



ARIK YOCHELIS



Nonlinear Dynamics in Energy and Biology

B.Sc. 1993-1996, Physics, BGU

M.Sc. 1996-1998, Physics, TAU

Ph.D. 1999-2003, Physics, BGU; with Ehud Meron

Postdocs 2004-2009, Technion, UC Berkeley, UCLA

Industry R&D 2009-2012, Landa Labs (Rehovot)

Senior Lecturer @ BGU since Aug. 2012

Research: soft matter solar devices, energy storage, electrochemistry, nonlinear waves, global bifurcation theory



Group scope and members:

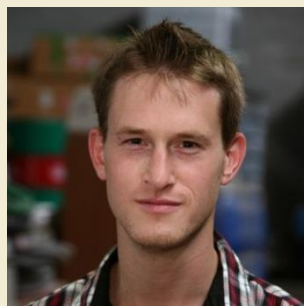
- Mechanistic understanding of physicochemical based renewable energy devices and biological systems by closely working with experimental groups
- Basic aspects of pattern forming systems and bifurcation theory



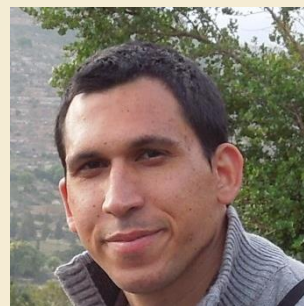
Dr. Yotam Avital,
Postdoc,
PhD BGU



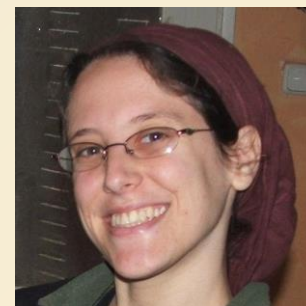
Dr. Erik Bernitt,
Postdoc,
PhD U. Bremen



Alon Shapira,
Ph.D. Student



Yuval Edri,
Ph.D. Student
(@ Physics)



Sariel Bier,
M.Sc. Student



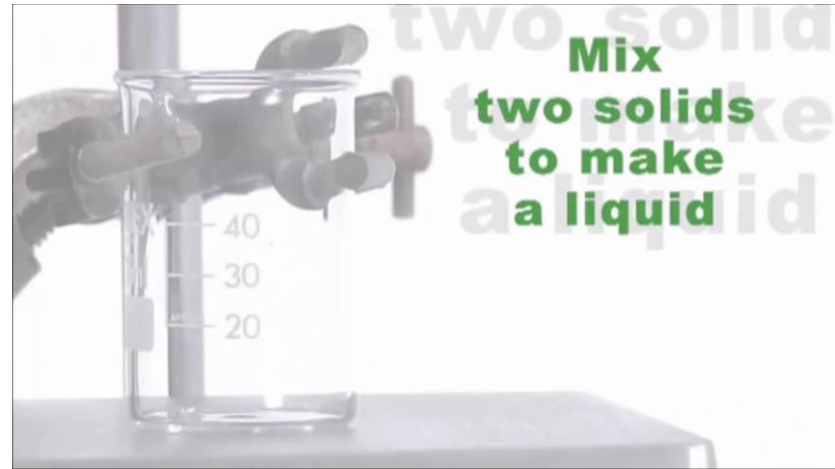
Paulino Castellero,
Ph.D. visiting
student

Physics, UNAM
Cuernavaca, México



Specific Projects

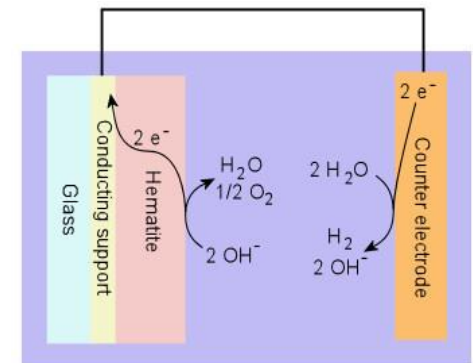
- **Soft-matter energy devices** where material morphology is coupled to Coulombic interactions, such as organic photovoltaics and ionic liquids



University of Leicester

<http://www.youtube.com/watch?v=jORKluf5SI4>

- **Photo-electro-chemical** water splitting: generating H_2 fuel



- **Pulses, pacemakers and waves** in biological systems: actin waves and amplification in hearing

