

# TOPICAL CONFERENCE ON MAGNETISM, CRYSTAL GROWTH, PHOTONICS

Tel-Aviv University - 7.10.2010 Sponsored by IVS (SCIENCE & TECHNOLOGY)

8:30 Registration Computer&Software Bldg.- Rosenblat Auditorium

9:40 Welcome to the Conference by Prof.Guy Deutscher, Vhairman of the Scientific Commiittee

Introductory remarks: Prof. Ehud Heyman, Dean Faculty of Engineering, TAU

10:00 **INVITED KEYNOTE SPEAKER: MAGNETISM @ CRYSTAL GROWTH**

Prof. Ivan Schuller, Physics Department and Center for Advanced Nanoscience University of California-San Diego

10:40 Coffee Break

**MAGNETISM**: Chairperson: Prof. A.Gerber: Invited speakers

11:00 E. Zeldov,WIS, Scanning Nanoscale SQUID on a tip for study of vortex dynamics

11:20 G. Markovich, TAU, Studying magnetization dynamics in magnetic nanoparticles using STM

11:40 A. Sharoni, BIU, Spin injection through transparent interfaces

12:00 L. Klein, BIU, The planar Hall effect sensor and memory applications

12:20 A. Kohn, BGU, Characterization and Modeling of Exchange-Bias using Polycrystalline  $\text{Ir}_{0.22}\text{Mn}_{0.78}$  Antiferromagnetic Thin Films

12:40 B. Almog, TAU, Probing the Cooper pairs spin structure near superconductor/ferromagnetic contacts

**CRYSTAL GROWTH**: Chairperson: Prof.E,Grunbaum: Invited speakers

11:00 A. Gelfgat, TAU, Modeling of crystal growth from the melt

11:20 M. Roth,HUJI,Growth-related Ferroelectric domain structure of KTP-type nonlinear optical and electro-optic crystal

11:40 Y.Golan, BGU,Chemical Epitaxy of Semiconductor Thin Films

12:00 M.BenShalom,TAU, Epitaxial laser Deposition of Oxide Perovskites

13:00 – 15:00 Lunch and **POSTER SESSION**

15:00 **INVITED KEY-NOTE SPEAKER**: Photonics and Plasmonics

Prof. David Bergman, TAU,

15:40 Coffee Break

**PHOTONICS**: Chairperson: Invited speakers

16:00 Dan Oron, WIS, Multiexcitons and the microscopic origin of blinking in colloidal quantum dots

16:25 Uriel Levy, HUJ,The importance of polarization & modal degrees of freedom for tight confinement of light.

16:50 Koby Sheuer, TAU, Circular Bragg nano-lasers, physics and applications.

17:15 Best Student Prize award ceremony

**Scientific Committee**: Guy Deutscher (TAU-Chairman), Sacha Gerber (TAU), Michael Roth (HUJI), Ehud Galun (Elbit Systems), Enrique Grunbaum (TAU-coordinator)

**POSTER PRESENTATIONS are requested on the following subjects**:

Spintronics, Magnetism and Superconductivity, Magnetic Storage, Local Probe Microscopy of magnetic materials, Non-linear Optical Crystals, Crystal Growth of Epitaxial films, Modeling of Crystal Growth Photonics, Plasmonics, Meta-Materials

Students wanting to participate in the **poster presentation prize** should: apply with supervisor certifying to be student.

**Deadline 21.September**, PDF of the poster (With presenting author underlined) to be sent by e-mail to:

Prof. Enrique Grunbaum: <enrique@eng.tau.ac.il> and IVS Secretary Galit Weizman <[ivs.sec@gmail.com](mailto:ivs.sec@gmail.com)>.

**Registration Deadline**: Send check on name "IVS" to:Galit Weizman, IVS Secretary , Faculty of Chemistry, Technion, Haifa32000:

Scientists 250 NIS - Emeritus&Students 200 NIS. Payment at registration desk: +10%