

CURRICULUM VITAE, David Cahen

Born: Vught - Netherlands, August 14, 1947
Nationality: Israeli; Married, + 4
Present Employment: **Prof., Weizmann Institute of Science** (1998 -)
Past Employment: Assoc.Prof., Weizmann Institute of Science (1993 - 1997)
Sr. Scientist, with tenure, Weizmann Inst. (1983 - 1992)
Sr. Scientist, temp., Weizmann Inst. (1978 - 1982)
Scientist, temp. Weizmann Institute of Science (1976 - 1978)
Postdoc, Hebrew University / Weizmann Inst. (1975 / 1974)

EDUCATION

<u>School</u>	<u>Period</u>	<u>Field</u>	<u>Degree</u>
Northwestern University	'69 - '73	Chemistry/Mater.Research	Ph.D.
(includes and Hebrew University of Jerusalem	'69 - '70 1972 @ Stanford U '66 - '69	Physical, Inorg. Chem. Chemistry & Physics	M.Sc. B.Sc.

Recent VISITING APPOINTMENTS

- Princeton Univ. (USA)	from 2001, yearly	Molecule/semiconductor interfaces
- Chiba Univ. (Japan)	2007-2010	Univ. Visiting Prof.
- Univ. of Otago (New Zealand)	3/01; 3/04	Molecules on semiconductor nanoparticles
- Victoria Un/ McDiarmid Nanocentre (NZ)	2-3/'04	Nanoscience
- Univ. Rome "La Sapienza"	9-10/04	Molecular electronics
- TU Delft (Holland)	8-9/88; 4/99 - 11/00	<i>HiT_csuperconductors</i> ; nm, mesoporous systems
- EPFLausanne	6-10/'97; '98-'99	Nanoscale and Mesoporous optoelectronic materials and solar cells
- Univ. NSW (Sydney)	1-2/04	Advanced concepts in photovoltaics

Recent TEACHING EXPERIENCE

Feinberg Graduate school	1979-2002	"Principles of Materials' Chemistry"
	1989- 2001	"Advanced Topics in Materials' Chemistry"
	1997- 2006	"Solid State Physics for Chemists" (<i>with S. Vega</i>)
	1996, 2007	Student Seminar (<i>with H. Scher</i>)
WIS Science Teaching Dept.	1990-1998	"Chemistry of Solids" for <u>high school teachers</u>
U.of Otago	2001	"Principles of Materials' Chemistry"
Northwestern U. (1995); TUDelft (2000)		"Advanced Topics in Inorganic Chem. /Materials Res."

PAST RESEARCH TOPICS

'90 - '99	Materials & Defect Chemistry of Opto-Electronic Materials; Fundamental Solid State Chem.Limits to device miniaturization & stability; How stable are p/n junctions?
'84 - '91	Energy Balance & Loss Mechanisms in Photovoltaic devices
'75 - '86	Photoelectrochemical Solar Cells; Photocalorimetric (Bioenergetics) of Photosynthesis
'74 - '78	Photosynthesis (<i>Hebrew Univ. and Weizmann Inst.</i> '74-'76 with I. Ohad and S. Malkin)
'69 - '73	Low dimensional Pt-oxides and coordination complexes, synthesis & properties (<i>Northwestern Univ.</i> with J.A. Ibers and J. B. Wagner); XPS & UPS studies of mixed and partial oxidation states (<i>Northwestern Univ.</i>)
'72	High Temperature Superconductors (<i>Stanford Univ.</i> , with W.A. Little, J. P. Collman., R. H. Bube)
'71	Crystallographic Computing, Absorption corrections (<i>SUNY Buffalo</i> , with P. Coppens)

PRESENT RESEARCH TOPICS

- **Alternative Energy: Novel Photovoltaic (Solar Cell) Materials, Interfaces, Devices**
- **Molecular and Molecule-based optoelectronics:** Understanding electron transport across molecules

Adviser/co-adviser to > 45 postgrads, including several at foreign institutions, >20 postdocs, >30 visiting and summer students, and 10s of high school, vocational and jr. college pupils & students.

~ 220 regular publications (articles and communications/letters); ~ 25 reviews and book chapters; ~ 100, mostly peer-reviewed conference proceedings; 19 patents.

LANGUAGES

English, Hebrew, Dutch	Read, Speak, Write
French	Read; Speak; Write (fair)
German	Read; Speak;

Recent FELLOWSHIPS, AWARDS

1998	Polish Jewish Soldiers (London, UK) prize for Electronic Device research
from 2002	Rowland and Sylvia Schaefer Professorial Chair in Energy Research
2003	Edwards Research Excellence Prize of Israel Vacuum Society

Present/ Recent SERVICE and related APPOINTMENTS

- Weizmann Inst. Dept. of Materials & Interfaces, <i>Chair</i>	2007-
- Weizmann Inst. Alternative Energy Research Initiative; <i>Scientific director</i>	2006-
- Nanosciences Lab., <i>acting director</i> , 2002-3; <i>chair</i> , users committee	2003-
- Weizmann Inst. Electron Microscopy unit, <i>director</i> 95-97; users committee <i>chair</i> 97-98; <i>member</i>	1999-
- Weizmann Inst. Scientific Staff organization, <i>board member</i>	1997-
- Feinberg Graduate School, Board of Studies of Chemical Sciences, <i>member</i> , 1996 - 1998; <i>chair</i> ,	1998-2004
- Int'l. Advisory Board, Int'l Confs. Ternary and Multinary Compounds, <i>member</i>	1991-
- Israel Ministry of Infrastructure and Energy; Scientific advisory committee, <i>member</i>	2003-
- Israel Ministry of Education, Nat'l Chemistry Advisory committee, <i>member</i>	2002-2004

Consultant & advisor on energy-related issues to various companies; *Chair* , Scientific Advisory Board, OrionSolar Ltd.

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