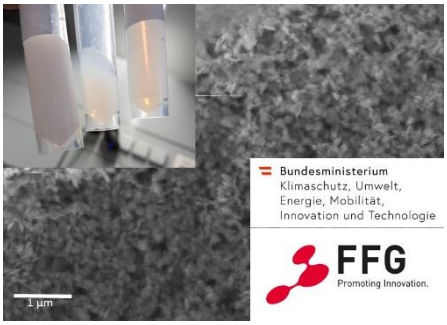
# PhD Position 2, TU Wien, Austria:

## Screen-Printed Two-Dimensional Hexagonal Boron Nitride Heat Spreaders




The position is part of the FFG-funded research project "HeatScreen2D: Screen-Printed Two-Dimensional Hexagonal Boron Nitride Heat Spreaders".

The focus of the position is on the development of a synthetic process for the wet-chemical deposition of two-dimensional (2D) materials such as hexagonal boron nitride as printable heat conductors in electronic 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 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 with thermal conductivity characterization of materials would also be an advantage.

Additionally, a high degree of willingness to cooperate with both internal and external partners, including a well-known Austrian company and a Chinese university as a project partners, 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
**375.2.2** 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