10 Invited lecture**

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*Chairperson: Leon Cizelj*

No. 102 17:10

**SAfe and REliable Nuclear Applications (SARENA)**

Abdesselam Abdelouas - France

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**18:10 Advances in nuclear technology**

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*Chairpersons: Martin Novšak, Uwe Stoll*

No. 201 18:10

**The Westinghouse AP1000 Plant – Proven, Advanced Generation III+ Technology**

Patrick Fragman - USA

No. 212 18:30

**Evolution of VVER reactors: from prototype to 3+ generation. Technological development**

Alexander Renev - Russian Federation

No. 202 18:50

**SMR Safety – Advantages and Challenges**

Gérard Cognet, Jan Bartak, Gianni Bruna - France

No. 203 19:10

**Teplator DEMO nuclear heating for Prague central heating network.**

Radek Skoda, David Masata, Tomas Peltan - Czech Republic

## Tuesday, September 7, 2021

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### 08:30 Invited lecture

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*Chairperson: Blaž Mikuž*

No. 104 08:30

**Full core Computational Fluid Dynamics: Recent advancements and Demonstrations**

Elia Merzari - USA

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### 09:10 Thermal-hydraulics & CFD I

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*Chairpersons: Andrej Prošek, Elia Merzari*

No. 601 09:10

**Classification and Resolution Adaptive Drag Modelling of Gas-Liquid Interfaces with a Multifield Two-Fluid Model**

Richard Meller, Matej Tekavčič, Benjamin Krull, Fabian Schlegel - Germany

No. 602 09:30

**GPU-based accelerated computation of coalescence and breakup frequencies for polydisperse bubbly flows**

Gasper Petelin, Jeffrey Kelling, Ronald Lehnigk, Gregor Papa, Fabian Schlegel - Slovenia

No. 603 09:50

**Effect of heat flux on axial distribution of vapour volume fraction and bubble sizes at flow boiling in horizontal annulus**

Boštjan Zajec, Boštjan Končar, Leon Cizelj – Slovenia

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### 10:10 Poster session **RED**

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### 11:00 Severe accidents I

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*Chairpersons: Matjaž Leskovar*

No. 402 11:00

**KIT-JIMEC experiments to investigate jet impingement on a core catcher bottom and ablation process**

Walter Tromm, Xiaoyang Gaus-Liu - Germany

No. 403 11:20

**Long-term containment cooling in Fukushima unit 1: insights into consequences from sensitivity studies**

Luis E. Herranz, Rafael Bocanegra - Spain

No. 404 11:40

**Experimental Investigation on the Post-Dryout Behaviour of Homogenous Debris Beds**

Markus Petroff, Rudi Kulenovic, Joerg Starflinger – Germany

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## 12:00 Nuclear power plant operation

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*Chairpersons: Janez Krajnc, Nikola Čavlina*

No. 507 12:00

**Long term operation of NPP Krško and related challenges**

Stanko Manojlović - Slovenia

No. 501 12:20

**EXPERIENCES IN SYSTEMATIC APPROACH TO PROCEDURES VALIDATION IN SIMULATOR**

Nicolas Moyano, Alejandro Arroyo, Borja Hervas - Spain

No. 502 12:40

**Reliability of Power System in Slovenia – Comparison of Scenarios**

Marko Čepin, Aljaz Spelko, Bruno Glaser – Slovenia

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## 14:20 Invited lecture

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*Chairperson: Luka Snoj*

No. 103 14:20

**A New Paradigm for High-Fidelity 3-D Reactor Kinetics Simulations**

Alireza Haghighat, Valerio Mascolino, Luka Snoj - USA 14:20 Invited Elia Merzari

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## 15:00 Reactor physics & research reactors I

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*Chairpersons: Andreja Peršič, Radek Škoda*

No. 307 15:00

**Thermal Scattering Law Data for Zirconium Hydride from First-Principles**

Ingrid Svajger, N. C. Fleming, B. Laramée, Gilles Noguere, A. I. Hawari, Luka Snoj, A. Trkov - Slovenia

No. 301 15:20

**Application of an artificial neural network to support the design of the PWR reactor core configuration**

Wojciech Kubiński, Patryk Bojarski, Piotr Darnowski - Poland

No. 303 15:40

**Analysis of the X2 VVER-1000 benchmark with FENNECS**

Romain Henry, Armin Seubert, Jeremy Bousquet – Germany

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## 16:20 Nuclear regulations

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*Chairpersons: Igor Sirc, Gérard Cognet*

No. 701 16:20

**Technical and scientific support organizations as an independent layer of defense-in-depth in licensing of nuclear facilities**

Mitja Uršič, Andrej Prošek, Leon Cizelj – Slovenia

No. 703 17:00

**Ensuring Nuclear and Radiation Safety during Pandemic in Slovenia**

Igor Grlicarev, Igor Sirc, Matjaž Podjavoršek, Helena Janžekovič, Tomi Živko, Andreja Peršič, Metka Tomažič, Darja Slokan Dušič, Neža Kompare, Janez Češarek – Slovenia

## Wednesday, September 8, 2021

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### 08:30 Invited lecture

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*Chairperson: Ivo Kljenak*

No. 105 08:30

#### **Current Challenges in Reactor Safety Research**

Uwe Stoll – Germany

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### 09:10 Severe accidents II

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*Chairperson: Mitja Uršič*

No. 405 09:10

#### **Assessment of different combustion models for the numerical simulations of the THAI containment**

Daniele Dovizio - Netherlands

No. 406 09:30

#### **Numerical Simulation of Melt Droplet/Water Interaction in Steam Explosions**

Nikita Sivakov, Sergey Yakush - Russian Federation

No. 407 09:50

#### **Numerical simulations of prototypical oxide-metal corium heat by electromagnetic induction**

Julien Guillou, Philippe Tordjeman, Wladimir Bergez, Rémi Zamansky, Jean-Francois Haquet, Pascal Piluso, Anne Boulin, Sebastien Renaudiere De Vaux – France

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### 10:10 Poster session **GREEN**

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### 11:00 Reactor physics & research reactors II

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*Chairpersons: Andrej Trkov, Davor Grgić*

No. 304 11:00

#### **Comparing Different Approaches to Calculating Decay Heat Power of a Spent Fuel Dry Storage Cask for Krško NPP**

Vid Merljak, Marjan Kromar - Slovenia

No. 305 11:20

#### **On the Processing of Thermal Scattering Law Data into ACE Format for Monte Carlo Transport Calculations**

Daniel Lopez Aldama, Andrej Trkov, Roberto Capote - Austria

No. 306 11:40

#### **Upgrades to the Monte Carlo Computational Model of the JSI TRIGA Research Reactor**

Anze Pungercic, Ingrid Švajger, Vladimir Radulović, Luka Snoj – Slovenia

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## 11:00 NARSIS special session

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*Chairpersons: Luka Štrubelj*

No. 1201 11:00

**Study of the Seismic Behaviour of Gen III Plant: The Influence of Ageing**

Rosa Lo Frano, Salvatore Angelo Cancemi, Pierre Gehl, Evelyne Foerster - Italy

No. 1202 11:20

**Multiple Hazard Modeling Utilizing Traditional PSA Tools**

Aleksej Kaszko, Slawomir Potemski - Poland

No. 1203 11:40

**Seismic fragility analysis based on vector-valued intensity measures; theory and application to fuel assembly grids**

Manuel Pellissetti, Marie-Cécile Robin-Boudaoud, Pierre Gehl - Germany

No. 1204 12:00

**SEVERA Decision Support Tool Development in Project NARSIS**

Luka Štrubelj, Marko Bohanec, Ivan Vrbanić, Ivica Bašić, Klemen Debelak - Slovenia

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## 12:00 Thermal-hydraulics & CFD II

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*Chairpersons: Iztok Tiselj, Walter Ambrosini*

No. 604 12:00

**Experimental exploration of interweaved fluctuations of pressure and velocity in 5x5 rod bundle with spacer grids**

Naz Turankok, Lionel Rossi, Valerie Biscay, Thibaud Lohez - France

No. 605 12:20

**Scale effects methodology for buoyant impinging jets in Sodium Fast Reactors**

Benjamin Jourdy, David Guenadou, Nathalie Marie, Alexandre Labergue, Michel Gradeck - France

No. 606 12:40

**Multiphysics Topology Optimization with Application to Molten Salt Fast Reactor**

Lorenzo Cattoni, Carolina Introini, Antonio Cammi, Laura Savoldi, Rosa Di Fonzo – Italy

## Thursday, September 9, 2021

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### 08:30 Invited lecture

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*Chairperson: Boštjan Končar*

No. 106 08:30

**The ITER Project: moving fusion power closer to reality**

Bernard Bigot - France

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### 09:10 Nuclear fusion and plasma technology

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*Chairpersons: Tomaž Gyergyek, Igor Lengar*

No. 801 09:10

**On the potential of W2C-reinforced tungsten: microstructure and mechanical properties of samples aged at temperatures above 1000 °C**

Petra Jenuš, Matej Kocen, Anže Abram, Aljaž Ivekovič, Črtomir Donik, Irena Paulin, Saša Novak - Slovenia

No. 802 09:30

**Liquid metal divertor in future fusion reactors: liquid tin**

Rok Zaplotnik, Vincenc Nemenič, Janez Kovač, Miran Mozetič - Slovenia

No. 803 09:50

**Assessment of Power Deposition on Plasma Facing Components Inside WEST Tokamak With the Use of Field Line Tracing**

Matic Brank, Gregor Simič, Leon Kos, Mehdi Firdaouss, Marie-Helene Aumeunier - Slovenia

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### 10:10 Poster session **BLUE**

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### 11:00 Materials and ageing management

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*Chairpersons: Bruno Glaser, Samir El Shawish*

No. 901 11:00

**A simplified model for estimating intergranular normal stresses**

Samir El Shawish, Timon Mede - Slovenia

No. 902 11:20

**Development of irradiation tolerant tungsten alloys for high temperature nuclear applications**

Dmitry Terentyev, Saša Novak, Petra Jenuš, Carmen Garcia-Rosales, Elisa Sal, Jan Willem Coenen - Belgium

No. 903 11:40

**Ageing at the TRIGA MK II research reactor of the University of Pavia: management and practical applications**

Andrea Gandini, Anna Maria Condino, Andrea Salvini – Italy

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## 12:00 Environment and back end of the fuel cycle I

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*Chairpersons: Helena Janžekovič, Eileen Langedger*

No. 1019 12:00

**NPP Krško Low and Intermediate Level Waste: Is More Rational Economical and Financial Management Plan Still Possible?**

Alemka Knapp, Ivica Levanat, Diana Šaponja-Milutinović - Croatia

No. 1001 12:20

**The French Reprocessing Solution And Its Recent Evolution**

Albert Yokobayashi - France

No. 1002 12:40

**Spent Fuel Dry Storage Loading Plan Based on Uniform Decay Heat Distribution among Casks**

Paulina Dučkić, Davor Grgić, Siniša Šadek, Štefica Vlahović - Croatia

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## 14:20 Education, training and outreach

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*Chairpersons: Igor Jenčič*

No. 1101 14:20

**Strategic agenda for EU wide nuclear education, training and knowledge management**

Leon Cizelj, Csilla Pesznyak, Michele Coeck, Joerg Starflinger, Pavel Gabriel Lazaro, Franck Wastin - Slovenia

No. 1102 14:40

**Socio-economic impacts of nuclear power plant closure: Lessons learnt from different EU Member States**

Hana Gerbelova, Vaida Rukaite Drazdove - Netherlands

No. 1103 15:00

**Towards Optimized Use of Research Reactors in Europe - the TOURR Project**

Pavel Gabriel Lazaro - Belgium

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## 15:20 Environment and back end of the fuel cycle II

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*Chairpersons: Ana Stanič*

No. 1006 15:20

**Method for analysis of neutron activation measurements of Am-241 with uncertainty propagation**

Gašper Žerovnik, Vladimir Radulović, Ljudmila Benedik, Bor Kos, Gilles Noguere - Slovenia

No. 1021 15:40

**Fukushima nuclear accident impacts on the EU nuclear arena**

Helena Janžekovič - Slovenia

No. 1005 16:00

**Approach for the Prospective Assessment of Radiological Impact to the Population from Decommissioning of "RADON" Type Radioactive Waste Storage Facility in Lithuania**

Valdas Ragaišis, Povilas Poskas, Audrius Šimonis - Lithuania



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## Poster session **RED** - Tuesday, September 7, 2021,

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Chairpersons: *Timon Mede, Domen Kotnik*

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### Advances in nuclear technology

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No. 204

#### **Dynamic response of LFR in cogeneration mode**

Riccardo Chebac, Marco Ricotti, Antonio Cammi, Khashayar Sadeghi, Seyed Hadi Ghazaie, Ekaterina Sokolova, Evgeniy Fedorovich - Italy

No. 207

#### **The potential of the TEPLATOR application in the Central Europe region**

David Mašata, Radek Škoda, Lucie Noháčová - Czech Republic

No. 210

#### **Evaluating the TEPLATOR Concept as a Nuclear Heating Solution Compared with other Alternatives in the Czech Republic.**

Hussein Abushamah, Jana Jiříčková, Radek Skoda, David Masata - Czech Republic

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### Reactor physics & research reactors

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No. 308

#### **Further development of RAPID code extension for TRIGA reactor 3D burnup calculations**

Anze Pungercic, Alireza Haghighat, Luka Snoj - Slovenia

No. 311

#### **Investigation of Recently Introduced Diffusion Coefficient Generation Methods**

András Ványi, Mathieu Hursin, Szabolcs Czifrus - Hungary

No. 314

#### **Jožef Stefan Institute TRIGA Research Reactor Activities in the Period from September 2020 – August 2021**

Anže Jazbec, Sebastjan Rupnik, Vladimir Radulović, Borut Smodiš, Luka Snoj - Slovenia

No. 317

#### **Analyses of Doppler Coefficient of Reactivity using Monte Carlo and Deterministic codes**

Dušan Čalič - Slovenia

No. 320

#### **Monte Carlo simulation of k<sub>0</sub> instrumental neutron activation analysis**

Lojze Gačnik, Radojko Jačimović – Slovenia

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### Severe accidents

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No. 408

#### **Investigation on Revaporization from CsI Deposited Particles in the Primary Circuit in Nuclear Severe Accident Conditions**

Melany Gouello, Teemu Kärkelä - Finland

No. 411

#### **Analysis of stratified steam explosion in reactor conditions**

Matjaž Leskovar, Janez Kokalj, Mitja Uršič - Slovenia

No. 414

**Simulation of Experiment on Passive Autocatalytic Recombiner Phenomena**

Tilen Švarc, Jure Marn, Ivo Kljenak - Slovenia

No. 416

**Analytical Modelling of ATF Chromium-Coated Zr-Based Cladding High Temperature Oxidation in Steam and Steam-Air Atmosphere**

Alexander D. Vasiliev - Russian Federation

No. 419

**Evaluation of containment source term of various VVER-1000/V-320 loss of coolant accidents**

Adam Kecek, Lubomir Denk - Czech Republic

No. 421

**An Analysis of Combustion Regimes for Hydrogen/CO/Air Mixtures in Different Geometries**

Mike Kuznetsov, Andreas Friedrich, Anke Veser, Gottfried Necker, Wolfgang Breitung – Germany

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**Nuclear power plant operation**

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No. 503

**Analysis of the effect of Krško NPP ex-core detector position on their response**

Tanja Goričanec, Marjan Kromar, Andrej Kavčič, Bor Kos, Rok Bizjak, Igor Lengar, Božidar Krajnc, Luka Snoj – Slovenia

No. 506

**Magnetic Sludge Removal device**

Jang Jinhee - South Korea

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**Thermal-hydraulics & CFD**

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No. 608

**Large interface tracking algorithm for air-water slug in turbulent flow**

Jan Kren, Blaž Mikuž - Slovenia

No. 611

**AN ANALYSIS OF THE INITIAL DYNAMIC OF LARGE LOCA ACCIDENT FOR THE PERSPECTIVE DIRECT FLOW SCWR**

Dmitriy Fedorov, Vladislav Filonov, Olexandr Kovalenko, Yulia Filonova - Ukraine

No. 614

**Influence of seeding particles on Particle Image Velocimetry measurements in single-phase turbulent pipe flow**

Blaž Mikuž, Jan Kren, Danjela Kuščer - Slovenia

No. 617

**Numerical Study on Convective Heat Transfer of Liquid Metals in Refractory High Entropy Alloy-Based Miniature Heat Sinks**

Mahyar Pourghasemi, Nima Fathi - USA-New Mexico

No. 620

**Validation of two-fluid boiling flow model on the DEBORA benchmark experiments**

Boštjan Končar, Matej Tekavčič, Andrej Prošek – Slovenia

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## **Nuclear regulations**

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No. 705

### **25 Years of the Slovenian Participation in IAEA ITDB Programme and Endeavours to Combat Illicit Trafficking of Nuclear and Radioactive Material**

Janez Češarek – Slovenia

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## **Nuclear fusion and plasma technology**

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No. 804

### **Neutronics analyses of EU DEMO 2020 EC port configuration**

Aljaž Čufar, Christian Bachmann, Thomas Berry, René Chavan, Tim Eade, Thomas Franke, Bor Kos, Dieter Leichtle, Peter Spaeh, Tran Minh Quang - Slovenia

No. 807

### **Kinetic-Fluid Coupling Time-Dependent Simulations Of ITER During ELMs**

Ivona Vasileska, Xavier Bonnin, Leon Kos - Slovenia

No. 810

### **Effects of the source properties on the filamentary transport in the tokamak SOL**

Jernej Kovačič, Stefan Costea, Tomaz Gyergyek - Slovenia

No. 813

### **Thermionic emission from the divertor surface during energetic events in tokamaks**

Stefan Costea, Jernej Kovačič, Tomaz Gyergyek – Slovenia

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## **Materials and ageing management**

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No. 905

### **The Regulatory Survey of the Reactor Pressure Vessel Suitability for the Krško NPP Long Term Operation**

Tom Bajcar, Andreja Peršič, Sebastjan Šavli - Slovenia

No. 908

### **Review of M5™ Cladding Models Relevant for LOCA Simulation with the TRANSURANUS Code**

Rolando Calabrese, Arndt Schubert, Paul Van Uffelen – Italy

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## **Environment and back end of the fuel cycle**

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No. 1004

### **Neutron Shielding Performance Analysis of the Ordinary Concrete Reinforced with an Innovative H3BO3 Polymer Based Particles**

Mohsen Kheradmand Saadi, Kimia Mokhtari - Iran

No. 1008

### **INVESTIGATION OF OCCUPATIONAL RADIATION EXPOSURE FROM C-ARM FLUOROSCOPY GUIDED PROCEDURES**

Turkki Shatona - Namibia

No. 1011

### **Adsorption of Iodine on Painted Surfaces in Nuclear Power Plants Containment Buildings**

Iana Zamakhaeva - Czech Republic

No. 1014

**Neutronic Analysis of Ventilated Dry Storage Cask with Monte Carlo Method**  
Burak Sarioglu - Turkey

No. 1017

**The impact of neutron irradiation on concrete structures**  
Szabina Török, Sugár Viktória, Lama Alnatour – Hungary

No. 1020

**Decommissioning of activated fragments of the Jaslovské Bohunice V1 NPP VVER-440 pressure vessel**  
Stefan Cerba, Milan Myslík, Branislav Vrban, Jakub Lüley, Vladimír Nečas - Slovakia

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## **Education, training and outreach**

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No. 1105

**Public Opinion about Nuclear Energy – Year 2021 Poll**  
Radko Istenič - Slovenia

No. 1108

**Upgrading of HPCC at Reactor Center JSI in the Last Decade**  
Sandi Cimerman, Bojan Žefran – Slovenia

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## Poster session **GREEN** - Wednesday, September 8, 2021,

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Chairpersons: Anže Jazbec, Jan Kren

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### Advances in nuclear technology

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No. 205

**Development of technical decision for digital support of the NPP construction using photogrammetry methods**

Nadezhda Kiriak - Russian Federation

No. 208

**Uncertainties and Sensitivity Analyses of ULOF and UTOP in Sodium-cooled Fast Reactor**

Rolando Calabrese - Italy

No. 211

**Neutron flux measurement in TEPLATOR DEMO**

Eva Vilimova, Tomas Peltan, Radek Škoda - Czech Republic

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### Reactor physics & research reactors

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No. 309

**Parametric analysis of the closed-water activation loop at the JSI TRIGA reactor**

Domen Kotnik, Kristina Pahor, Luka Snoj, Igor Lengar - Slovenia

No. 312

**Non-Modal Stability Analysis of the Zero-Dimensional Model of the TRIGA Mark II Reactor**

Carolina Introini, Antonio Cammi, Parikshit Bajpai - Italy

No. 315

**The Effect of Burnup on ITU TRIGA Mark II Research Reactor Control Parameters**

Fadime Ozge Ozkan, Senem Senturk Lule, Uner Colak - Turkey

No. 318

**Gathering of Data on the European Research Reactor Fleet as Part of the TOURR Project**

Bor Kos, Roberta Cirillo, Anze Pungercic, Pavel Gabriel Lazaro, Luka Snoj - Slovenia

No. 321

**Burnup-dependent isotopic compositions of PWR fuel pins using OpenMC and WIMS with ENDF/B-VIII nuclear data library**

Jan Malec, Dušan Čalič, Andrej Trkov - Slovenia

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### Severe accidents

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No. 401

**Simulation of premixed layer formation in PULiMS E6 and SES S1 experimental tests**

Janez Kokalj, Mitja Uršič, Matjaž Leskovar - Slovenia

No. 412

**EVALUATION OF MELT-WATER PREMIXTURE FORMATION DUE TO HYDRODYNAMIC INSTABILITIES**

Darya Finoshkina, Vladimir Melikhov, Oleg Melikhov - Russian Federation

No. 417

**INFLUENCE OF NON-CONDENSABLE GAS ON MELT-WATER PREMIXING IN A STRATIFIED STEAM EXPLOSION**

Darya Finoshkina, Vladimir Melikhov, Oleg Melikhov, Sergey Yakush - Russian Federation

No. 420

**NPP Krško Large Break Loss of Coolant Accident using MELCOR Code**

Vesna Benčik, Davor Grgić, Siniša Šadek – Croatia

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**Nuclear power plant operation**

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No. 504

**The impact of JEK2 on the operation of the Slovenian electrical power system**

Aleksandar Momirovski, Jurij Kurnik, Robert Bergant, Bruno Glaser – Slovenia

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**Thermal-hydraulics & CFD**

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No. 609

**TRACE simulation of Semiscale S-NC-2 and S-NC-3 tests**

Andrej Prošek, Boštjan Končar - Slovenia

No. 612

**Na and NaK Laminar and Turbulent Flows and Heat Transfer within Rectangular Minichannel Heat Sinks**

Mahyar Pourghasemi, Nima Fathi - USA-New Mexico

No. 615

**LOCA plus Loss of One Emergency Core Cooling System Simulated by RELAP5/MOD3.3 Patch 05**

Andrej Prošek – Slovenia

No. 618

**Selection of the most suitable cooling technology for the JEK2 project**

Klemen Debelak, Aleš Kelhar, Robert Bergant, Bruno Glaser - Slovenia

No. 621

**Simulation of heat transfer in multiple impinging jets with scale-adaptive turbulence model**

Martin Draksler, Matej Tekavčič, Boštjan Končar – Slovenia

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**Nuclear regulations**

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No. 706

**Heading Toward Configuration of BEPU Approach into Licensing Process of SMRs**

Seyed Ali Hosseini, Amir Saeed Shirani, Reza Akbari, Francesco D'Auria – Iran

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**Nuclear fusion and plasma technology**

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No. 805

**Thermal Hydraulic Performance Analysis of Smooth and Swirl Tube Type Geometries of Plasma Facing Component Using Entropy Generation Approach**

Mohit Sharma, Vinay Menon, Samir Khirwadkar - Slovenia

No. 808

**Tritium measurements by nuclear reaction analysis using <sup>3</sup>He beam**

Mitja Kelemen, Sabina Markelj, Mickael Payet, Elodie Bernard, Matej Lipoglavšek, Aleksandra Cvetinović, Christian Grisolia, Primož Pelicon - Slovenia

No. 811

**Determination of uncertainties for activation material irradiation in TT fusion spectra**  
Igor Lengar, Vladimir Radulović, Zamir Ghani, Paola Batistoni, Jet Contributors - Slovenia

No. 814

**Development of the MELCOR model for the analysis of large helium ingress into the DEMO cryostat**  
Rok Krpan, Janez Kokalj, Mitja Uršič, Matjaž Leskovar, Boštjan Končar – Slovenia

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## Materials and ageing management

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No. 906

**An investigation neutron irradiation effects on the nanocrystalline boron nitride (h-BN) particles using EPR spectroscopy**  
Elchin Huseynov, Adil Garibov, Nicat Abasov - Azerbaijan

No. 909

**Microstructural indicators for assessment of the radiation ageing of electronic components**  
Igor Neuhold, Vladimir Krsjak, Jarmila Degmova, Vladimír Slugeň, Pavol Noga – Slovakia

No. 911

**Thick protective Fe coatings for PbLi coolant environments**  
Jan Cizek, Jakub Klecka, Lukáš Babka - Czech Republic

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## Environment and back end of the fuel cycle

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No. 1009

**Methodology of Calculating Air Pollution Dispersion with a Lagrangian Particle Model for Assessing the Impact of Atmospheric Emissions on the environment from Krško NPP**  
Marija Božnar, Primož Mlakar, Boštjan Grašič, Darko Popović - Slovenia

No. 1012

**Neutron Absorber for VVER-1000 Storage, Transport and Final Disposal Facilities**  
Martin Lovecky, Jiri Zavorka, Kristýna Klímek Gincelová, Jana Jiříčková, Radek Škoda - Czech Republic

No. 1015

**Effect of the ionizing radiation dose on histone H2AX**  
Jana Skálová, Tomáš Vlas, David Mašata - Czech Republic

No. 1018

**Spent fuel characteristics of various reactor types**  
Pauli Juutilainen – Finland

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## Education, training and outreach

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No. 1106

**Training Lessons Learned from the Covid-19 in the Spanish Nuclear Fleet Training Centers**  
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