ROGER J-B WETS

Department of Mathematics, University of California, Davis

Fields of specialization *(constructive theory, numerics & applications)*: Equilibirum and optimization, especially in an uncertain environment; Variational Analysis; Statistical estimation, in particular with poor and extremely poor data information; Mathematical Finance.

Education

Ph.D. Engineering Sciences (1965), Univ. California, Berkeley, (G.B. Dantzig & D. Blackwell)
Licence, Applied Economics (1961), Université de Bruxelles, Belgium

Experience

Distinguished Research Professor of Mathematics, 2009-...;
Research Associate, Universidad de Chile, Centro de Modelamiento Matematico (1992-...)
& Instituto Sistemas Complejos de Ingeniera (2008-...);
& Chilean node: Institute for New Economic Thinking, Soros Foundation (2011-...);
Co-director, Financial Engineering & Risk Management, International University, Ho Chi Minh (2011-...);
Professor, University of California, Davis, 1984-1997, Distinguished Professor 1997-2009;
Academic Associate, IBM Watson Research Center, Yorktown Heights 1986-1994;
Project Leader, International Institute of Applied Systems Analysis, 1980-1984 (acting 1985-1987);
Professor of Mathematics, University of Kentucky, 1972-1984;
Ford Professor, University of Chicago, 1970-1972;
Boeing Scientific Research Labs, 1964-1970;
Operation Manager, Cartonneries d'Alsemberg (family-business), 1955-1960.

Honors & Awards:

1977-78 University Research Profesor, University of Kentucky
1982-1984 Guggenheim Fellow
1993 Foreign Member of the Ukrainian Academy of Sciences
1994 (SIAM/MPS) G.B. Dantzig Prize in Mathematical Programming
1998 Lanchester Prize (INFORMS) for the book 'Variational Analysis'
2003 Doctor Honoris Causa, Universität Wien
Others: 1975 CNRS Fellowship, Grenoble. 1983 Norwegian Research Fellowship. 1984 CNRS Fellowship, Paris IX (Dauphine). 1991 Erskine Fellowship (NZ), 2002 ISI Highly Cited (Mathematics), 2004 Pioneer Award from the Stochastic Programming Scoiety.
Distinguished Lectures: Duncan Lectures-Johns Hopkins University (March 2000), Baptist University of Hong Kong (January 2011), Polytechnic University of Hong Kong (February 2011), Ho Chi Minh International University (February 2011), New York University (March 2011), Ostrom Lectures-Washington University (April 2011), City University of Hong Kong (February 2013).

Grants-External Support:

National Science Foundation: 1971-2011
Air Force Office of Scientific Research: 1985-1993
World Bank, Debt Management Development Project: 1995-1998
Office of Naval Research (MURI): 1999-2005
Army Research Office: 2010-..., ARPA-E: 2012-...

Visiting Appointments (from one up to six months): University of Washington, University of California (Berkeley), Université de Grenoble, CORE (U. Louvain), Stanford University, Universität Köln, Universität Bonn, Centre de Recherche Mathématiques (Montréal), Université Monpellier II, Université Paris IX (Dauphine), University of New South Wales (Sysdney), Los Alamos National Laboratories, Tsinghua University (Beijing), Universität Wien, Christchurch University, Université Paris I (Sorbonne), Humboldt Universität (Stochastic & Finance, Berlin), Polytechnic University of Hong Kong, Eidgenssische Technische Hochschule (ETH) Zürich

Keynote and Plenary Lectures 2011-1990: International Seminar in Optimization and related Areas (Lima, October 2011), 28th Coloquio Brasileiro de Matematica (Rio, July 2011), Nonparametric Statistics and Geometry (Prague, August 2011), Continuous Optimization and Information-Based Technologies In the Financial Secto (Izmir, June 2010), Variational Analysis (Montpellier, September 2009), 25th Coloquio Brasileiro de Matematica (Rio, July 2005), International Conference on Complementarity Problems (Stanford, 2005), International Conference on Stochastic Programming (Praha 1986, Udine 1992, Vancouver 1998, Berlin-Keynote 2001, Tucson-Keynote 2004), German/Austrian Mathematical Society (Vienna, 2001), Bank Association Institute Meeting (New York 2000), AMS/Hong Kong Mathematical Society Meeting (2000), International Conference on Variational Inequalities (Hong Kong, 1998), Belgo-French-German Optimization Confernce, (Namur, 1998), Forum on Sovereign Debt Management (Washington, 1997), 1er Encuentro Latino IberoAmericano de Optimizacion (Conception, Chile 1997, Mathematical Programming Symposim (Den Haag 1970, Bonn 1982, Tokyo 1988 and Ann Arbor-Keynote 1994), Data Analysis and Applied Stochastic Processes (Grenada 1991, Chania 1993), Convergence en Analyse Multivoque et Unilaterale (Lumigny, 1992), Australia/NZ Applied Mathematics Meeting (Hammer Spring, NZ 1991).

Tutotial Lectures (2012-1990): Ecole CEA-EDF-INRIA (Centre d'Energie Atomique, Cadarache, June 2012), Computing with Uncertainty (IMA- Minneapolis 2010), International Conf. on Continuous Optimization (Santiago 2010), Decision Making under Uncertainty (Banco Central de Chile 2008), Multi-Agent Optimization (Mathematics and the Environment: Energy Risk, Environmental Uncertainty and Public Decision Making, Banff 2007), Solving deterministic and stochastic equilibrium problems (Frontiers in Mathematics and Economics, Vancouver, 2006), Coping with Uncertainty (1*st* International Conf. on Continuous Optimization, Troy, 2004), Approximation for Variational Problems (International Workshop on the Mathematics of O.R., Amsterdam, 1990).

Editor/Associate Editor: Mathematics of Operations Research (area editor: 1989-1992), Mathematical Programming (1977-1987), Operations Research (1975-1984), SIAM J. on Control and Optimization (editor: 1979-1985), Annals of Operations Research, SIAM J. on Optimization (1990-1999), Set-Valued Analysis (1998-), Journal of Applied and Pure Mathematics (2006-), Journal of Convex Analysis (co-managing editor: 1994-).

Other Activities: Visiting lecturer for SIAM (1968-1971); COSP∼Committee on Stochastic Programming (Founder 1982, President 1989-1992), Chair of the SIAM/MPS-G.B. Prize Committee (1982 & 1985); Advisory board: Center for Optimization and Combinatorics, U. of Florida; Co-director (1988-1990) of the program in Decision Sciences at SISA (Trieste, Italy); CNRS-evaluation commitees for some CNRS-research centers (2005-2006). Founder and CEO of EpiRisk Research (2006-. . .). Organizer or co-roganizer of (too numerous) meetings in Systems Analysis, Operations Research, Optimal Control and Nonlinear Analysis. Designed the programs in stochastic dynamics and mathematical finance (nascent) at Univ. of California, Davis.

Students: W. Ziemba (Univ. of British Columbia) 1968. L. Van Thienen (Belgian Ministry of Finance) 1972. R. Wright (Lemoyne College) 1976. F. Louveaux (Economics, U. de Namur) 1976. G. Salinetti (Statistics, U. La Sapienza, Roma) 1977. F. Solis (Banco de Mexico) 1981. A. Makowski (E.E., U. of Maryland, College Park) 1982. W. Klein Haneveld (OR, Universiteit Groeningen) 1981. K. Back (Economics, Rice University) 1982. J. Wang (Mathematics, Nanjing University) 1983. S. Wallace (Informatics, U. Lancaster) 1984. A. King (IBM-Watson Lab, Yorktown Heights) 1986. S. Wright (U. of Miami, Ohio) 1988 [*]. R. Lucchetti (Mathematics, Polytecnico de Milano) 1990. A. Bagh (U. of Kentucky, Lexington) 1994. M. Dong (Cadence Systems, San Jose) 1996. L. Korf (U. of Colorado, Denver) 1998. M. Casey (Raytheon, Los Angeles) 2000. S. Lucero (Center for Neuroscience, U. of California, San Francisco) 2004. M.Y. Nie (Transportation Engineering, Northwestern U.) 2006. S. Tian (EpiRisk Research LLC, Orinda, CA), 2007.

[*] acted as co-advisor for A. King, S. Wright and M.Y Nie