#### **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. Jose Garrido, Prof. Paolo Lugli, Dr. Ian Sharp (TUM)

#### **Scientific Affiliates**

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

#### **TUM International Office**

Summer University



Six Week
Summer University

## **Finding Nano**

Discovering Nanotechnology and Culture in Germany

June 11th to July 22nd 2012

#### Contact

Technische Universität München International Office Summer University

Gabelsbergerstraße 39 D-80333 München Tel +49.89.289.22151

sommeruni@zv.tum.de www.tum-summer.com



#### **About Technische Universität München**

As one of only three universities distinguished with the German Excellence Award in 2006, 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)

This course introduces students to the rapidly developing field of nanoengineered materials with special focus on their electronic properties. The course is of special interest to electrical engineers, materials scientists, physicists and the like. Fundamental aspects of the electronic properties of these materials, as well as fabrication processes and applications will be equally discussed. A lecture series on the state-of-the-art will give students direct exposure to cutting-edge researchers. (30 Lecture hours = 2 Semester Credit Hours/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, nextnano3) 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 included in German language credits)

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 as quickly as possible.

#### **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 2012**

Early admission applications accepted starting January 1st 2012.

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

Please make sure that you have a passport (valid until March 2013) or that you apply for a new one on time (see the new passport regulations). Students from countries requiring a visa should apply for early admission in January.