

Open PhD and Postdoc positions

on a FWF project: ***“Self-aligned 2D material ribbons and plasmonic nanobelts”***
at Institute of Physics, Montanuniversität Leoben, Austria.

- **PhD position: Three-year (2020-2022)**, 30 hours/week, starting asap (ideally by spring 2020)
- **Postdoc position: One-year** with a possibility for prolongation, 40 hours/week

The candidates should be self-reliant, self-driven, and highly motivated to pursue their careers in science; related to the fields of experimental physics, materials science, surface science, nanotechnology, and plasmonics. The open positions are within an international collaboration of a Scanning Probe Microscopy Group Leoben (head Prof. Christian Teichert) with a world-leading group in plasmonics and tip-enhanced Raman spectroscopy from Tomsk Polytechnic University. Good/excellent English is required; German is a plus but not requested. For the Postdoc position, an appropriate publication track record is required.

Keywords: Nanotechnology, 2D Materials, Scanning Probe Microscopies, Self-assembly, self-alignment, bottom-up nanofabrication, Plasmonic nanostructures

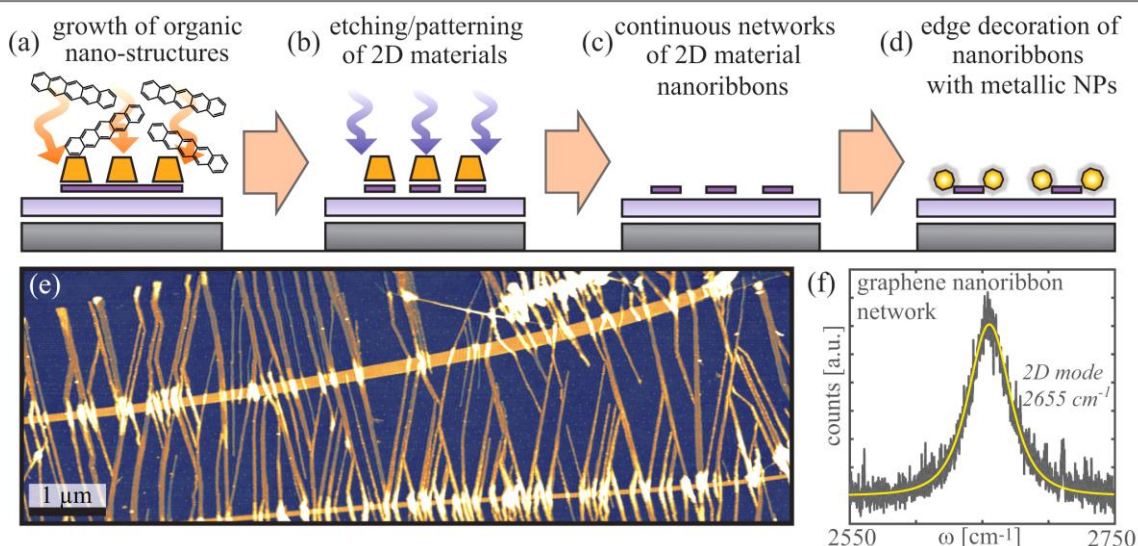
Preferred background: Materials science, Physics, Electrical Engineering, Materials of Electronics, Physical chemistry, or in similar fields.

General knowledge in: 2D Materials, Epitaxy, HV or UHV Systems, Atomic Force Microscopy, Reactive Ion Etching, and/or Raman Spectroscopy are considered as an asset.

Contact: Interested applicants please contact directly project’s PI Dr Aleksandar Matkovic via email.

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Project overview: (a-d) Planned scheme of fabrication processes for realization of nanoribbon networks and plasmonic nanobelts. (e,f) Proof-of-concept results showing AFM topography of a graphene nanoribbon network and corresponding Raman spectra (2D mode) of the nanoribbons.