Building a quantum processor with novel properties based on superconducting qubits.

This is the aim of the GeQCoS project ('German Quantum Computer based on Superconducting Qubits') funded by the German Federal Ministry of Education and Research (BMBF). To reach this goal we are searching for a

Quantum Scientist – Nanofabrication (m/f/d)

to join our team at the Walther-Meißner-Institute (WMI) located at the Campus Garching near Munich in Germany. If you are motivated to advance superconducting qubit-based quantum computing, we would be happy to receive your application. We are in particular looking for a skilled and highly motivated candidate who is eager to take on responsibility in the fabrication of superconducting thin film devices to strengthen our efforts in the direction of quantum information processing.

You will work within a growing international team embedded in the diverse research activities at the WMI (<u>https://www.wmi.badw.de/</u>) and the close-by Technical University of Munich (<u>https://www.tum.de/</u>). At the WMI, a research institute of the Bavarian Academy of Science and Humanities (BAdW), we explore the physics at low and ultra-low temperatures with special focus on superconductivity and magnetism as well as on the control of quantum systems in the field of quantum technologies. The WMI plays a key role in the broad and highly visible Munich research efforts on quantum science and technology, such as the Munich Center for Quantum Science and Technology (MCQST - <u>https://www.mcqst.de/</u>) and the recently established Munich Quantum Valley (MQV – <u>https://www.munich-quantum-valley.de/</u>) that aims to realize scalable quantum computers.

If you want to be part of this thriving quantum environment, you should bring with you proven expertise in micro- and nanofabrication. Specifically, you should fulfill the following requirements:

- Educational background in the fields of physics, engineering or material science and a strong background in thin-film deposition and lithography.
- Several years of work experience and expert skills for micro- and nanofabrication in a cleanroom environment.
- Proficiency in mask design, e-beam and optical lithography, wet chemistry and characterization tools.

In addition,

- You are able to carry out independent work and assume responsibility within a larger team.
- You are willing to train, guide, and to advise students working in our cleanroom facility. Moreover, you will run and maintain the cleanroom facility and fabrication tools.
- You have a systematic and precise approach combined with curiosity and eagerness to develop new processes and fabrication recipes.
- You are able to correlate data from inspection tools and measurements to improve and trouble shoot fabrication processes.
- You have good communication and English language skills.

Diversity. We are determined to build an inclusive culture that encourages and values the diverse voices of all members of the research team embracing the full diversity of gender identities, cultures and ideologies to do finest research. Disabled candidates with equal qualification and aptitude will be given preferential consideration according to the SGB IX.

How to apply. Please send your application documents including your CV and a brief cover letter explaining your motivation and other relevant expertise in a single PDF file, mentioning the code '2021-SF-01', until September 10, 2021 to <u>sekretariat@wmi.badw.de</u>. This permanent position is available immediately with a salary based on the federal wage agreement (depending on qualification up to TV-L E14). Depending on the level of expertise, the contract duration may initially be limited to two years. For further information please contact Mrs Martina Meven (+49 (0) 89 289- 14255).

Data Protection Information. When you apply for a position with the Bavarian Academy of Science and Humanities (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. More information is found at https://badw.de/die-akademie/jobs/information-zur-verarbeitung-personenbezogener-daten-nach-dsgvo.html.



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