NAIRI BAGHDASARYAN

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Warsaw, Poland

PROFESSIONAL EXPERIENCE

PhD Student: 2018 - Present

National Center for Nuclear Research (ncbj.gov.pl), Poland

- Research existing models in TRISO performance analysis,
- Temperature distribution and pressure buildup analysis in TRISO fuel,
- Fuel failure probability assessment analysis,
- Creating/using new/existing models for TRISO performance analysis,
- Benchmarking created/used models,
- Sensitivity and uncertainty analysis.

Part Time Lecturer: 2017 - 2018

Yerevan State University (ysu.am), Armenia, Department of Physics

- Practical problems in nuclear engineering using programming tools,
- Management, organization and team work skills to achieve specified goals.

Specialist on Neutronics Analysis and Nuclear Fuel: 2012 - 2018

Nuclear and Radiation Safety Center (nrsc.am), Armenia

- Nuclear reactor core performance (such as power distributions and reactivity effects analysis) review by PARCS,
- Criticality safety analysis including burnup credit approach of spent nuclear fuel storage and cooling pools by KENO -VI (SCALE 6) and MCNP 6.1 codes,
- Spent nuclear fuel depletion and decay heat analysis by ORIGEN code,
- Shielding analysis (e.g. spent fuel cask) by MCNP6.1 code,
- Benchmarking models for WWER fuel including systems,
- Verification and validation analysis.

EDUCATION

- Yerevan state University, Yerevan, Armenia, PhD in Nuclear Engineering.   **2014 - 2017**
- Yerevan state University, Yerevan, Armenia, Master in Nuclear Physics.   **2012 - 2014**
- Yerevan state University, Yerevan, Armenia, Bachelor in Physics.   **2008 – 2012**

TRAININGS

- Criticality Safety and Thermal-hydraulics, JINR, 22 -29 September, 2012, Bologna, Italy,
- Safety Assessment, VUJE, 24 February - 03 April , 2013, Trnava, Slovakia,
- Nuclear Fuel Cycle Safety, IRSN, 07-20 September 2014, Avignon, France,
- Management of RW and SNF, TUV, 18-23 April 2016, Mannheim, Germany,
- Induction to Nuclear Safety, GRS, 02 -30 June 2013, Munich, Germany,
- Intercontinental Nuclear Institute, IAEA, 28 June - 25 July 2016, USA, Czech Republic,
- TRACE-PARCS coupling of WWER 440 reactor core model, BNL, 08-21 January, 2017, Upton, USA,
- WWER regulatory forum, SEC NRC, 17-21 October, 2017, Moscow, Russia,
- HTR 2018, NCBJ, 08-10 October, 2018, Warsaw, Poland,
- Nuclear Energy beyond Electricity, OECD/NEA, 24-25 September, 2019, Warsaw, Poland.

SKILLS

- Tools: [MCNP, SERPENT, KENO, PARCS, PYTHON, MATLAB, EXCEL, GIT, LINUX]
- Languages: [Armenian-native, English-fluent, Russian-fluent, Polish-beginner]

PUBLICATIONS

1. Baghdasaryan, N. and T. Kozlowski (2020), "Review of Progress in Coated Fuel Particle Performance Analysis", Nuclear Science and Engineering 194 (3), pp. 169-180.
2. Bznuni, S., N. Baghdasaryan, and A. Amirjanyan (2017), "Assessment of the Reactivity Bias and Bias Uncertainty Due to WWER-440 Fuel Depletion Uncertainties", Proceedings of the YSU, Physical and Mathematical sciences 1 (3), pp. 60-65.
3. Bznuni, S., N. Baghdasaryan, A. Amirjanyan, et al. (2017), "Development of bounding Burnup Axial Profiles for WWER-440 Spent Fuel Pool Burnup Credit Analysis", Journal of Nuclear Science and Engineering 186 (1), pp. 98-102.
4. Baghdasaryan, N. (2016), "Development of Optimal Fuel Loading Configurations for Armenian ANPP Spent Nuclear Fuel Transport Cask", Proceedings of the YSU, Physical and Mathematical sciences 2 (3), pp. 53-56.