

Mini-symposium

Contemporary approaches to atomic scale crystal growth simulations

25 February 2016

LOCATION: Institute of Physics (IP), Polish Academy of Sciences (PAS) in Warsaw, room D

ORGANIZERS:

Magdalena Załuska-Kotur and Filip Krzyżewski

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Institute of Physical Chemistry, Bulgarian Academy of Sciences

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Center for Nonlinear Phenomena and Complex Systems, Université Libre de Bruxelles

Program

9:30 Opening Welcome note by the organizers

9:35 James F. Lutsko (CNPCS, ULB): *The effect of thermal fluctuations on impurity-driven crystal growth cessation.*

10:15 Łukasz A. Turski (Center for Theoretical Physics, PAS): *Crystal growth as seen from dinosaur view*

10:45 Anna Hoser (Chemical Faculty, Warsaw University): *The role of the lattice energy calculations in the crystal growth study*

11:15 Ioana Sovago (Chemical Faculty, Warsaw University): *Aspirin crystallization*

11:45 Magdalena Załuska-Kotur (IP, PAS): *Cellular automaton based atomistic scale model for fast and effective modelling of unstable vicinal crystal growth.*

Coffee break

12:30 Stanisław Krukowski (Institute for High Pressure Physics, PAS): *Electronic contribution to energy of adsorption on semiconductor surfaces - consequences to crystal growth mechanism*

13:00 Paweł Strąk (Institute for High Pressure Physics, PAS): *Polar Al-terminated AlN (0001) surface in the presence of nitrogen*

13:30 Filip Krzyżewski (IP-PAS): *Various surface morphologies observed during simulations of GaN crystals growth*

Lunch break

14:40 Vesselin Tonchev (IPC-BAS): *Diffusion-limited vs. kinetics-limited: What we learned from the Sato-Uwaha model of unstable vicinal crystal growth*

15:10 Marcin Mińkowski (IP, PAS): *Self-organizing structures in immiscible crystals*

15:30 Roundtable discussion: Collaboration prospective in the EU context