Research & Services | The Dielectric Spectroscopy Laboratory (Yissum)

code: 34-2007-1736

Yuri Feldman, HUJI, School of Computer Science and Engineering, Applied Physics

Categories	Broad band dielectric spectroscopy, time domain dielectric spectroscopy, soft condensed and condensed matter physics, relaxation dynamics, biosystems, and nanocomposites

Objective/function

- The laboratory is an internationally recognized leader in the field of dielectric spectroscopy (DS), the theoretical development of soft condensed matter physics, condensed matter physics, electromagnetic simulations and biophysics

Key research areas

- Broad band dielectric spectroscopy in time and frequency domain
- Dielectric polarization and relaxation in soft condensed matter
- Transport, relaxation and strange kinetics in complex disordered materials
- Dipolar nanostructures and impurity ions in ferroelectric crystals
- Relaxation dynamics and mesoscopic features of glass forming systems
- Dielectric properties of biological systems *in vitro* and *in vivo*
- Broad band dielectric spectroscopy on chip
- Services and measurements in dielectric spectroscopy for industry and academia
- Courses available on the undergraduate and graduate level

Advantages

- State-of the-art facilities
- Experienced, highly trained staff

Client record

Former clients include: Agar Corporation (USA), Akron University (USA), AVX, Ben Gurion University, Bergen University (Norway), Centro Plus (Switzerland), Clarkson University (USA), De Montfort University (Leicester, UK), EDCOT, Kodak (USA), Ministry of Defense, Old Dominion University (USA), Pendragon (Switzerland), Rafael, Solianis (Switzerland), Sony (Japan), South Hampton University (UK), Technion, Tel Aviv University, Tessera (Israel), and Tokai University (Japan)

Available equipment

- Broad band dielectric spectrometer BDS 80 (NOVOCONTROL) in the frequency range 10 mHz – 1.8 GHz with automatic temperature control by QUATRO Cryosystem (temperature range -150^{00}
- Two time domain dielectric spectrometer in the frequency range 100 kHz - 12 GHz (temperature range -30^{0}C - +100^{0}C)

- Low-frequency time domain spectrometer (10^{-6}-100 Hz)

Staff

- Alexander Puzenko, PhD
- Anna Greenbaum, PhD
- 4 PhD students
- 5 MSc students

Contact

- Yuri Feldman, PhD, yurif@vms.huji.ac.il
- Link to homepage http://aph.huji.ac.il/feldman/research.htm

Contact for more information:
Itzik Goldwaser, 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