University of Stuttgart
Institute of Physical Chemistry

Position Opening for a PhD Student (m/f/d) in Physical Chemistry

Quantum Properties of Thin Films of Molecular Spin Qubits Probed by High Frequency Electron Spin Resonance

Project background:

I am setting up my new group as an independent junior researcher. Initially, the group will consist of two doctoral researchers and myself. The project aims to develop metasurface capable of focusing terahertz magnetic fields in a 2D region. These will be used to enhance the sensitivity of electron spin resonance experiments on thin films and monolayer molecular samples. Molecular spin quantum bits will be the main class of target materials to be studied.

Job description:

The project will include synthesis of inorganic molecular complexes, preparation of thin films by wet chemistry, spin-coating or thermal evaporation, surface characterization and electron spin resonance experiments.

The position will be available to start from the beginning of January 2024. The position is for 3 years. Remuneration will be based on the collective agreement for the public service of German federal states (*Tarifvertrag für den Öffentlichen Dienst der Länder* TV-L E13 50%).

Your profile:

I am looking for highly motivated individuals, holding a MSc degree in Chemistry or similar, who are interested in multidisciplinary projects at the interface of chemistry, physics and engineering. Ideally, but not necessarily, the applicant will have experience in surface deposition and characterization and/or inorganic synthesis and/or magnetic resonance techniques.

What I offer:

- Supportive research environment in a young researcher group
- Excellent working environment and employment conditions
- State-of-the-art facilities and cutting-edge research projects
- Ample funding, and possibilities to visit laboratories and conferences abroad
- Close and personal scientific mentorship

About Stuttgart University:

Stuttgart is one of Europe's most vibrant economic centres. The university offers the best possible research and learning environment and extensive support for international students. The Institute is located on the Vaihingen scientific campus, in a pleasant green area well connected to the city.

I look forward to receiving your application, which should include 1) a detailed curriculum vitae, 2) a statement of research interests, containing a short description of your background, motivation, and skills, 3) meaningful summary of your master thesis and 4) names and addresses of two contacts for references. Please send it as one pdf file by email to:

Dr. Lorenzo Tesi
Emmy Noether Group Leader
lorenzo.tesi[at]ipc.uni-stuttgart.de

The review of applications will begin immediately and continue until the position is filled.