## **ROGER J-B WETS : Biography-Summary\***

Roger Wets received his Ph.D. in Engineering Sciences in 1965 from the University of California at Berkeley. He was with the Boeing Scientific Research Labs ('64-70, Mathematics) in Seattle and then joined the Univ. of Chicago as Ford Professor of Applied Mathematics. He was with the Univ. of Kentucky ('72-83, Mathematics) and since '84 he has been at the University of California, Davis (Mathematics), now as a Distinguished Research Professor. Concomitantly, he was leader ('80-84, acting 85-87) of the Optimiztion and Adaptation project at the International Institute of Applied Systems Analysis (Laxenburg, Austria)<sup>†</sup>, Academic Associate ('86-94) of the IBM Watson Research Laboratories (Yorktown Heights, N.Y.), co-director of the program in Financial Engineering & Risk Management, International University, Ho Chi Minh ('11- ) and since '92 on, developed a sustained research association first with the 'Centro de Modelamiento Matematico' and with the 'Instituto Sistemas Complejos de Ingeniera', starting in '08, of the Universidad de Chile<sup>‡</sup>.

He supervised 21 Ph.D. dissertations (4 as co-supervisor), 10 Master (6 as co-supervisor) and 2 Bachelor theses. He published around 200 technical articles, mostly in applied and pure mathematics, but also in probability, statistics, economics and ecology. He is presently working on a graduate text: 'An Optimization Primer.'

He was selected as one of the first University Research Professor (Kentucky, '77-78), awarded a Guggenheim Fellowship in '82-83, received two fellowships from the Centre National de la Recherche Scientifique ('75-Grenoble, '84-Paris IX), one from the Norwegian Research Council ('83) and an Erskine Fellowship ('91-Christchurch, NZ). In '92, he was made a member of the Ukrainian Academy of Sciences. In '94, he was awarded the George B. Dantzig Prize in Mathematical Programming for his contributions to stochastic programming and variational convergence. In '98, he received the Lanchester Prize (INFORMS) for the book, co-authored with R.T. Rockafellar, 'Variational Analysis' (Springer 'Grundlehren der Mathematischen Wissenschaften'). In '02, he was awarded a Doctor Honoris Causa by the University of Vienna for his contributions to mathematics, statistics and economics. In '04, he was recognized as a pioneer in the field of stochastic optimization at the 10th International Conference on Stochastic Programming. He gave Distinguished Lectures at Johns Hopkins (Duncan Lectures-'00), Baptist & Polytechnic Univ. (Hong Kong, '11), Ho Chi Minh International Univ. ('11), New York Univ. ('11), Washington Univ. (Ostrom Lectures, '11), City Univ. of Hong Kong ('13).

He held visiting appointments at Univ. of California (Berkeley), CORE (Louvain, Belgiun), Stanford, Univ. Köln & Bonn, Centre de Recherche Mathématiques (Montréal), Univ. of Washington, Michelsen Institute (Bergen, Norway), Univ. of New South Wales (Sidney), Tsinghua Univ. (Beijing), Los Alamos National Labs and more recently at the Sorbonne ('02), Univ. of Vienna ('09), Humboldt University (Berlin '10), Polytechnic Univ. (Hong Kong '11), ETH-Zürich ('12). He has done consulting work for companies in aerospace, telecommunications, finance, soil management, manufacturing and energy. In the late 90's, he worked on asset/liability models for the World Bank and governmental agencies (Central Banks, Ministry of Finance) in developing countries. He built ('06) and managed EpiRisk Research.

He serves, or served, on the editorial board of: Mathematics of Operations Research (area editor: '89-92), Mathematical Programming, Operations Research, SIAM J. on Control and Optimization (editor: '79-85), Annals of Operations Research, SIAM J. on Optimization, Set-Valued and Variational Analysis, and the Journal of Convex Analysis (managing editor: '94-...). He is on the Advisory Board of the deGruyter/Veritas program in Mathematics. He was a founder ( $\pm$  '81) and President of the Committee on Stochastic Programming ('89-92). He was a founder and twice chair of the G.B. Dantzig Prize Committee (mathematical programming) for the first ('82) and second ('85) awards. Until '92, he was a member of the advisory board of the Center for Optimization and Combinatorics at the Univ. of Florida and a co-director ('88-90) of the program in Decision Sciences at SISA (Trieste, Italy). He has organized or been on the scientific program committee of numerous meetings. Most recently, in '10, as Program Chair of 'Optimization and Information-Based Technologies in Finance' (Izmir) and co-orgnizer of 'Computing with Uncertainty,' at IMA (Minneapolis) and in '11, 'Optimization in an Uncertain Environment' (Davis) and 'Nonparametric and Geometry' (Prague).

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

<sup>&</sup>lt;sup>†</sup>This project was aimed at the development of algorithmic procedure for stochastic optimization problems. The results were reported in: 'Numerical Techniques for Stochastic Optimization' (Springer, Series on Computational Mathematics).

<sup>&</sup>lt;sup>‡</sup>starting with a series of lectures on stochastic programming, served in '05 as member of the CNRS-evaluation of CMM, helped foster the relationship between CMM and Banco Central de Chile by delivering in '08 a series of lectures on 'Portfolio Management' at Banco Central, co-supervised 6 Master theses in the Departamentos de Ingenieria Matematica y Ingenieria Industrial.