

CURRICULUM VITAE

PERSONAL DATA

Date & Place of birth 05.07.1962; Dushanbe, USSR
Marital status: married + 2
Office Address: School of Chemistry, Tel-Aviv University, Tel-Aviv
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Languages: Hebrew, Russian, English

EDUCATION

2/1991 - 2/1994 Tel-Aviv University, Tel-Aviv, Israel
Postdoctoral training in quantum chemistry,
Name of Supervisor: Prof. U. Kaldor
9/1979 - 8/1988 Leningrad State University, Leningrad, USSR
Ph. D. in theoretical & mathematical physics (1988)
Name of Supervisor: Prof. M. Adamov
B.S. & M.S. in theoretical & computational physics (1985)
Names of Supervisors: Prof. L. Labzowsky, Prof. M. Adamov

ACADEMIC AND PROFESSIONAL EXPERIENCE

12/2005 - Present School of Chemistry, Tel-Aviv University, Tel-Aviv, Israel
Principal Research Fellow (KAMEA Research Professor)
4/1998 – 12/2005 School of Chemistry, Tel-Aviv University, Tel-Aviv, Israel
Senior Research Associate (Senior Lecturer)
3/1994 - 3/1998 School of Chemistry, Tel-Aviv University, Tel-Aviv, Israel
Senior Scientific Researcher
9/1989 - 8/1990 The Municipal Center for Scientific & Technical
Activity of Young Scientists, Dushanbe, USSR
Manager of the Computational Laboratory
9/1988 - 8/1989 Leningrad State Pharmaceutical & simultaneously Leningrad
State Ship Building Institutes, Leningrad, USSR
Senior Physicist and Assistant of Professor of Physics

TEACHING EXPERIENCE:

1985 - 88 Leningrad State University, Lecture Course on Quantum Chemistry
1988 -89 Leningrad Pharmaceutical Institute, Course on General Physics
1988 - 89 Leningrad Shipbuilding Institute, Course on Modern Physics
1998 - 03 Tel-Aviv University, General Chemistry Laboratory (*lab assistant*)
2004-Present Tel-Aviv University, Computational Chemistry Laboratory (*lab header*)

RESEARCH INTERESTS AND EXPERIENCE:

- New theoretical methods for treatment of relativistic, QED and correlation effects
- Benchmark ab-initio calculations of atomic and molecular properties
- Structure and properties of relativistic quantum dots

INVITED SCIENTIFIC VISITS WITH SEMINARS:

Winter 1996	University of Bonn, Bonn, Germany
Summer 1997	University of Helsinki, Helsinki, Finland
Summer 1999	Free University of Amsterdam, Amsterdam, Netherlands
Summer 1998;1999	Simon Fraser University, Burnaby, BC, Canada
Summer 2000	University of Puerto-Rico, San-Juan, Puerto-Rico, USA
August 2001-9	University of South Denmark, Odense, Denmark
May 2002	University of Florida, Gainesville, USA
May 2003, Dec 2009	Petersburg Nuclear Physics Institute, Petersburg, Russia
May 2004	Louis Pasteur University, Strasbourg, France
July 2005	GSI, Darmstadt, Germany
July 2007	FIAS, Frankfurt, Germany
August 2007	University of Calgary, Calgary, Canada
August 2010	University of Nevada, Reno, USA
May 2011	University of St Petersburg, St Petersburg, Russia
August 2012	University of Vienna, Vienna, Austria
July 2013	University of Banska Bystrica, Slovakia
July 2016	The Comenius University, Bratislava, Slovakia
August 2016	PU, PNPI, St. Peterburg, Russia
April 2016	University of Tbilisi, Tbilisi, Georgia
Summer 2017-19	Groningen University, Groningen, The Netherlands
August 2017	Prague University, Prague, Czech Republic
November 2017	Moscow University, Moscow, Russia

M.Sc. STUDENTS SUPERVISED :

T. Zelovich "*Properties of Heavy Elements by the Relativistic Coupled Cluster Methods*", 2010

PhD. STUDENTS SUPERVISED :

A. Borchshevsky "*Extension of the intermediate Hamiltonian Fock space coupled cluster method and application to problems of heavy and superheavy elements*", 2008
H. Yakobi "*Extensions of the relativistic multireference coupled cluster method and applications to properties other than energy*" , 2009

RESEARCH GRANTS:

1997-2000	INTAS, Brussels, ``Generalized Relativistic Effective Core Potentials for High-Accuracy Coupled-cluster Calculations".
1997-2000	Israel Science Foundation, ``High Accuracy Computation of Atomic and Molecular Properties Including Relativistic Effects".
1999-2003	U.S.--Israel Binational Science Foundation, ``High Accuracy Computation of Inner-Shell Processes in Atoms and Molecules".
2000-2003	Israel Science Foundation, ``Novel Coupled Cluster Methods".
2003-2005	U.S.--Israel Binational Science Foundation, ``High Accuracy Treatment of Molecules and Clusters Containing Heavy Atoms".
2003-2007	Israel Science Foundation, ``High Accuracy Coupled Cluster Calculations of Short-Lived Atomic and Molecular States".

2019-2023 LISA - Laser Ionization and Spectroscopy of Actinides
2020-2022 Special Scientific Grant of the Russian Government

FELLOWSHIPS, HONORS AND AWARDS:

1982-1985 The Lenin Fellowship for outstanding BS and MS students
1995 The Gishur Fellowship of the Israeli Ministry of Science
1996-1998 The Gileadi Fellowship of the Israeli Ministry of Absorption
2000 The Lize Meitner Prize for Computational Quantum Chemistry

PRESENTATIONS IN INTERNATIONAL SCIENTIFIC MEETINGS:

1988 International Seminar for theory of atoms and atomic spectra, Tbilisi, Georgia.
1994 The 34 Sanibel Symposia, Ponte Vedra Beach, Florida, USA
1994 The International Meeting on Molecular Spectroscopy, Semolnice, Slovakia
1994 The 8 International congress of Quantum Chemistry, Prague, Czech Republic
1995 Workshop on Non-Perturbative Many-Body Methods, Bad Honnef, Germany
1995 Conference on relativistic effects in chemistry, Castelvecchio Pascoli, Italy
1996 WATOC-96, Jerusalem, Israel
1997 Research conference on superheavy elements, Granada, Spain
1997 The 9 International Congress of Quantum Chemistry, Atlanta, Georgia, USA
1997 The Electron Correlation Workshop, Cedar Key, Florida, USA
1998 The 12 Canadian Spectroscopic Conference, Vancouver, BC, Canada
1999 Conference on relativity and correlation, Acquafredda di Maratea, Italy
2000 The 10 International Congress of Quantum Chemistry, Nice, France
2000 Fourth Workshop on Quantum Systems, Marly-le-Roi, France
2001 Relativistic Effects in Chemistry and Physics, Kerkrade, The Netherlands
2001 Finish Symposium on Quantum Chemistry, Kuusamo, Finland
2002 Israel Theochem 2002, Hebrew University, Jerusalem, Israel
2003 Fock School on quantum and computational chemistry, Novgorod, Russia
2003 Workshop on electron correlation methods, Bad Herrenalb, Germany
2003 REHE-2003 conference, Berlin, Germany
2003 XI International congress of Quantum Chemistry, Bonn, Germany
2004 HAMEC meeting, Cambridge, England
2004 Malrieu conference on correlation effects, Lagrasse, France
2005 Nanoscience Workshop, Karlsruhe, Germany
2006 XII International congress of Quantum Chemistry, Kyoto, Japan
2006 Chemical accuracy and beyond, Satellite meeting of ICQC-XII, Tokyo, Japan
2006 ICCMSE symposium, Crete, Greece
2006 QSCP-XI, St Petersburg, Russia
2007 REHE-2007, Obernai, France
2007 SAMQCP, Torun, Poland
2008 Coupled Cluster theory meeting, Seattle, USA
2008 6-th Congress of TCP Society, Vancouver, Canada
2008 TACC, Shanghai, China
2008 WATOC-2008, Sidney, Australia
2008 Satellite meeting WATOC-2008, Auckland, New Zealand
2009 Workshop on electron correlation methods, Oslo, Norway
2009 XIII International congress of Quantum Chemistry, Helsinki, Finland
2010 REHE-2010, Beijing, China
2011 WATOC-2011, Santiago-DeCampostella, Spain

- 2012 XIV International congress of quantum chemistry, Boulder, Colorado
2014 WATOC-2014, Santiago, Chile
2014 STC 2014, Austria, Vienna
2014 REHE-2014, Smolinice, Slovakia
2015 TAN-2015, Urabandai, Fukushima, Japan
2015 XV International congress of quantum chemistry, Beijing, China
2015 New Frontiers of Relativistic Quantum Chemistry, Beijing, China
2015 RAEST-2015, Nanjing, China
2015 Open Shells, open questions, Middelfart, Denmark
2016 Nobel Symposium NS160, Lund, Sweden
2016 8th Molecular Quantum Mechanics - MQM 2016, Uppsala, Sweden
2016 Nuclear Physics 2016, St. Petersburg, Russia
2016 ISTCP 2016 - Grand Forks, ND, USA
2017 WATOC 2017, Munich, Germany
2017 REHE-2017, Marburg, Germany
2017 Nuclear Physics-2017, St. Petersburg, Russia
2018 RAS Council of heavy-ion physics meeting on SHE research, Dubna, Russia
2018 HCI, Lisbon, Portugal
2018 ICQC-18, Menton, France
2019 TAN-2019, Wilhelmshouse, Germany
2019 Mendeleev Congress, St. Petersburg, Russia

PUBLICATIONS:

131 publications in academic periodicals and books (attached)