# Curriculum Vitae Evgeny Katz

Department of Chemistry & Biomolecular Science

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## Education:

- 1976 B.Sc. & M.Sc. in Chemical Engineering D.I. Mendeleyev Chemical Engineering University, Moscow, Russia
- 1983 Ph.D. in Chemistry A.N. Frumkin Institute of Electrochemistry, Russian Acad. Sci., Moscow, Russia

## **Appointments:**

- 2006-present Milton Kerker Chaired Professor, Department of Chemistry & Biomolecular Science, Clarkson University, Potsdam, NY (tenured)
- **1993-2006** Senior Research Associate (1993-2000) / Research Associate Professor (2000-2006), Institute of Chemistry, Hebrew University of Jerusalem, Jerusalem, Israel
- 1983-1991 Senior Research Scientist, Institute of Photosynthesis, Russian Acad. Sci., Pushchino, Russia
- Visiting Positions: Alexander von Humboldt Fellow, München Technische Universität, Department of General Chemistry & Biochemistry, Freising, Germany (1992-1993); CSIC Fellow, Instituto de Catalisis, CSIC, Madrid, Spain (1992); Visiting Scientist, Hebrew University of Jerusalem, Israel (1991-1992).

### **Research Interests:**

- *Biocomputing* based on enzymes, logic gates and arithmetics based on bioelectronic systems, self-organized & self-responding bioelectronic systems.
- *Biosensors* based on integrated systems with complex molecular architecture, self-powered biosensors, switchable & tunable biosensors, multi-signal digital biosensors with built-in logic.
- *Biofunctionalized nanomaterials* (metallic nanoparticles, magnetic nanoparticles, semiconductive quantum dots, nanovires) for bioelectronic and biomedical applications.
- *Bionanoengineering*, functional interfaces composed of biomaterials & nano-objects, supra-molecular hybrid systems with complex molecular/biomolecular architecture.
- *Bioelectronics & optobioelectronics*, switchable & tunable electrobiocatalytic and photobiocatalytic systems.
- *Bionanotechnology for bioelectronic applications*, electrical wiring of enzymes by nano-objects, amplification paths for bioanalytical systems, nanocircuitry generation based on biotemplates & biocatalysis.

#### **Professional Honors, Fellowships and Affiliations:**

Lifetime Research Achievement Award (Clarkson University), **2014**; Professor Accreditation by Agència per a la Qualitat del Sistema Universitari a Catalunya (AQU Catalunya, Spain), **2006**; Kaye Awards for Scientific Innovations, Hebrew University, Israel, **1995** and **2004**; Research Award, Alexander von Humboldt-Stiftung, Germany, **1993**; Research Award, CSIC, Spain, **1992**; Institute Recognition Awards, Institute of Photosynthesis, Russian Acad. Sci., **1983**, and **1989**; State Medal of Inventor, USSR, **1989**.

#### Synergistic Activities (selected):

Vice Chair of "Bioelectrochemistry" Division of the International Society of Electrochemistry;

- Member of Editorial Boards: IEEE Sensors Journal, Sensors and Actuators B, Biosensors and Bioelectronics, Electroanalysis, Sensors, International Journal of Electrochemical Science, Sensors & Transducers Journal; International Journal of Unconventional Computing
- Membership: American Chemical Society, Electrochemical Society, International Electrochemical Society



### **Teaching Accomplishments:**

Development and establishment of new courses on bioelectronics and bionanotechnology.

Publications: 382 refereed papers and book chapters, 23 patents; 141 presentations at conferences);

**Hirsch-index: 75.** Dr. Katz was included in the list of **top cited chemists with the worldwide rank 384**: <u>http://www.rsc.org/chemistryworld/news/2007/april/23040701.asp</u> (see the downloadable pdf file at the web page bottom).

Dr. Katz is included as # 63 in the list of **world's top 100 chemists** over the past 10 years as ranked by the impact of the published research from approximately a million chemists indexed by **Thomson Reuters**: <u>http://sciencewatch.com/dr/sci/misc/Top100Chemists2000-10/</u>

## **Research Funding:**

Evgeny Katz has been inducted into the Clarkson's Million Dollar Club for the significant amount (over 1 million) of external funding that his research activities have garnered in the last 5 years from: NSF, ONR, USAR, SRC and industry.