

Filip Uhlík

curriculum vitae

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- 1972 born in Brno, Czech Republic
2003 Ph.D. in physical chemistry at Charles University in Prague
1995–1997 researcher at the Institute of Chemical Processes, Czech Academy of Sciences
1997– researcher at Charles University in Prague (associate professor since 2015)

Research experience

- 1990 research stay at MPI für Chemie, Mainz, Germany (2 weeks)
1992–1993 research stay at UMIST, Manchester, United Kingdom (3+2 months)
2003–2004 research stay at University of Bergen, Norway (2+2 weeks)
2007–2008 postdoc at University of Milano-Bicocca, Italy (18 months)
–2023 author and co-author of about 200 scientific publications and 50 conference communications with over 1980 citations (without self-citations), H-index 28, E-distance 5 (list of publications is available at www.researcherid.com/rid/G-7395-2012)

Major research interests

systems: fullerenes, water, atmospheric complexes, Ge/Si quantum dots, polymer nanostructures
methods: fundamental and applied quantum theory, spectroscopy, statistical thermodynamics, computer simulations (Monte Carlo methods, molecular, Langevin and Brownian dynamics, quantum and path-integral Monte Carlo), discrete and numerical mathematics, signal processing, analysis of algorithms, parallel computing

Research projects

- 2003–2005 *Coarse-grained modeling of polymers* (GAČR 203/04/P117)
2005–2007 *Fullerenes and nanotubes as building blocks of nanotechnologies* (AVČR 1ET401110505)
2010–2012 *Computer studies of nanomaterials based on fullerenes* (GAČR P208/10/0179)
2014–2016 *Simulations of weak polyelectrolytes: Interplay of acid-base equilibria, ion correlations and polymer topology* (GAČR P208/14/23288J)
2016–2022 *Charles University Centre of Advanced Materials* (Ministry of Education, Youth and Sports, CZ.02.1.01/0.0/0.0/15_003/0000417, team member)
2022–2026 *Carbon molecular nanostructures in space* (COST, CA21126, secondary proposer)

Awards

Josef Hlávka award; “Talent” by the Ministry of Education Youth and Sports of the Czech Republic; prize for the best M. Sc. thesis in physical chemistry by the Czech Chemical Society

Teaching experience

Chemical Structure, Chemical Principles, Molecular Symmetry, Molecular Structure and Spectroscopy, Computer Programming Fundamentals I & II, Physics I & II (at the Department of Physical and Macromolecular Chemistry); supervision of *Software project* (at the Department of Software and Computer Science Education); supervisor of 7 bachelor, 4 master, 2 doctoral projects; advisor of 3 bachelor, 3 doctoral projects

Skills

languages: English (CEFR-C1), Russian (CEFR-B1)
programming: C/C++, Unix, TCP/IP, X window system, parallel programming, LISP, Prolog
organization of conferences: POLYAMPHI 2005, ECIS 2010, bMIS 2015 and 2017

References

- Prof. Leo Miglio (miglio@unimib.it)
University of Milano-Bicocca, Via Cozzi 53, 201 25 Milano, Italy
Prof. Alan Hinchliffe (alan.hinchliffe@umist.ac.uk)
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Contact

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