

## Post-Doctoral Position

Christian Doppler Laboratories (CDL) merges academic basic research with potential future applications with industrial partners by long term projects up to 7 years (<https://www.cdg.ac.at/>). The Christian Doppler Laboratory for Direct-Write Fabrication of 3D Nano-Probes (CDL - DEFINE), hosted by the Institute of Electron Microscopy ([www.felmi-zfe.at](http://www.felmi-zfe.at)) at Graz University of Technology ([www.tugraz.at](http://www.tugraz.at)), started in March 2018 and now joins with Anton Paar GmbH ([www.anton-paar.com](http://www.anton-paar.com)) as additional industrial partner. Therefore, we expand our research team by a 40 h Post Doctoral position described in more detail below.

The research program focuses on fabrication of novel 3D nano-probes in the frame of Anton Paar's new Atomic Force Microscopy (AFM) product line. In slight more detail, the activities include 1) direct-write fabrication of freestanding nanostructures using focused electron beam induced deposition (FEBID), 2) structural and functional nano-characterization based on transmission electron microscopy (TEM), 3) chemical characterization via Raman spectroscopy / microscopy and 4) simulations as complementary tool depending on the research progress.

Based on this profile, the ideal candidate has experience in TEM, AFM and Raman techniques as well as basic skills in Python / C++ programming. FEBID know-how is beneficial but not absolutely needed as the new employee will be integrated in a well-experienced team in this area. The candidate has to have a finished PhD (typically, but not limited, in physics or chemistry), a clear scientific profile which reflects previous research activities and excellent English skills. As this position requires strong interaction with different members at the institute as well as representatives at Anton Paar GmbH, team spirit, reliability and communication skills are mandatory.

The position is embedded at Graz University of Technology and belongs to the group B1 (collective agreement) with a monthly salary of € 3.711,10 before tax (14x per year). The position is currently planned to start with March 1<sup>st</sup> 2019, while the CDL DEFINE can run till February 2025 with two mandatory interim evaluations in February 2020 and 2023, following the CDG conditions for CDLs.

Applications, curriculum vitae and further documents such as recommendation letters must be electronically submitted to [harald.plank@felmi-zfe.at](mailto:harald.plank@felmi-zfe.at) before February 10th, 2019.