András Szabolcs VÁNYI

1 Personal Data

Place and Year of Birth:	Budapest, Hungary | 1995
Address:	Budapest, Hungary
Phone:	+36 20 989 32 70
email:	vanyi.andras@reak.bme.hu

2 Work Experience

September 2019–February 2020	Research fellow at Hungarian Academy of Sciences Centre for Energy Research, Budapest, Hungary
July 2019–September 2019	Intern at Hungarian Academy of Sciences Centre for Energy Research, Budapest, Hungary
February 2019–June 2019	Intern at OECD Nuclear Energy Agency, Boulogne-Billancourt, France

3 Education

2020–2021 Visiting PhD student (5 months), **École Polytechnique Fédérale de Lausanne**
Supervisor: Dr. Mathieu Hursin

2019– PhD in Physical Sciences, **Budapest University of Technology and Economics**
Thesis: "Design of Validation Measurements for Reactor Transient Analysis with Multi-physics Codes"
Supervisor: Dr. Szabolcs Czifrus

2017–2019 Master of Science in Physics, **Budapest University of Technology and Economics**
Specialization: Nuclear Engineering
Thesis: "Coupled neutronics-thermohydraulics analysis of the Th-SCWR reactor concept"
Supervisor: Dr. Sándor Fehér

2014–2017 Bachelor of Science in Physics, **Budapest University of Technology and Economics**
Thesis: "Analysis of heat source distribution of a thorium fuelled SCWR using coupled reactor physics-thermohydraulics calculations"
Supervisor: Dr. Sándor Fehér
Advisor: Dr. Gyula Csom

2008–2014 Secondary school studies at **ELTE Apáczai Csere János Practice School**, Budapest
Specialization: Maths and Physics

4 Teaching activity

2020-2021 Advanced Laboratory Exercises in Physics 3 – Flux measurements
2016-2021 Monte Carlo Methods – Computer Laboratory Exercises
Institute of Nuclear Techniques, Budapest University of Technology and Economics
2017-2018 Nuclear Energy and Sustainable Development – Demonstrator
Institute of Nuclear Techniques, Budapest University of Technology and Economics

5 Languages

HUNGARIAN: Mother tongue
ENGLISH: Fluent (type complex C1 language certificate)
FRENCH: Speaking and writing on intermediate level

6 Computer Skills

PROGRAMMING LANGUAGES: C/C++, Fortran, Python
ENGINEERING CODES: ANSYS CFX, APROS, MCNP, PARCS, Serpent, TRACE
OTHER PROGRAMS: Maple, MATLAB, Microsoft Office, LaTeX

7 Competitions

2018 BME's Scientific Students' Associations Conference
"Numerical thermal-hydraulic analysis of supercritical water flow in a heated channel"
Nuclear Techniques Section, **1st Award**

2017 33rd National Scientific Students' Associations Conference
"Analysis of heat source distribution of a thorium fuelled SCWR"
Nuclear Energetics Section, **2nd Award**

2016 BME's Scientific Students' Associations Conference
"Analysis of heat source distribution of a thorium fuelled SCWR"
Nuclear Techniques Section, **2nd Award**

8 Journal papers

A.Sz. Ványi, B. Babcsány, Z.I. Böröczki, A. Horváth, M. Hursin, M. Szieberth, Sz. Czifrus:
Steady-state neutronic measurements and comprehensive numerical analysis for the BME training reactor
Annals of Nuclear Energy, 155 (2021)

9 Conference papers

2019 I. Hill, J-.F. Martin, D. Costa, **A. Ványi**, S. Cornet, T. Ivanova:
OECD/NEA Nuclear Science Fuel Activities Spanning Scales and Technologies
Top Fuel 2019 (Seattle, USA)

A. Ványi, S. Fehér, A. Kiss and Gy. Csom:
Coupled thermohydraulics-neutronics study of a thorium fueled SCWR concept
9th International Symposium on Super-Critical Water-cooled Reactors (Vancouver, Canada)

A. Kiss, B. Hegyesi, **A. Ványi** and Gy. Csom:
About the thermal hydraulic analysis part of a coupled study on a thorium fueled SCWR concept
9th International Symposium on Super-Critical Water-cooled Reactors (Vancouver, Canada)

10 Courses

April 2019 Intermediate MCNP6 Class of Los Alamos National Laboratory
OECD Nuclear Energy Agency, Boulogne-Billancourt

March 2018 ATHENS Programme – Energy
École Supérieure de Physique et de Chimie Industrielles de la Ville de Paris (ESPCI), Paris

11 Societies

2014–2017 Member of the Eugene Wigner College of Advanced Studies (Vice President 2015–2016)
2019– Member of Hungarian Nuclear Society