DANIEL HACKL

Physicist & Energy Engineer



@ website@daniel-hackl.com ndanielhackl-tu

Wien, Österreich



WORK EXPERIENCE

Project Engineer

JUNO Consulting & Nuclear Engineering GmbH

March 2025 - Now

Collaboration and management of engineering projects as well as coordination of international project partners, carrying out calculations, quality control and technical documentation.

Graduate Researcher

Vienna University of Technology

Conducted research on neutron-irradiated high-temperature superconductors for fusion applications as part of my master's thesis. Designed and manufactured custom sample holders for in-situ resistivity measurements during oxygen annealing. Determined neutron flux in the TRIGA research reactor to accurately assess irradiation conditions.

Project Engineer (Student Employee)

DMT GmbH & Co. KG

March 2024 - Dec. 2024

■ Vienna

■ Part-time

Preparation of technical reports and calculations for engineering projects, development of concepts for energy and waste disposal projects, analysis of market and competition data, support in the coordination of external partners.

Intern

Nuclear Engineering Seibersdorf GmbH

Participation in the modernization of a conditioning plant: Carrying out an analysis of the current status and comparing defined parameters before and after the conversion using trial operations.

Physics Teacher

Department of Education for Vienna

Taught physics to multiple upper school classes, delivering engaging lessons. Served as an assessor for oral school-leaving examinations, evaluating student performance.

MOST PROUD OF

Merit Scholarship

Awarded for the academic year 2022/23 with a GPA of 1.06

EDUCATION

MSc in Physical Energy and Measurement Engineering

Vienna University of Technology

BSc in Technical Physics

Vienna University of Technology

Grammar School

GRG 21 Ödenburgerstraße

Graduated with honors.

SKILLS

Analytic Problem Solving Team Leadership **Technical Reporting** Project Management Data Analysis **Digital Literacy** Sustainability Awareness Adaptability Process Optimization | Quality Assurance Stakeholder Management Presentation **Energy Engineering** Renewable Energy **Radiation Protection** Data Modelling Thermodynamics Instrumentation Automation Simulation Data Analysis Materials Science Safety Engineering C++ **Autodesk Inventor** Python MT_FX Microsoft Office | VS Code

Driving License A2 and B

UNIVERSITY PROJECTS

In-Situ Measurement of the Resistivity during Annealing of Neutron Irradiated High-Temperature Superconductors (Master Thesis)

Vienna University of Technology

☐ Sept. 2024 - Now Vienna

Second Full-time

Radiation Exposure in ISS Columbus Module

Vienna University of Technology

Oct. 2023 – Jan. 2024 Vienna () Full-time

Used thermoluminescence dosimeters to measure and analyze radiation exposure in the ISS Columbus module.

Activity Determination of Radiation Sources

Vienna University of Technology

Analyzed Co-60 and Cs-137 radiation sources using various detection and measurement methods.

Safety Concepts for PWRs (Bachelor Thesis)

Vienna University of Technology

Feb. 2023 - Aug. 2023 Vienna () Full-time

Researched and developed safety concepts for pressurized water reactors from Generation II to Generation III+.

EXTRACURRICULAR ENGAGEMENT

President - Young Generation

Austrian Nuclear Society

April 2025 - Today

Board Member (Sept. 2023 - March 2025) and previously a member. Participated in international conferences and stakeholder meetings, fostered exchange with young professionals, and contributed to various nuclear sector initiatives.

Member

TU Wien TOP Fellows

📋 Jan. 2024 - Today

Lead Organizer

DACH Young Nuclear Professionals Conference

Organized the joint conference of the Austrian, German, and Swiss nuclear societies, leading organizational planning and moderation.

Delegate

International Youth Nuclear Congress

Represented Austria, presented country report and technical paper on nuclear safety advances.

LANGUAGES

German	••••
English	••••
Croatian	••••
Russian	••••
French	• • • • •

PUBLICATIONS

Conference Proceedings

• D. Hackl, E. Langegger, and H. Böck, "Evolution of safety concepts in pressurized water reactors," in Proceedings of the IYNC 2024 Conference, 2025.

REFEREES

Senior Scientist Dipl.-Ing. Dr. Mario Villa

@ mario.villa@tuwien.ac.at

▼ Technische Universität Wien

Head of TRIGA Center, Lecturer for Reaktorphysik

Privatdoz. DI. Dr. Michael Eisterer

@ michael.eisterer@tuwien.ac.at

Vienna University of Technology

Professor of Solid State Physics

Univ. Prof. Dr. Helmuth Böck

@ helmuth.boeck@tuwien.ac.at

Vienna University of Technology

Professor of Nuclear Engineering