

Dr Wawrzyniec Niewodniczański

Education

Ph.D. in Chemistry (Quantum Chemistry), June 2008
Wroclaw University of Technology, Faculty of Chemistry

M.Sc. in Materials Science Engineering (Molecular Engineering), July 2002
Wroclaw University of Technology, Faculty of Fundamental Problems of Technology

Experience

[Booking.com](#) part of [Priceline.com](#) Cambridge, UK
System Administrator November 2008 - present

Prepare servers for web-facing and internal roles; Keeping documentation updated; Maintenance existing infrastructure; Improve performance of key systems.

Tools: Linux (CentOS, RedHat), Apache, Puppet, F5 BigIP & LVS loadbalancers, BIND, shell (bash, awk, sed), Python, MySQL, Mantis, JIRA, SVN, git, Sun & HP ILOM, RH Satellite Server, iSCSI, MacOSX, emacs, vi.

[CCDC](#) (affiliated to Cambridge University) Cambridge, UK
Product Support Engineer January 2007 - October 2008

Front-line support and generate the documentation for technical aspects of the CCDC products; Generating scheduled releases; Carry out testing and quality control; Prepare and help maintenance software build environment.

Tools: Windows, MacOSX, Linux (Debian, SuSE, RedHat), IRIX, Solaris, Wise Installer, Bash, Python, RT, Bugzilla, CVS.

[Wroclaw University of Technology](#) Wroclaw, Poland
PhD student duties October 2002 - November 2006

Research Assistant (CCMSI at Jackson State University, MS, USA, 2003, Institute of Macromolecules Chemistry, Prague, Czech Rep. 2004); Teaching Assistant (Computer Science II (Python), Chemistry); Linux Administrator (desktop & computational systems).

[IT-Zone](#) Wroclaw, Poland
Open Source Specialist October 2004 - June 2006

Consultation and training of various Open Source products.

Tools: Linux (Ubuntu, Debian, Suse, PLD), Python, shell, desktop programs (i.e. Gnome OpenOffice, Thunderbird, Firefox), server programs (i.e. Apache, Exim).

Dr Wawrzyniec Niewodniczański

Other work experience

- **Seller**
Wagon Trail Resort, Green Bay, WI, USA, (2001)
- **Guarian at Holiday Camps (Voluntary position)**
St. John Bosco Parish in Lubin Poland (1996,1997)

Additional Courses

Computer Science courses (Algorithms, Numerical Methods, Matlab, Unix, SQL, C/C++), 2001-2003

Wroclaw University of Technology, Faculty of Fundamental Problems of Technology

School of Multiconfiguration Methods, September 2002

Nicolaus Copernicus University

“Elements of enterprise and management”, 1994-1995

Salesians High School in Lubin

Skills

Languages: Polish (native), very good English, some experience with Russian and Italian.

Operating System: expert in Linux (Ubuntu, CentOS, RedHat, CRUX, Debian, SuSE), confident with MacOSX and Windows, experience with Solaris, IRIX and other UNIX environments.

Programing Languages: expert in shell scripts, very good in Python and \LaTeX , good in HTML/CSS, experience with Matlab, C++, C, Fortran, SQL.

Computer Tools: Vim, Emacs, GNUMake, GCC, RCS, CVS, SVN, git, Puppet, Nagios, Cactai, Wise Installer, FLEXIm, Bugzilla, Mantis, JIRA, RT, HP & Sun ILOM, F5 BigIP and LVS loadbalancers, RH Satellite Server.

Other Computer Skills: Open Source desktop environments (i.e. Firefox) & server applications (i.e. Apache, MySQL), queueing system, knowledge about Grid computing, distributing algorithms, numerical methods & data mining, DNS, DHCP.

Dr Wawrzyniec Niewodniczański

Awards

Rector's Award, Wrocław University of Technology, 2002;

Dean's Award, Faculty of Fundamental Problems of Technology, Wrocław University of Technology, 2002;

Primus Inter Pares Award, Wrocław University of Technology, 2002;

Minister of Education Scholarship, Wrocław University of Technology, 2001-2002.

Articles in scientific journals: Molecular Physics, Journal of Physical Chemistry A, Chemical Physics Letters, Journal of Molecular Modeling

Interests and Activities

Computers: Linux and Open Source, scalability, GRID computing;

Science: Astronomy, High-Tech, Quantum Chemistry, History, Geography;

Traveling: Chicago-San Diego by bus, from Poland to Scotland via Hungary and France by hitchhiking;

Science-Fiction; Politics; Photography; Sport: Cycling, Hiking, Basketball, Handball, Aikido.

Dr Wawrzyniec Niewodniczański

Academic Papers

W. Niewodniczański, W. Bartkowiak;

Theoretical study of geometrical and nonlinear optical properties of pyridinium N-phenolate betaine dyes.

Journal of Molecular Modeling, 13 (6-7) 793–800 (2007) [DOI](#)

B. Skwara, W. Bartkowiak, R. W. Gora, W. Niewodniczański, S. Roszak;

On the weak intermolecular interactions and their influence on the optical properties of unsaturated hydrocarbons. Part I – two body interactions.

Molecular Physics 104, (13-14), 2263–2271 (2006) [DOI](#)

B. Skwara, W. Bartkowiak, R. W. Gora, W. Niewodniczański;

Theoretical investigations of the intermolecular interactions between unsaturated hydrocarbons: n-conjugated and n-cumulated oligomers.

Annals of Polish Chemical Society, 4 662–666 (2005)

W. Bartkowiak, W. Niewodniczański, T. Misiaszek, R. Zaleśny;

First-order hyperpolarizability of pyridinium N-phenolate betaine dye: Ab initio study.

Chemical Physics Letters, 411 (1-3), 8–13 (2005) [DOI](#)

W. Niewodniczański, W. Bartkowiak, J. Leszczyński;

Reinvestigation of molecular structure and barrier to internal rotation of pyridinium N-phenolate.

Journal of Molecular Modeling, 11 (4-5), 392–397 (2005) [DOI](#)

W. Niewodniczański, W. Bartkowiak, J. Leszczyński;

Betaine dyes: molecular structure and barriers to internal rotations.

Annals of Polish Chemical Society, 2 894–898 (2003)

W. Bartkowiak, R. Zaleśny, W. Niewodniczański, J. Leszczyński;

Quantum chemical calculations of the first- and second-order hyperpolarizabilities of molecules in solutions.

Journal of Physical Chemistry A, 105 (47), 10702–10710 (2001) [DOI](#)