

The Hebrew University of Jerusalem  
The Authority for Research and Development  
<http://ard.huji.ac.il>  
Tel: 972-2-658-6625/6/8; Fax: 972-2-652-9764

June 2013

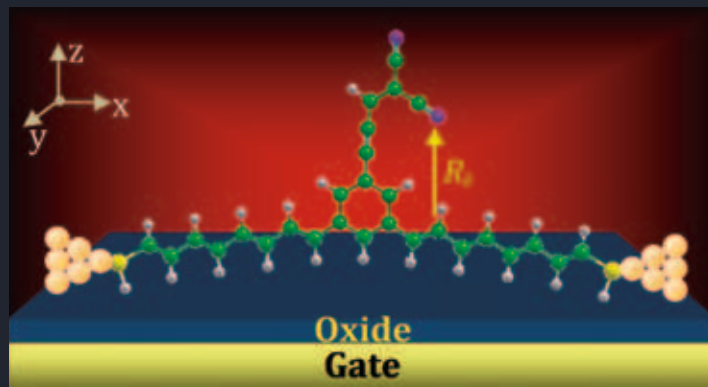


The Authority for  
RESEARCH AND DEVELOPMENT

# THE KLACHKY PRIZE

FOR THE ADVANCEMENT  
OF THE FRONTIERS OF SCIENCE

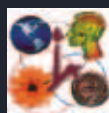
AT THE HEBREW UNIVERSITY  
OF JERUSALEM



תשע"ג June 2013



האוניברסיטה העברית בירושלים  
The Hebrew University of Jerusalem



The Authority for  
RESEARCH AND DEVELOPMENT

# KLACHKY

# PRIZE

## for the Advancement of the Frontiers of Science

The Klachky Prize for the Advancement of the Frontiers of Science is an annual prize founded by the late Ms. Rachel Klachky. The prize is given to Hebrew University faculty members or academic units for their achievements in:

*The Advancement of Science*

*The Advancement  
of Scientific Research*

*The Advancement  
of Scientific Knowledge*

*The Advancement  
of the Frontiers of Science*

*New Academic Developments*

*Academic Ventures*



## The Donor

Rachel Klachky (1925-2001) was born in Mexico. Married to the late Engineer Manuel Klachky, she was a central figure in the Jewish Community of Mexico, and was one of the founding members of the Mexican Friends of the Hebrew University.

In 1997, she received an Honorary Fellowship from the Hebrew University for her outstanding contributions to the State of Israel and the Hebrew University of Jerusalem. She wholeheartedly

supported worthy causes, including the absorption of new immigrants, scholarships for students, and support of various scientific research projects, and studies on superconductivity at the Hebrew University.

After she passed away, her sons, Roberto and Leopoldo, continued her legacy of support to the Hebrew University of Jerusalem. The Klachky Prize has been awarded since 2003.

# The Klachky Prize for 2013

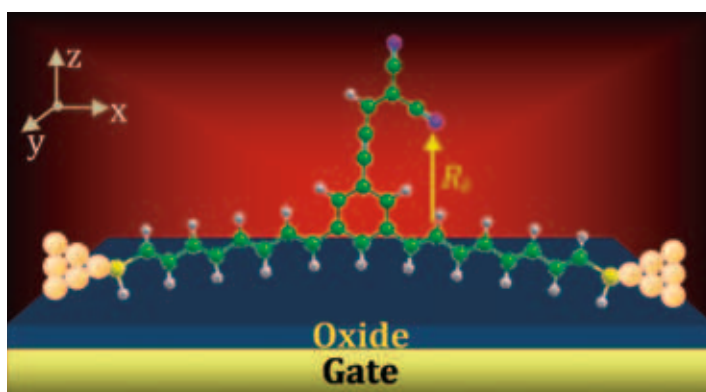


**Prof. Roi Baer**

*Director of the Fritz Haber Center for Molecular Dynamics,  
Institute of Chemistry*

*Contribution: Developed new theoretical and computational techniques that enable determination of the energy levels of charge carriers in large molecular systems and nanocrystals. These methods help scientists design new types of organic and inorganic solar cells with increased efficiency.*

*Many of the challenges facing chemists, materials scientists and biologists involve the detailed understanding of the energetics and dynamics of charge carriers in large molecules, molecular films and nanocrystals. Theoretical techniques are very important for analyzing experiments and predicting the behavior of new systems.*



*Prof. Baer has developed new theoretical-computational methods that allow the accurate determination of charge carrier energy levels, their alignment across interfaces and their dynamics following optical excitations. His methods are being used in many laboratories around the world to predict and understand processes in organic and dye sensitized solar cells, in biological systems and in molecular junctions.*

## FORMER HONOREES

- 2012      **Dr. ERAN MESHORER**  
Head of the Stem Cell Chromatin Laboratory at the Department of Genetics, Faculty of Science  
Contribution: Using genome-wide approaches and sophisticated imaging techniques.
- 2011      **Prof. DAVID WEISBURD**  
Director of the Institute of Criminology, Faculty of Law  
Contribution: Pioneering research on white collar crime, policing and crime prevention.
- 2010      **Prof. MERAV AHISSAR**  
Head of Program in Cognitive Sciences, Faculty of Social Sciences  
Contribution: The neuro-cognitive basis of reading disability - the "anchoring-deficit" hypothesis.
- 2009      **Prof. ISAIAH TUVIA (SHY) ARKIN**  
Chairman of the Silberman Institute of Life Sciences, Faculty of Science  
Contribution: Structural biology of membrane proteins, focusing on pathogen's ion channels and ion pumps.
- 2008      **Prof. URI BANIN**  
Alfred & Erica Larisch Memorial Chair in Solar Energy, Institute of Chemistry and the Center for Nanoscience & Nanotechnology, Faculty of Science  
Contribution: Major advancements in the science and technology of nanocrystals and the development of hybrid multifunctional nanoparticles.
- 2007      **Prof. HOWARD (CHAIM) CEDAR**  
Department of Developmental Biology and Cancer Research, Faculty of Medicine  
Contribution: Establishing the cornerstone of epigenetics and its role in human development.