

The department of chemistry, faculty of Natural Sciences  
Ilse Katz Institute for Nanoscale Science and Technology  
Symposium in honor of our distinguished guest

**Prof. Devens Gust**

Director, ASU Center for Bio-Inspired Solar Fuel Production, Regents' Professor,  
Foundation Professor of Chemistry and Biochemistry, Arizona State University

**Frontiers in artificial photosynthesis:  
From solar fuels to photodynamics**

Tuesday March 15, 2011, IKI Auditorium (building 51, room 015),  
Ben Gurion University of the Negev

**9:30: Coffee and refreshments**

**9:45 – 10:00: Greetings** - Prof. Amir Sagi, Dean of the faculty of Natural Sciences  
Prof. Yuval Golan, Head of the Ilse Katz center for Nano-Science and Technology

**Session 1: 10:00 – 12:30** Session chair: Ira Weinstock

**Photosynthesis-inspired energy production**

Devens Gust (ASU)	Solar Power Plants: What Photosynthesis Can Teach Us About Energy Conversion
Frank Wuerthner (Wuertzburg)	Self-assembled Antenna Systems for Artificial Light Harvesting
Haim Levanon/ Manuela Jakob (HUJI)	Novel rotaxanes and catenanes: Time-resolved EPR study
Boris Rybtchinsky (WIS)	Self-assembled nanostructures in aqueous medium: noncovalent synthesis for artificial photosynthesis
Itai Carmeli (TAU)	Photosystem I – solid state hybrid systems, photocurrent from a single PS I and the extraordinary photopotential of PS I crystals

**12:30 – 13:30: Lunch**

**Session 2: 13:30 – 16:00** Session chair: Rafi Shikler

**Bio- and solar fuels**

Moti Hershkowitz (BGU)	Renewable and Alternative Liquid Fuels for Transportation
Lital Alfonta (BGU)	Site Specific Wiring of Redox Enzymes in Biofuel Cells
Ronny Neumann (WIS)	Photocatalytic Reduction of Carbon Dioxide
Igor lubomirsky (WIS)	large scale energy storage by electrochemical conversion of CO <sub>2</sub> to CO
David Cahen (WIS)	Photovoltaics as beta site for Artificial Photosynthesis

**16:00 – 16:30: Coffee and refreshments**

**Session 3: 16:30 – 18:00** Session chair: Nurit Ashkenasy

**Photodynamics**

Avigdor Scherz (WIS)	Tumor ablation by focal photogeneration of oxygen and nitric oxide radicals in situ-from bench to bedside
Benjamin Ehrenberg (BIU)	photosensitization in membranes and nanostructures
Avraham Parola (BGU)	Fluorescence for the study of anti- angiogenic drug - mechanism