

The Chair of Biogenic Functional Materials at TUM Campus Straubing for Biotechnology and Sustainability is offering a

Bachelor / Master Thesis Project – New Fluorescent proteins for BioLEDs

Are you passionate about innovation?; Do you love to develop applied science with environmental impact?; Do you use multidisciplinary thinking to solve professional questions?; Are you able to appreciate the beauty of nature's answers to its many challenges?; Would you like to innovate in an international and highly collaborative environment? Then the Chair of Biogenic Functional Materials (BFM) lead by Professor Dr. Rubén D. Costa at the Technical University of Munich (TUM) is the perfect place for your future. BFM offers state-of-the-art infrastructure comprising three inter-disciplinary and inter-connected laboratories focused on the synthesis and engineering of biogenic and sustainable photo-electro-active materials, mechanical/ spectroscopic/ electro-chemical characterizations, and the engineering of lighting and photovoltaic devices with researchers from around the world. We are located at the young TUM Campus Straubing, aiming to become the European leader in developing sustainable technologies and their economic implementation. Learn from Biology, think like a Chemist, and handle like an Engineer...are you ready?

Background: Biotechnology, Chemistry, Biochemistry, or similar

Project Description: Fluorescent protein-based bio-phosphors applied as color converters are considered front-runners in sustainable lighting and photovoltaics. We are searching for a student that wants to cross the line between spectroscopy and protein engineering to characterize and modify new fluorescent proteins for bio-phosphors. The project goes from protein production characterization to steady-state and time-resolved spectroscopy. The proteins will be tested to overcome thermal and photodegradation.

A successful project ends with a technical/proceeding paper and one or more author contributions to the articles of the group in artificial evolution.

For questions, please contact:

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