



The **Jena School for Microbial Communication (JSMC)** is funded by the German **Excellence Initiative**. The JSMC is an ambitious Graduate School with over 150 doctoral researchers who are educated in a structured, interdisciplinary training program based on top-level fundamental research. It conceptually combines different research areas within a comprehensive core theme of microbial communication (www.jsmc.uni-jena.de). Institutes at five faculties of the Friedrich Schiller University Jena, six non-university research institutes as well as 12 partner companies participate in this cutting-edge research and training program.

The JSMC Graduate School of Excellence invites applications for a **Doctoral Researcher Position TV-L E13 65% (Ref. No. 299/2017)** (this offer of employment was already published in 2016 – 198/2016) to conduct research on the project

Photonics as a non-destructive investigation strategy for biofilms

Understanding the properties of microbes that organize themselves in biofilms is getting more and more important. The planned project aims to utilize Raman spectra of biofilm samples to identify its microbial composition. Perspectives, a Raman sum parameter should be defined for a fast and reliable differentiation between biofilms distinct in their microbial composition and matrix associated properties (e.g. resistance to antibiotics).

More projects details here: www.jsmc.uni-jena.de/phd-program/fellowship-application/vacant-projects/

We expect:

- a Master's degree (or equivalent) in the natural sciences (biology, chemistry). Candidates in the final stages of obtaining their degree are eligible to apply.
- desirable methodological skills: application of spectroscopy; knowledge about microbiological cultivation
- highly motivated individuals with an interest in joining one of the interdisciplinary research areas of JSMC
- the ability to work creatively and independently towards developing your own thesis project
- an integrative and cooperative personality with enthusiasm for actively participating in the dynamic JSMC Community
- excellent communication English skills, both written and spoken (instruction language at JSMC)

We offer:

- a highly communicative atmosphere within a scientific network providing top-level research facilities
- a comprehensive mentoring program with supervision by a team of advisors
- a top-level PhD training program with courses in state-of-the-art research technologies and soft skills
- Jena – **City of Science**: a young and lively town with dynamic business activities, successful and innovative scientific centers affiliated with the famous Friedrich Schiller University and a vibrant local cultural agenda.

The doctoral researcher position will be limited until December 31, 2018 initially. An extension up to three years may be possible in the course of the grant application in the frame of the German Excellence Strategy. The position will be financially supported corresponding to TV-L (salary agreement for public service employees). Severely disabled applicants with equal qualification and aptitude are given preferential consideration.

Applications are exclusively accepted via the online via the HKI-Online Application Portal:

<https://jobs.hki-jena.de/>

Please familiarize yourself with the currently available PhD projects and the application process as described on this website. Selected applicants will be invited to the JSMC recruitment meeting in Jena, Germany, on **December 14-15th 2017**. Awarding decisions will be announced shortly thereafter, and candidates are expected to be available to start their projects in early 2018.

Application deadline: October 22nd 2017