



Workshop on Advanced Methods for Interpretation of TEM, X-Ray and SIMS Measurements in Nano and Atomic Scale

1-3 June 2005, INSTITUTE OF PHYSICS, PAS
Warsaw, Poland

<http://info.ifpan.edu.pl/cepheus/Workshop/WORKSHOP2005.htm>

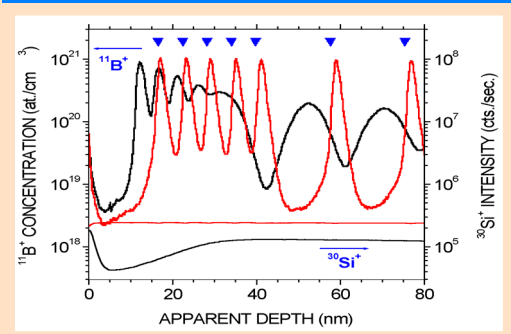
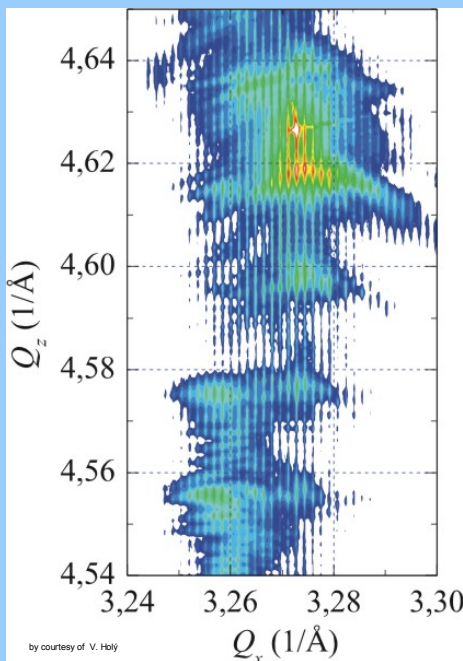
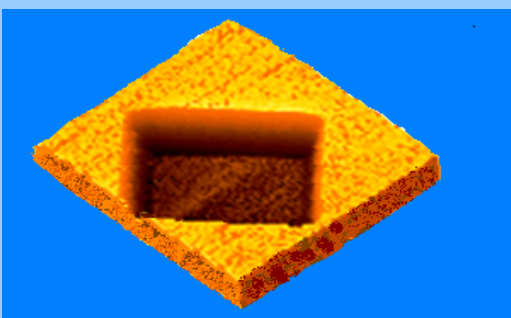
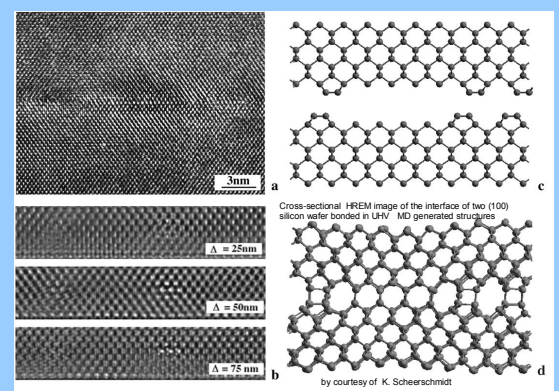
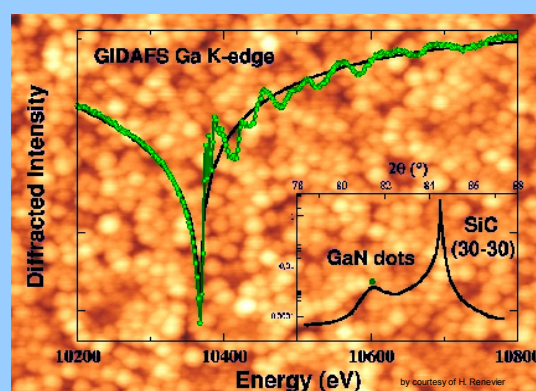
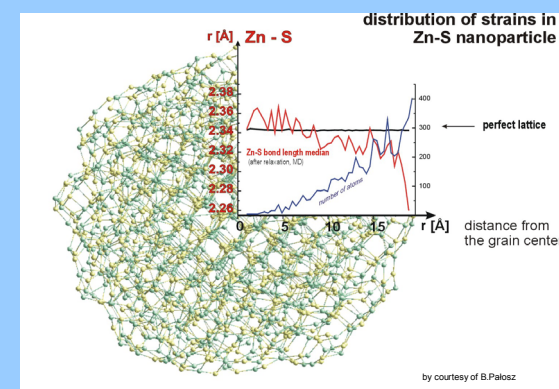
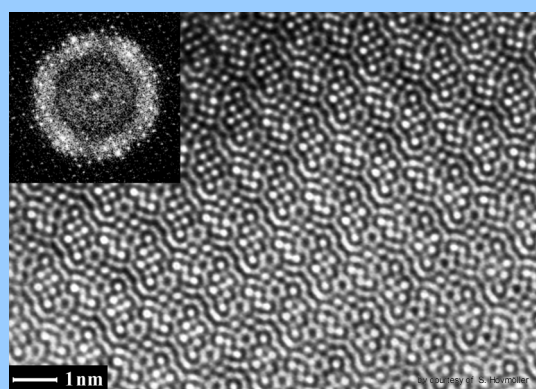
Chair Person : S.Kret E-mail: kret@ifpan.edu.pl

Methods:

- Synchrotron Radiation (XRSR, EXAFS, GIDAFS)
- Transmission Electron Microscopy (EELS, TEM, HRTEM)
- Secondary Ion Mass Spectroscopy (SIMS)
- Advanced Processing of Raw Data
- Modeling :
 - Molecular Dynamics (MD)
 - Finite Element Methods (FEM).

Object of Investigations:

- Quantum Heterostructures
- Integrated Devices
- Nanocrystalline Materials



Invited Speakers:

- M. Bersani** (Povo-Trento, Italy)
Ultra shallow depth profiling by SIMS in microelectronic materials and processes
- S. Hovmöller** (Stockholm, Sweden)
Computer aided electron crystallography as powerful tool to structure determination
- V. Holý** (Masaryk, Czech Republic)
X-ray investigation of self-organized semiconductor nanostructures
- M. Hýtch** (Vitry-sur-Seine, France)
Geometric phase analysis for measuring strain in nanostructures: challenges and recent advances.
- I. Demchenko** (Warsaw, Poland)
EXAFS as a tool for investigation the local environment of Ge atoms in buried low-dimensional structures
- P. Galindo** (Cádiz, Spain)
The Peak Pairs strain mapping algorithm and its application to HRTEM images
- E. Knudsen** (Roskilde, Denmark)
Algorithms and instrumentation for generating 3d grain maps in polycrystals by 3DXRD
- B. Palosz** (Warsaw, Poland)
Diffraction study of nanocrystals under ambient and non-ambient conditions
- H. Renevier** (Grenoble, France)
Grazing Incidence Anomalous Diffraction and Diffraction Anomalous Fine Structure (GIDAFS) to study nanostructures
- A. Rosenauer** (Bremen, Germany)
Composition evaluation by lattice fringe analysis (CELFA) in semiconductor nanostructures investigation
- A. Sanchez** (Universidad de Cádiz, Spain)
Plasmon peak in EELS. The beginning of a new technique to determine the strain in semiconductor heterostructures
- K. Scheerschmidt** (Halle, Germany)
Molecular dynamics modeling for enhanced interpretation of TEM images

