

Research & Services | Crystal Physics Laboratory (Yissum)

code: 9-2006-212

[Michael Roth](#), HUJI, Faculty of Science, Applied Physics Department

Categories

Crystal physics, crystal growth, high-temperature superconductors, nonlinear optical crystals, electro-optic crystals, relaxor ferroelectrics

Objective/function

- The laboratory is active in the field of crystal growth and characterization of electro-optic, nonlinear optical, ferroelectric and high-temperature superconducting materials

Research provided

- Crystal growth of oxides from melt and high-temperature solutions
- High-temperature sintering of materials
- Fabrication of superconducting wires and tapes
- Electrical and optical characterization of crystals and devices (spectrophotometry, polarized optics, dielectric, acoustic emission, dilatometric and low-temperature resistivity measurements)

Advantages

- The laboratory focuses on the structure-property relationships of single crystals and polycrystalline materials versus their main processing parameters

Client record

- Raicol Crystals, Ltd - Crystal growth of nonlinear optical KTP crystals
- Synergy, Ltd - Preparation of sintered high-temperature superconducting materials

Available equipment

- Acoustic emission and dilatometric measurements systems (high-temperature furnaces and low-temperature cryostat)
- High-temperature electrical furnaces
- Mechanical equipment for metal wire and tape pulling and rolling
- Optical microscope
- RF generator
- UV-VIS spectrophotometer

Staff

- Vladimir Beilin, PhD
- Evgeny Dul'kin, PhD
- Evgeny Mojaev, PhD

Contact

- Michael Roth, PhD, mroth@vms.huji.ac.il

Contact for more information:

Itzik Goldwasser , VP, Head of Research Collaborations , +972-2-6586685

Yissum Research Development Company of the Hebrew University of Jerusalem
Hi-Tech Park, Edmond J. Safra Campus, Givat-Ram, Jerusalem P.O. Box 39135, Jerusalem 91390
Israel Telephone: 972-2-658-6688, Fax: 972-2-658-6689