

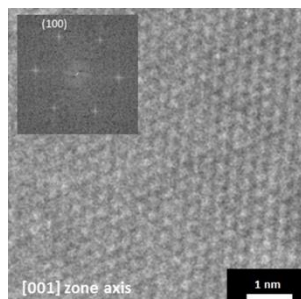
PhD Position 1, TU Wien, Austria:



3D printing of 2D materials for green hydrogen (photo-)electrochemistry

The position is part of the FFG-funded research project "3Dadditive2D - Micro-3D-Printing of 2D Materials with Aerosol Jet Printing for novel Hydrogen-(Photo-)Electrocatalysis-Electrodes".

The focus of the position is on wet-chemical ink development with two-dimensional (2D) materials such as graphene and 2D MoS₂ for three-dimensional (3D) printing of electrodes for (photo-)electrocatalytic applications. Therefore, experience with wet-chemical synthesis of low-dimensional and/or 2D materials is an advantage. Furthermore, experience in materials development for printing processes and ink development is an advantage. The produced materials and layers are characterized using a range of modern methods including various diffractive, microscopic and spectroscopic methods. Experience with diffractive, microscopic and spectroscopic materials characterization techniques is therefore an advantage. Experience in 3D printing and/or (photo-)electrocatalytic hydrogen production would also be an advantage.



Bundesministerium
Klimaschutz, Umwelt,
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In addition, a high degree of willingness to cooperate with both internal and external partners, including a well-known Austrian non-academic research institute as a project partner, is expected. Willingness and ability to carry out a dissertation are required.

The position is initially limited to 1 year, with an option to extend to a total of 3 years.

If you have any questions about the position, please contact: Dr. Bernhard C Bayer, bernhard.bayer-skoff@tuwien.ac.at

More information on our research into 2D materials can be found under: www.nanobayer.com

TU Wien newsletter: https://tiss.tuwien.ac.at/mbl/blatt_struktur/anzeigen/10529#p375.2

375.2.1 At the Institute of Materials Chemistry, Research Division Molecular Materials Chemistry (E165-02), Research Group Molecular Materials Chemistry (E165-02-1), we have an opening for a project assistant, salary group B1, 30h per week from 03.10.2022 to 30.09.2023. The position is initially limited to 1 year, with an option to extend to a total of 3 years. The monthly minimum wage for this salary group is currently 2294 EUR gross (14 times a year). The salary may increase due to previous work experience.

Requirements: Completed master degree in chemistry, chemical engineering, physics, materials science or similar

Application deadline: 08.09.2022 (date of postmark) Applications should be sent to the Personnel Administration, Scientific Personnel Department at the TU Wien, Karlsplatz 13, 1040 Vienna, Austria. Preferably online applications to: elisabeth.karner@tuwien.ac.at