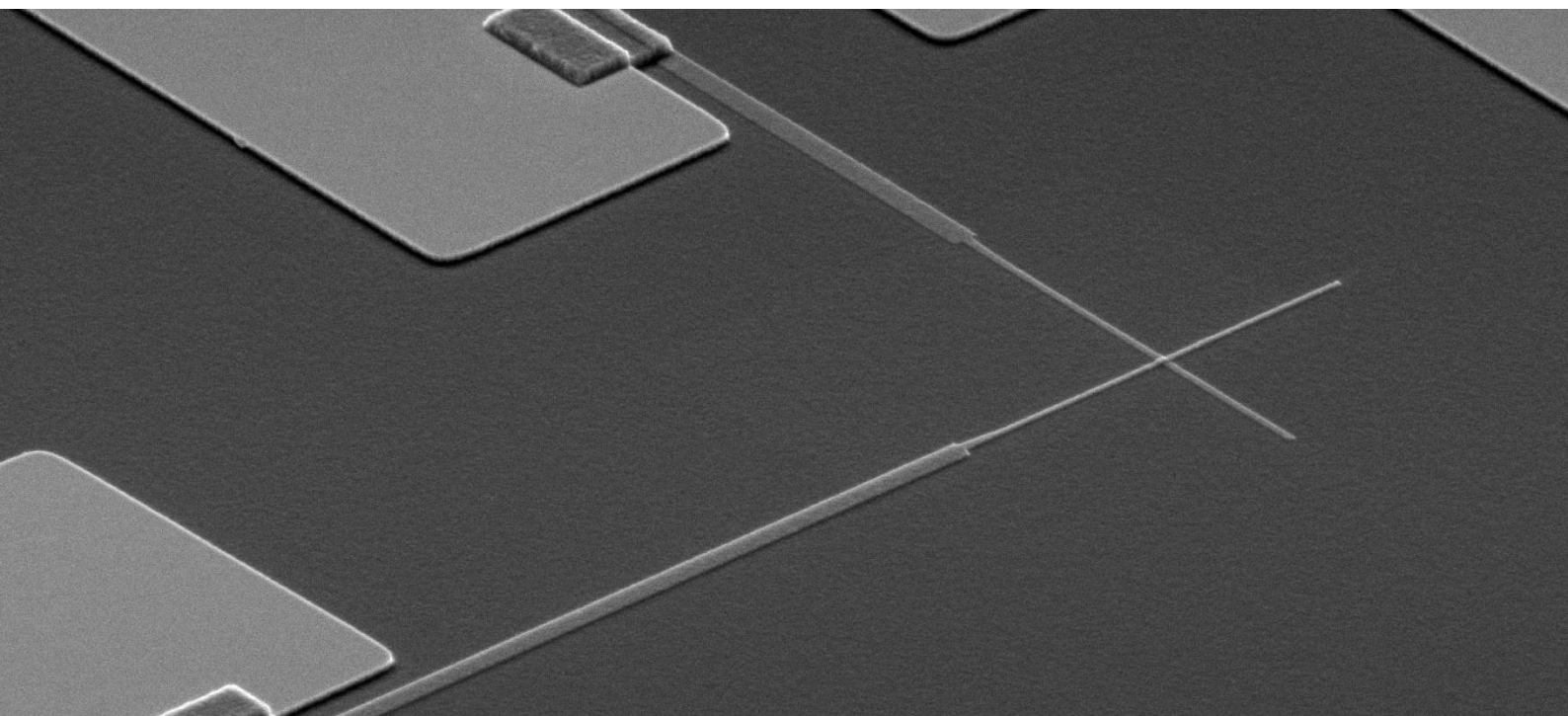


## Quantum device fabrication expert (m/f/d) (PhD/Postdoc/Engineer)

Are you looking for an opportunity to shape the future of quantum computing? With superconducting quantum computers on the verge, we aim to strengthen our research at the Walther-Meißner-Institute (WMI – [www.wmi.badw.de](http://www.wmi.badw.de)) of the Bavarian Academy of Sciences and Humanities (BAdW) in close collaboration with the Technical University of Munich (TUM – [www.tum.de](http://www.tum.de)) and open a researcher position for a fabrication expert (PhD/Postdoc/Engineer) within the Munich Quantum Valley (MQV – [www.munich-quantum-valley.de](http://www.munich-quantum-valley.de)).

### How you will support us:

- You will take on responsibilities in the fabrication of high-coherence superconducting quantum circuits and the investigation of novel materials.
- You will develop new fabrication processes and surface treatments, optimize Josephson junction fabrication processes, and/or support the scaling of quantum processors via 3D-integration technology.
- Depending on your prior experience, you will lead a fabrication team at the WMI towards the project goals of the [QuantumSPICE project](#), which has recently been funded by the BMBF.
- You will support the day-to-day activities in our cleanroom facilities.
- You will supervise and guide early career researchers.
- You will work in a thriving international team focusing on quantum technology and computing with superconducting qubits.
- You will work at the intersection of basic science and technology development and closely interact with project partners at universities, research organizations, and companies.
- You will actively participate in outreach events and present your results at conferences, workshops and in research publications.



### Your profile:

- You hold an MSc or PhD degree in physics, engineering or material science.
- You have expertise in the fabrication of micro- and nanostructured thin-film devices and like to push technology further towards highest quality superconducting quantum circuits.
- You have experience in thin film material characterization techniques.
- You work in an organized manner and pay attention to details.
- You thrive on finding solutions to complex problems.
- Ideally, you have experience with superconducting quantum circuits.
- Ideally, you have experience in cryogenics and the operation of dilution cryostats.
- You work well independently and bring in creative ideas into a larger team.
- You like to work in an academic setting with a technology-oriented mindset.
- You have strong communication and writing skills.

### What can you expect in return:

- A curiosity-driven, technology-focused research environment with an international team of scientists and researchers at the Walther-Meissner-Institute, working on superconducting quantum circuits, hybrid quantum systems, and magnetic materials.
- A dynamic, multidisciplinary research environment at the Research Campus in Garching, one of Europe's most advanced centers for research and education, featuring internationally renowned programs in quantum science and technology.
- Close connection to the activities of the Munich Quantum Valley with its main goal to build a quantum computer based on different platforms, to develop suitable algorithms and application, and to establish an ecosystem for innovative quantum technologies.
- A remuneration according to qualifications in accordance with the collective bargaining agreement of the German federal states (depending on qualification up to TVL-E14).
- A part or full time position that is initially limited by the project duration (3 years) with the clear intention for continuation.

**How to apply.** If your aim is to advance superconducting quantum computing and you are motivated to join the team, we would be happy to receive your application before **January 24, 2025**. Please send us your documents including your CV, relevant documents and a brief motivation letter in a single PDF file to Martina Meven ([sekretariat@wmi.badw.de](mailto:sekretariat@wmi.badw.de)) mentioning the code '2025-Fab-01'. Positions are available starting immediately, applications may be considered until the position is filled.

**Diversity.** We are determined to build an inclusive culture that encourages and values the diverse voices of all members of our research team embracing the full diversity of gender identities, cultures and ideologies to do excellent research. BAdW strives to raise the proportion of women in their workforce and explicitly encourage applications from qualified women. Disabled candidates with equal qualification and aptitude will be given preferential consideration according to the SGB IX.

**Data Protection Information.** When you apply for a position with the BAdW, you are submitting personal information. Please take note of the data protection information on collecting and processing personal data contained in your application in accordance with Art. 13 of the General Data Protection Regulation (GDPR). By submitting your application, you confirm that you have acknowledged the above data protection information of the BAdW. Please visit [badw.de/die-akademie/jobs/information-zur-verarbeitung-personenbezogener-daten-nach-dsgvo.html](https://badw.de/die-akademie/jobs/information-zur-verarbeitung-personenbezogener-daten-nach-dsgvo.html) for more information.