### **Impressions of Former Participants**

Since 2008, Finding Nano has given students from around the world an opportunity to meet and learn at this international technology center.

"I liked the exposure to a wide range of thriving research centers in Munich and the rare opportunities we had to speak to experts in their respective fields." Hui Qing Yap, University of Illinois, Urbana-Champaign, USA, sophomore

"Finding Nano opened up a world of possibilities for me. Between the in-depth nanotechnology coursework, the opportunity to have a hands-on laboratory experience, and the visits with global companies and research groups it is an amazing program in and of itself. Munich is such a cultured and fun city with easy access to the rest of Europe that it broadened my sense of the world and gave me the opportunity to explore an international career-path." Matthew Morton, Northwestern University, USA, junior



#### **Scientific Program**

Prof. Matthew Grayson (Northwestern University, Visiting Professor TUM) Dr. Gregor Koblmüller, Prof. Paolo Lugli (TUM)

#### **Scientific Affiliates**

Prof. Martin Stutzmann, Prof. Gerhard Abstreiter (TUM)

TUM International Office
Summer University

# ТИП

# Six Week Summer University

## **Finding Nano**

Discovering Nanotechnology and Culture in Germany

June 17th to July 28th 2013

## Contact

Technische Universität München International Office Summer University

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### About Technische Universität München

Having earned the German Excellence Award in 2006 and 2012, the Technische Universität München is a leading university in Germany and Europe, serving as an important global player in the international world of science and technology.

#### Electronic Properties of Nanoengineered Materials (NanoSCI)

The first section focuses on the physics, materials science and engineering methodologies of solid-state, semiconductor-based nanostructures. The second section considers alternative perspectives arising from the varied applications of nanomaterials, in sciences, electronic devices, or quantum logic. The course has been structured to be of interest to electrical or chemical engineers, materials scientists, physicists, and chemists, with the team of lecturing staff drawn from the TUM and leading US universities. (30 Lecture Hrs = 2 Semester Credit Hrs/1 Quarter Course Credit)

### Nanotechnology in Germany: Implementing Science, Research and Technology in Germany (NanoTECH)

This course gives students an overview of the technological landscape of Germany, with an emphasis on nanotechnology. Students perform a one week nanotechnology lab project of their choice (nanoimprinting, organic sensors, or photovoltaics). Excursions to industrial sites (GE Global Research, BMW), research laboratories (e.g. Max-Planck-Institute, Nanosystems Initiative Munich) and start-up technology companies (Attocube) lead to a deeper understanding of Germany's position in the technological world while informing students of international job and research internship opportunities. (30 Lecture hours = 2 Semester Credit Hours/1 Quarter Course Credit)

#### **German Language Course**

The ability to use German for communicative purposes provides students with a greater access to German culture. A comfortable working knowledge of German and a familiarity with German culture prepare the students for an increasingly international working environment. Language courses are offered at beginner, intermediate, and advanced levels. (50 Lecture hours = 3 Semester Credit Hours/1.5 Quarter Course Credits)

#### German Cultural Program

Visits to cultural sites give both an introduction to the cultural and political profile and to the importance of technology in the development of the arts and the architecture in history (Nuremberg, Augsburg). Social events complement the daily life experience and create opportunities to interact with German students at TUM. (Visits are a required component of the German Language course)

English is the language of instruction for the courses NanoSCI and NanoTECH. The intensive German language courses will be taught exclusively in German with the express goal of encouraging students to achieve a good level of communicative competence.

#### Accommodation

Students live in student dormitories or in rooms in private/semi-private dormitories of international housing programs.

#### Requirements

Undergraduates of science and engineering who have completed an introduction to quantum mechanics or quantum chemistry. German language course: no prerequisites.

#### **Program Fee for Six Weeks**

#### € 3300

#### Program fee includes:

TUM Workshops in Nanoscience and Nanotechnology, German language course, German culture and history program, excursions, health insurance, accommodation in a dorm, half-board (Mo-Fri), public transportation pass.

#### How to Apply

Please contact TUM Summer University for the application form: sommeruni@zv.tum.de

#### Application Deadline: March 15th 2013

#### **Passport and Visa Requirement**

Please make sure that you have a passport (valid until March 2014) or that you apply for a new one on time (see the new passport regulations).