

## Job offer

Job-No. 152/2018

Deadline 07.07.2018



**FRIEDRICH-SCHILLER-  
UNIVERSITÄT  
JENA**

The Friedrich Schiller University Jena is a clearly structured classical university with more than 18000 students. It is among the oldest and most traditional universities in Germany. The Collaborative Research Centre (CRC) ChemBioSys of the Friedrich Schiller University Jena is seeking - *subject to the final DFG approval* - a

### **Scientific staff member (65% Ph.D. position)**

starting from 1 October 2018.



Albeit microalgae are key contributors to global carbon fixation, their molecular interactions with other microbes in various ecosystems are barely known. In the framework of the CRC ChemBioSys ([www.chembiosys.de](http://www.chembiosys.de)), we have investigated the interplay of the green alga *Chlamydomonas reinhardtii* with other microorganisms and found that *Pseudomonas protegens* strongly inhibits algal growth. The bacteria immobilize the algae by secreting cyclic lipopeptides that cause  $Ca^{2+}$  signals and deflagellation (Aiyar et al., Nat. Commun. 8, 1756, 2017). We now aim to understand the detailed molecular mechanism of this signal cascade as well as the role of additionally relevant secondary metabolites.

#### **Your tasks:**

- Construction of biosynthesis mutants
- Cultivation of mixed cultures composed of several microorganisms including biosynthesis mutants to investigate the influence of secondary metabolites
- Quantification, purification and structure elucidation of secondary metabolites
- Activity tests with purified compounds (inhibition of algal growth, deflagellation etc.)

#### **What we expect:**

- Diploma or Master's degree in biochemistry, biology or a related subject
- The candidate should be highly motivated. Experience with biochemical, analytic-chemical and/or molecular biology methods is desired. He/she should be familiar with the cultivation of microorganisms.
- A very good knowledge of English is expected.

#### **We offer:**

- A top-level research environment
- Close interactions with the involved institutions of the SFB ([www.chembiosys.de](http://www.chembiosys.de))
- Potential participation in graduate programs
- Attractive fringe benefits such as capital accumulation benefits, job tickets for reductions in public transport, employer-funded pension (VBL); university health promotion and a family-friendly working environment with flexible working hours
- The position will be financially supported according to TV-L (salary agreement for public service employees) till salary scale 13.

The employment is limited to three years. Applications from physically handicapped persons will be considered preferentially in case of equal qualifications and suitability. Have we sparked your interest? If so, please send your application (cover letter, complete CV, all certificates and credentials as well as recommendation letters of your supervisors from previous research, list of publications) to the address below, preferably in electronic form as a single pdf file. Include the job number 152/2018. The deadline is 07.07.2018:

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Please send your documents only as copies as they will be destroyed at the end. Please consider applications hints on: [www.uni-jena.de/stellenmarkt\\_hinweis.html](http://www.uni-jena.de/stellenmarkt_hinweis.html)