



PROGRAMME

Recommendation to the speakers: Keep 3-5 minutes of the time of your presentation for Q & A

| Monday, 11.09.2017 | |
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| 16:00 – 19:00 | <i>Registration, Hotel Hall</i> |
| 20:00 | Welcome Reception |

| Tuesday, 12.09.2017 | |
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| 08:00 – 09:00 | <i>Registration, Conference Hall</i> |
| | Conference Room |
| 09:00 | Opening by Conference Chair Pavlin GROUDEV |
| | Session: NEWS AND OVERVIEWS |
| | Chairs: Pavlin GROUDEV (INRNE-BAS, BG) and Adela Klepáková (Research Centre Řež, Czech Republic) |
| 09:00 – 09:10 | Vladimir URUTCHEV , European Parliament, “Nuclear energy and the global transition to clean energy sources”, presented by Dimitar Stoyanov, EP |
| 09:10 – 09:30 | Lachesar KOSTOV , BNRA, BG, “Bulgarian Nuclear Regulatory Agency – 60 years commitment to safety” |
| 09:30 – 09:50 | Nikola BALABANOV , Plovdiv, BG, “CURIE - an unit of high activity and a measure of high morality” |
| 09:50 – 10:10 | Tasko ERMENKOV , BG Parliament, “Electroenergy Security Challenges for Bulgaria” |
| 10:10 – 10:30 | Antonio BALLESTEROS , EC JRC, Netherlands, “Lessons Learned from Research Reactors Relevant for Nuclear Power Plants” |
| 10:30 – 10:50 | Emilia JANISZ , ENS, BL, “ENS – the largest nuclear community in Europe” |
| 10:50 – 11:10 | <i>Coffee break</i> |
| | Session: EDUCATIONAL POLICY |
| | Chairs: Mladen MITEV (INRNE-BAS, BG) and Tzanka WHELDON (University of Birmingham, UK) |
| 11:10 – 11:30 | Stanislav PAKULYAK , Joint Institute for Nuclear Research, Russia, “JINR educational programmes” |
| 11:30 – 11:50 | Daniela SANTOPOLO and Pierre KOCKEROLS, EC JRS, Belgium, “European Learning Initiatives for Nuclear Decommissioning and Environmental Remediation ELINDER” |



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| 11:50 – 12:10 | Corina DULEA , Horia Hulubei National Institute for R&D in Physics and Nuclear Engineering - IFIN-HH , Romania, “Training in Grid Computing for Nuclear Physics Research” |
| 12:10 – 12:30 | Ljubomir PIRONKOV , Kozloduy NPP, BG, “Nuclear Safety Knowledge Management beyond Corporate Boundaries. The spotlight of the IAEA new development” |
| 12:20 – 12:40 | Valeria HADJIDEKOVA , NCRPP, BG, “Biodosimetry of ionizing radiation. RENEB Network.” |
| 13:00 – 14:30 | <i>Lunch, Hotel Restaurant</i> |

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| | Session: NEWS AND OVERVIEWS |
| | Chairs: Dimitar BALABANSKI (IFIN-HH Magurele, Romania) and Igor Kozlov (Odessa NPU, Ukraine) |
| 14:30 – 14:50 | Dimitar TONEV , INRNE-BAS, “The Project for National Cyclotron Center at INRNE-BAS” |
| 14:50 – 15:10 | Lyuben MARINOV , NPP New Build, BG , The project for new Nuclear Power in NPP "Kozloduy" - Status and Challenges " |
| 15:10 – 15:30 | Tahnoun Jumaa AL HAMELI , Abu Dhabi, United Arab Emirates, "Current status of UAE Nuclear Power Program" |
| | Session: SIXTY YEARS BULGARIAN NUCLEAR REGULATION |
| | Chairs: Yavor ANDREEV (Theta-Consult Ltd, BG) and Stanislav PAKULYAK (JINR, Dubna, RU) |
| 15:30 – 15:50 | Htisto BOTSOEV , BNRA, BG, “Extension of KNPP Units 5&6 Service Life – Regulatory Aspects” |
| 15:50 – 16:10 | Albena GEORGIEVA , BNRA, BG, “IAEA sources for nuclear information” |
| 16:10– 17:10 | <i>Coffee break and Session: POSTERS</i> |
| | Chairs: Krassimira ILIEVA (BgNS, BG) and Albena GEORGIEVA (BNRA, BG) <i>Posters listed behind the Program will be presented. Preliminary request fort short (3 min) presentation has to be done to the chairs.</i> |
| | Session: RADIATION DOSIMETRY AND RADIATION PROTECTION |
| | Chairs: Russyan TSIBRANSKI (KNPP, BG) and Marieta SOPADJIEVA (University Hospital “St. Georgy” Plovdiv, BG) |
| 17:10 – 17:30 | Orlin STOYANOV , NCRPP, BG, “National system for individual dosimetry” |
| 17:30 – 17:50 | Tzveta IVANOVA , Regional Helth Inspection, Plovdiv, BG, “Drinking water radioactivity - the problem 2017years” |
| 17:50 – 18:10 | Rositza KAMENOVA-TOTZEVA , NCRPP, BG, “Uranium content in drinking water - radiochemistry, normalization, risk assessment” |
| 19:30 – 21:30 | <i>Estreya Wine cellar visit, social</i> |



| Wednesday, 13.09.2017 | |
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| | Conference Room |
| | YOUNG GENERATION COMPETITION - ORAL |
| | Chairs: Dobromir DIMITROV (INRNE-BAS, BG) and Antonio BALLESTEROS (JRC-EC, BE) |
| 08:30 – 10:10 | <i>15 min for presentation plus 3 min for questions</i> YG PRESENTATIONS |
| 10:10 – 10:20 | <i>Voting</i> |
| | YOUNG GENERATION COMPETITION - POSTERS |
| | Chairs: Vladimir POPOV (Kozloduy NPP, BG) and Krassimira ILIEVA (BgNS, BG) |
| 10:20 – 10:40 | <i>(3+2) min for presentation and question</i> |
| 10:40 – 11:00 | <i>Voting and Coffee break</i> |
| | Session: TECHNOLOGIES |
| | Chairs: Kalin FILIPOV (Technical University of Sofia, BG) and Galina TODOROVA (Varna Free University, BG) |
| 11:00 - 11:20 | Dimitar BALABANSKI , Horia Hulubei National Institute for R&D in Physics and Nuclear Engineering - IFIN-HH , Romania, “Applied nuclear physics research at ELI-NP: Day-one studies and prospective societal benefits” |
| 11:20 - 11:40 | Peter TRINDEV , GAMACHEK LTD, Quality Control of Nuclear Medical Equipment |
| 11:40 – 12:00 | Marieta SOPADJIEVA , Tosho Tonev, and Vasil Andreev, Radiotherapy Department, University Hospital “St. Georgy” Plovdiv, Bulgaria, “Implementing New Technologies- Robotic Stereotactic Radiosurgery System Cyberknife” |
| 12:00 – 12:20 | Natasa TODOROVIC , University of Novi Sad, Faculty of Sciences “Different methods for tritium determination” |
| 12:20 – 12:40 | Anany YANACHKOV , Sonya YANKOVA , BgNS, “Unit 4 Kozloduy NPP as a Heat Generation Plant” |
| 12:40 - 12:50 | Svetlomir MITKOV , Kozloduy NPP and Ivan Spasov, INRNE-BAS, BG, “Sub-channel thermal-hydraulic analysis of the hot assembly in a reactivity transient in VVER-1000” |
| 13:00 – 14:30 | <i>Lunch, Hotel Restaurant</i> |
| 14:15 – 18:30 | <i>Excursion to Varna Town</i> |
| 20:00 – 24:00 | Gala diner, Hotel Restaurant Awarding the best YG presentations. |



| Thursday, 14.09.2017 | |
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| | Conference Room |
| | Session: EDUCATIONAL POLICY |
| | Chairs: Petya VRYASHKOVA (INRNE-BAS, BG) and David WINFIELD (Canada) |
| 9:20 – 9:40 | Ivan KOJOUHAROV , GSI, Germany, “New technologies on the germanium and scintillation detectors” |
| 9:40 – 10:00 | Rossitza MITEVA , Riskengineering, BG, “Evaluation results from the ECVET based pilot training course for RPW” |
| 10:00 – 10:20 | Yury PANEBRATTSEV , JINR, Dubna, Russia, “On-line courses and virtual laboratories for nuclear physics studies” |
| 10:20 – 10:34 | Bruno MOURENZA , APRE, Italia, “NUCL-EU 2020. Connecting EURATOM National Contact Points in a pro-active network under EURATOM Programme in Horizon 2020” |
| 10:40 - 11:00 | Tzanka WHELDON , SFHEA, Birmingham, “About UK Educational Programme, about Birmingham Educational Program” |
| 11:00 - 11:20 | <i>Coffee Break</i> |

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| | Session: NPP ISSUES |
| | Chairs: Boyka NENKOVA (GCR Ltd, BG) and Viktor KOLYKHANOV (Institute for Safety Problems of Nuclear Power Plants of NASU, UA) |
| 11:20 – 11:40 | Chris ALLISON , Innovative Systems Software, USA “Development and assessment of improved RELAP/SCDAPSIM modeling options to support Fukushima-Daiichi decommissioning R&D” |
| 11:40 – 12:00 | Vladimir POPOV , Kozloduy NPP, BG, “Kozloduy NPP Units 5&6 Modernization programs. Modernization and plant lifetime extension of Kozloduy NPP Units 5&6” |
| 12:00 - 12:20 | Denitza DISHKOVA , SE RAW, BG, “Progress of the decommissioning of KNPP units 1-4” |
| 12:20 | M. Mitev - Closing of the conference |
| 12:30 – 14:30 | <i>Lunch, Hotel Restaurant</i> |

| Friday, 15.09.2017 | |
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| 12:00 – 14:00 | <i>Lunch for the guests departing on 15 September 2017</i> |



POSTERS out of YGC

- 1) **V.N. Kolykhanov, I.E. Kozlov, and V.I. Skalozubov**, Odessa National Polytechnic University, Ukraine, "Distortion of the Neutron Flux Profile in Reactor Core Induced by Control Rods"
- 2) **Bruno Mourenza**, Agenzia per la Promozione della Ricerca Europea, , Italia, "NUCL-EU 2020 – European Network of EURATOM National Contact Points (NCP)"
- 3) **Boyka Nenkova**, GCR Ltd, BG, . **Emil Tomov**, Risk Engineering Ltd, BG, "Human Factor as an Important safety NPP Safety Factor"
- 4) **Tzvetelina Beshirova**, Kozloduy NPP, BG, "Modernization of the turbine for increasing the heat power output of the reactor to 104%"
- 5) **Mladen Milchev**, Kozloduy NPP, BG, "Production division "Reactor Core Design" at Kozloduy NPP"
- 6) **Viorel Serban**, IFIN-HH MAGURELE, Romania, "Building the information system of Nuclear Training Centre"
- 7) **Plamen TZANKOV**, Energoservice, BG „Large Clearance Monitoring System"
- 8) **Neli Zahariieva, Pavlin Grudev**, INRNE-BAS, BG, "Analysis of main areas of interests and key indicators as a base for comparative evaluation of nuclear and non-nuclear energy options for small counties"
- 9) **Rositza Gencheva, , Pavlin Grudev**, INRNE-BAS, BG, "Investigation of IVMR with external water cooling in VVER 1000 reactor type with ASTECv2.1.1.0"
- 10) **Krassen Rashkov**, KNPP, BG, "New Deterministic Approach to Defence-in-Depth (DiD)"
- 11) **V.N. Kolykhanov, I.L. Kozlov**, Odessa National Polytechnic University, Ukraine, "Risk-Informed Maintenance Optimization for Safety Systems of NPP"
- 12) **Dobromir Dimitrov, Mladen Mitev, Mariya Manolova**, INRNE-BAS, BG, "Approaches Used in CORONA Academy for Training Non-nuclear Professionals in Specific Topics of VVER Knowledge"
- 13) **Kaloyan Mukov, Georgi Apostolov, Vasil Iskrenov**, NCRPP, BG, "Review of the current physical systems and methods for retrospective dosimetry, used in the Bulgarian health physics practice at NCRPP: current state, implementation of new methods and future perspectives"
- 14) **Djengiz Nurettin Ishler, Galina Todorova**, Varna Free University, BG, "Safety Culture – Essential Requirements and Activities"
- 15) **Kaloyan Mukov, Georgi Apostolov, Vasil Iskrenov**, NCRPP, BG, " Dosimetry for High-Dose Applications used in the Bulgarian Secondary Standard Dosimetry Laboratory at National Center of Radiobiology and Radiation Protection: currently applied methods and future perspectives"



YG COMPETITION COMMISSION

Ljudmil Tzankov, Associate Professor Dr., Sofia University "St. Kliment Ohridski"
Kalin Philipov, Associate Professor Dr., Technical University of Sofia
Galina Todorova, Associate Professor Dr., Varna Free University

Competition Criteria

The evaluation criteria for the competition are: correspondence with the conference title, actuality, clear statement of objectives, subject, results and conclusions, understandability, attractiveness and visualization, balance between text and images.

YOUNG GENERATION PRESENTATIONS

- 1) **Simeon Ivanov**, Kozloduy NPP, BG, "Design and construction of an accessible pin-diode based semiconductor detector of ionizing radiation (IR)"
- 2) **Ivailo Dimitrov**, TU, Sofia, BG, "Thermal calculations of steam turbine installations K-1000 / 60-1500 when switching to electric drives of feed pumps"
- 3) **Ljubomir Kandov**, TU, Sofia, BG, "Final Report on the Possibility of Continuation of Operation Period of Block 5 of the Kozloduy NPP until 60 Years (Hydroaccumulators)"
- 4) **Ivailo Naidenov**, TU, Sofia, BG, "Changes in isotope factors of the intrinsic barrier of Plutonium produced in energy reactors with pressurized water when burning uranium and uranium-plutonium fuels over the aging time"
- 5) **Petya Vryashkova**, INRNE-BAS, BG, " Further investigation of the boil-off QUENCH-11 experiment with MELCOR code"

YOUNG GENERATION POSTERS

- 1) **Mitko Doichinov**, TU, Sofia, BG, "Thorium as a nuclear fuel"
- 2) **Simona Miteva**, TU, Sofia, BG, "Glasses and ceramics for high-level waste immobilization: an overview"
- 3) **Alexandar Stoilov**, TU, Sofia, BG, "Comparison of Western and Eastern Nuclear Reactor Pressure Vessel Steels"