Curriculum vitae

Jiří Pittner

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Born: 1968; Marital Status: married, 2 children

Employment:
Post-doc in the group of Prof. Dr. V. Bonačić–Koutecký, Humboldt University Berlin (1997)
Researcher at the J. Heyrovský Institute of Physical Chemistry, AV ČR (Nov. 1997 - August 2005).
Head of the Department of Theoretical Chemistry at the J. Heyrovský Institute of Physical Chemistry, AV ČR (since Sept. 2005)

Education:

1986-91	Undergraduate studies: Department of Chemistry, School of natural Sciences, Charles University Prague, Czechoslovakia;
1991-96	Ph. D. study with Prof. Dr. V. Bonacic–Koutecky, at the Free University Berlin and Humboldt University Berlin. Thesis titled "Ab Initio Study of Optical Properties of Neutral and Charged Pure and Mixed Alkali Metal Clusters" was defended in December 1996 with result "summa cum laude".
2013	DSc. title, Academy of Sciences of the Czech Republic Thesis entitled: "Multireference Hilbert Space Coupled Cluster Methods"
2015	Habilitated as Docent of Physical Chemistry, Faculty of Science, Charles University Prague

Scientific Awards:
Carl–Ramsauer Prize for the Dissertation, Berlin, 1997.
Josef Hlávka Award for Junior Scientists, Prague, 1999.
Award of the Czech Learned Society for Junior Scientists, Prague, 2001.
Otto Wichterle Award for Junior Scientists, Prague, 2003.

Memberships and conference organizations:
Member of the Editorial Board of the Collection of Czechoslovak Chemical Communications, 2001-2011.
Member of the Scientific Council of the J. Heyrovský Institute, 2004-2006.
Member of the American Chemical Society, 2011.
Member of the Board of the J. Heyrovský Institute, 2012-2016.
Co-organizer of the Central European Symposium of Theoretical Chemistry (CESTC) in Hejnice, 2008.
Co-organizer of the Czech-Slovak-Japan Symposium on Theoretical Chemistry (JCS) in Liblice, 2011.
Co-organizer of the Central European Symposium of Theoretical Chemistry (CESTC) in Znojmo, 2013.
Co-organizer of the ISTCP 2016 symposium in Grand Forks, ND, 2016.

Research Interests:
Development and implementation of accurate multireference quantum chemical methods.
Non-adiabatic molecular dynamics of systems undergoing photochemical reactions.
Algorithms for quantum chemical calculations on (future) quantum computers.

Pedagogical Activity: Charles University Prague
Exercises to the lecture "Chemical structure", Faculty of Science, W.S. 1998–2012
Lecture "Theoretical and computational chemistry", Faculty of Science, S.S. 2003, 2005, 2006, 2007, 2009, 2011, 2012, 2013, 2014, 2015
Lecture "Numerical and algorithmic methods of quantum chemistry", Faculty of Science, W.S. 2000, 2011.
Lecture "Second quantization, diagrammatic methods, perturbation and CC theories", Faculty of Science, W.S. 2001, 2006, 2007, 2012
Lecture "Analytic gradient techniques in quantum chemistry", Faculty of Science, W.S. 2002, 2009
Lecture "The symmetric and unitary groups in quantum chemistry", Faculty of Science, W.S. 2003, 2004, 2013
Lecture "Introduction to density functional and density matrix functional theory", Faculty of Science, W.S. 2005, 2008, 2014
Lecture "Quantum computers and algorithms", Faculty of Mathematics and Physics, W.S. 2010,2013.

Supervised PhD. Students:
Ondřej Demel (2006); Kiran Bhaskaran-Nair (2011); Jan Šmydke (2011); Jiří Brabec (2012); Libor Veis (2012); Jakub Višňák, Marek Pederzoli, Andrej Antalík

Recent Invited Lectures:
3rd Japan-Czech-Slovak symposium, Bratislava 2009
Eighth International Conference of Computational Methods in Sciences and Engineering (ICCMSE), Kos, 2010
American Chemical Society Spring Meeting, Anaheim 2011
The Seventh Congress of the International Society for Theoretical Chemical Physics (ISTCP-VII), Tokyo, 2011
Recent advances in many electron theories - II (RAMET-II), Puri (India), 2011
Central European Symposium on Theoretical Chemistry (CESTC 2012), Mariapfarr, 2012
The Eigth Congress of the International Society for Theoretical Chemical Physics (ISTCP-VIII), Budapest, 2013
5th JCS Symposium on theoretical chemistry, Nara 2013
World Association of Theoretically Oriented Chemists (WATOC) 2014, Santiago, Chile, October 2014
ICQC 2015 Satellite symposium: Novel Computational Methods for Quantitative Electronic Structure Calculations, Kobe, June 2015
Theory and Applications of Computational Chemistry (TACC) 2016, Seattle 2016

Awarded Research Grants:
Development of the MR BWCCSD method, Grant Agency of the Czech Republic, 2000–2002
Analytic gradient of the MR BWCCSD method, Grant Agency of the Czech Republic, 2004–2006
MR BWCC method with connected triple excitations, Grant Agency of the Academy of Sciences of the Czech Republic, 2004–2007
Computer-aided implementation of multireference coupled cluster methods, Grant Agency of the Czech Republic, 2007-2010
Efficient methods for ab-initio non-adiabatic molecular dynamics, Grant Agency of the Academy of Sciences of the Czech Republic, 2008-2011
Quantum Chemistry on Quantum Computers, Grant Agency of the Czech Republic, 2008-2012
Explicitly correlated multireference coupled cluster methods, Grant Agency of the Czech Republic, 2011-2015
Ab initio molecular dynamics with non-adiabatic and spin-orbit effects applied to time-dependent fluorescence, Grant Agency of the Czech Republic, 2012-2016
Hilbert-space multireferenční coupled cluster metody, jejich paralelní implementace a aplikace na excitované stavy, MŠMT-AMVIS, 2013-2015.
Local multireference coupled cluster methods based on the pair natural orbital approach, AVČR - DAAD, 2014-2015.
DMRG-based externally corrected coupled cluster methods, Czech Science Foundation, 2016-2018