# DANIEL HACKL

## **Physicist & Energy Engineer**



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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**

High 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<sub>F</sub>X 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 U Full-time

# Radiation Exposure in ISS Columbus Module

### Vienna University of Technology

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**

Oct. 2024 Zwentendorf, AT

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.