PROJEKT DIVISION

Nanomeasurement and Nanopositioning Technolody, Nanotools

A1 Metrology of NPM Machines
Prof. Grünwald, Dr. Füßl

A2 Nanomeasurement Technology Nanocontact Systems
Prof. Jäger, Dr. Manske

A5 Nanopositioning Systems for Large Movement Ranges
Prof. Bertram, Dr. Schäffel

A7 Control and Feedback Control Plan
Prof. Sawodny

A8 Multi Functional Nano Analytics
Prof. Ambacher

Construction, Technology and Materials

B1 Dynamics of NPM Maschines
Prof. Zimmermann

B2 Nanoconstruction
Prof. Höhne, Prof. Theska, Dr. Brix

B3 Materials and Surfaces
Prof. Knedlik, Prof Kern, Dr. Spieß

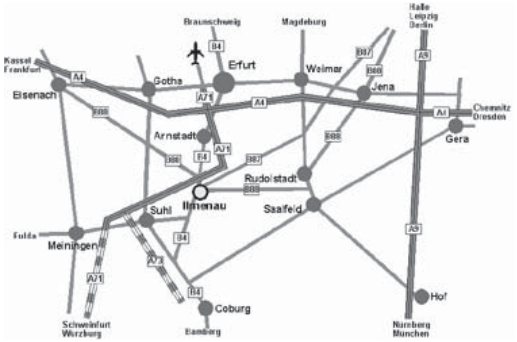
B5 Tribologic Properties
Prof. Schäfer, Prof. Scherge

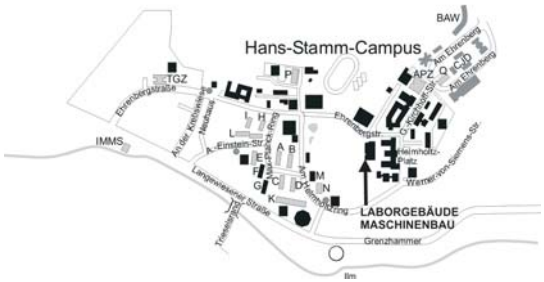
Signal Processing, System Control and User Interface

C1 High-performance Information Processing with Integrated Systems
Prof. Fengler

C2 Sensor-oriented Data Logging and Processing
PD Dr. Franke

C5 Design- and Knowlege-based Test Planning
Prof. Linß





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WORKSHOP

SONDERFORSCHUNGSBEREICH

SFB 622

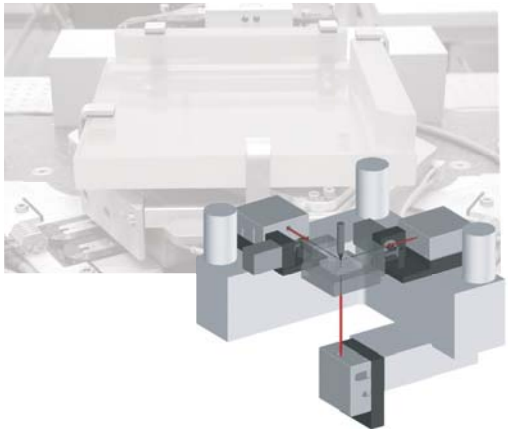
Nanopositionier- und Nanomessmaschinen

The first so-called Sonderforschungsbereich ("collaborative research centre", abbr. SFB) of the TU Ilmenau is being sponsored by the German Research Foundation (DFG) in its the second sponsorship period from July 2005 to June 2009. In the SFB 14 departments of the Faculties of Mechanical Engineering, Electrical Engineering, Computer Science and Automation, Mathematics and Natural Sciences as well as the Institute for Microelectronic and Mechatronic Systems Ilmenau are working together on solutions to the various challenges facing the SFB. The SFB spokesman is Prof. Gerd Jäger, director of the Institute of Process Measurement and Sensor Technology.

Nanotechnology is one of the main points of research at the TU Ilmenau. The great economic potential of nanotechnology is the primary reason for national and international efforts in nanomeasurement and nanopositioning technology, potential that is estimated by leading scientists at approx. US$ 700 - 800 thousand million long-term (10 - 15 years).

The primary purpose of the SFB is the development of scientific and technological fundamentals for the design and implementation of nanopositioning and nanomeasuring machines (NPM machines). These machines are increasingly being used to carry out analytical operations with great precision and superior dynamics in future-oriented technological applications such as in semiconductor technology; extreme UV, electron and x-ray lithography; nanoimprinting lithography; nanostructuring; nanofabrication; wafer-level testing; micromechanics; crystallography; and mineralogy as well as in bio-technology and genetic engineering. Because of the many challenges associated with these applications, the NPM machines must fulfil demands for increasingly large areas of movement with extreme accuracy and high positioning speeds and must also be able to integrate innovative, developmental sensor systems and nanotools (processing tools).

WORKSHOP



Dr. Dante J. Dorantes-Gonzáles

Tecnologico de Monterrey
Campus Guadalajara
Institute for Technological Entrepreneurship
Center for Innovation
México City, Mexico

23. August 2006
09:00 Uhr

TU Ilmenau
Newtonbau
2010

Speak about following topics

- Research and Development strengths of Monterrey Tech (R&D centers, Institutes, and ransfer center)
- Other academic and liaison competitive advantages (Technological Entrepreneurs Program, Industrial Reconversion Program, etc)
- Initiatives and proposals for collaboration
- Preliminary arrangement document