

## **Sergio R. Idelsohn Curriculum Vitae**

### **Academic degree:**

- ✓ 1970 Mechanical Engineer, National University of Rosario (Argentina).
- ✓ 1974 Ph.D. in Applied Sciences, Aeronautics and Spatial Laboratory of the University of Liege (Belgium). Adviser: Prof. Fraeijs de Veubeke.

### **Academic and scientific positions:**

- ✓ 1973-1974 Research Assistant at the Aeronautics and Aerospatiale Lab., University of Liege. Belgium.
- ✓ 1975-1981 Associate Professor, Depart. of Statistics, Universidad Nacional de Rosario, Argentina.
- ✓ 1978-2006 Professor, Applied Mechanics Department, Universidad Nacional de Rosario, Argentina
- ✓ 1989-present: Full Professor, Universidad Nacional del Litoral, working at INTEC, Santa Fe, Argentina. (Now in leave of absence).
- ✓ 2006-present: ICREA Research Professor at the International Centre for Numerical Methods in Engineering, Polytechnic University of Cataluña, Barcelona, Spain.
- ✓ 2006-present: Senior Researcher at the International Centre for Numerical Methods in Engineering, Polytechnic University of Cataluña, Barcelona, Spain.

### **Other Academic positions:**

- ✓ 1979-1980. Visiting Researcher at the Aeronautics and Aerospatiale Lab. Univ. of Liege, Belgium.
- ✓ 1981-2005. Director of the International Centre for Computational Methods in Engineering (CIMEC) at INTEC, (CONICET-Universidad Nacional del Litoral), Santa Fe, Argentina.
- ✓ 1985-1987 and 2003-2005. Director of the Regional Centre of Research and Development in Santa Fe, CERIDE, CONICET, Santa Fe, Argentina.
- ✓ 1998-2011. Member of the Executive Council of the Internat. Association of Computational Mechanics.
- ✓ 2002-2010. Secretary General of the International Association of Computational Mechanics.
- ✓ 1985-2005 Argentine Representative at the Assemble General of the International Union of Theoretical and Applied Mechanics (IUTAM).
- ✓ 1985-2005. President of the “Asociación Argentina de Mecánica Computacional, AMCA.”
- ✓ 1987-1988 (9 months). Visiting Professor at The Institute for Advanced Study in Princeton, New Jersey, USA, to work at the School of Mathematics with Professor Luis Caffarelli.
- ✓ 1989-1990 (6 months). Visiting Professor at the University “Pierre et Marie Curie”, Paris VI, France, where he worked at the Numerical Analysis Laboratory with Professor Olivier Pironneau.
- ✓ 1991-2005 (6 months each year) Visiting Professor at the Polytechnic University of Cataluña, where he worked at the International Centre for Numerical Methods in Engineering, Barcelona, Spain, with Professor Eugenio Oñate.
- ✓ 1991-present: Professor at Numerical Methods in Engineering Masters, Polytechnic University of Cataluña, Barcelona, Spain.

### **Main research lines:**

Computational Mechanics, Particle Methods in Structural Dynamics, Fluid Mechanics and Heat Transfer.

### **Prices and awards:**

- ✓ Personality of the year 2010. Newspaper El Litoral, Santa Fe, Argentina, December 2010.
- ✓ ERC Advanced Grant 2009 to develop Real Time computational mechanics in fluid mechanics problems.
- ✓ SEMNI 2009 Award in recognition to a professional and international trajectory in the Numerical Methods in Engineering and in particular to the personal influence to the development and diffusion of these methods in the Hispanic speaking world. Barcelona, 2009.
- ✓ Emerald Award for Excellence 2009. For the outstanding paper Award Winner at the Literati Network: “Validation of the particle finite element method (PFEM) for simulation of free surface flows” published in Engineering Computations, Barcelona, 2009.
- ✓ “Elsevier-Scopus’2007 Award to the eight Argentinean Researchers most cited in Scientific International Journals in the last ten years. Elsevier, Buenos Aires, Argentina.

- ✓ “IACM Award for an outstanding contribution in the field of Computational Mechanics”, International Association of Computational Mechanics, Vienna, Austria.
- ✓ “AMCA Award 2006 to an equilibrated activity in research, teaching and professional in Argentina”. Asociación Argentina de Mecánica Computacional, Santa Fé, Argentina.
- ✓ “KONEX Award to the best five specialists of the last decade in Sciences and Technology in Electro mechanic Engineering”, Konex, Buenos Aires, Argentina.
- ✓ “Bernardo Houssay Award to the best scientific research in Argentina”, CONICET, Buenos Aires, Argentina.
- ✓ “National Academy of Sciences of Argentina Award”. Buenos Aires, Argentina.
- ✓ Fellow of the American Academy of Mechanics.
- ✓ Fellow of the International Association of Computational Mechanics.

#### **Main teaching activities:**

- ✓ 1975-2005 Advanced course in Continuous Mechanics. University of Rosario, Argentina.
- ✓ 1991-2005 Simulation and Numerical Methods. University of Litoral, Santa Fe, Argentina.
- ✓ 1991-2005 Director of Doctoral Commission of the University of Litoral, Santa Fe, Argentina.
- ✓ 1991-present: post-graduate course on Numerical Methods in Fluid Mechanics. Universidad Politécnica de Cataluña, Barcelona, Spain.

#### **Researcher and thesis supervisions:**

Since 1981, Director of 33 researchers in the Universidad of Litoral, Santa Fe Argentina and in the Polytechnic University of Cataluña, Barcelona, Spain. From those, 14 become Ph Doctors.

#### **Publications:**

- ✓ 117 papers in international journals included in the ISI Web of Knowledge (October 2010), mainly in International Journal for Numerical Methods and Engineering, Computer Methods in Applied Mechanics and Engineering, Computers and Structures, Communications in Numerical Methods and Engineering, Int. Journal of Sound and Vibrations, etc.
- ✓ Editor of the Int. J. Num. Meth for Analysis and Design in Engng. Published in Spanish by UPC, (indexed by the Science Citations Index).
- ✓ 13 Edited books.
- ✓ More than 100 papers in proceedings congresses.
- ✓ Total number of citations: 1311 (Source: ISI Web of Knowledge, 2010). Index h: 19.

#### **Member of the Editorial Board:**

Member of the Editorial Board of 14 international journals, among them: “Computational Method in Applied Mechanics and Engineering” and the “Int. Journal for Numerical Methods in Engineering”.

#### **Congress Organization:**

Organizer of 16 international conferences among them: the IV World Congress of Computational Mechanics, (IV WCCM), July 1998, Buenos Aires, Argentina, the First South-American Congress on Computational Mechanics (MECOM 2002), October 28-31, Santa Fe-Paraná, Argentina, the IV Pan-American Congress of Applied Mechanics (PACAM IV), January 1995, Buenos Aires, Argentina, and the XII Iberian Latin American Congress on Computational Methods in Engineering and the Third National Congress on Computational Mechanics, MECOM'91, September 1991, Paraná, Argentina.

#### **Talks and Lectures:**

Invited to deliver 20 Plenary or Keynote Lectures in the main international conferences in the field of Computational Mechanics, among them: Semi Plenary Lecturer at the “*8th World Congress in Computational Mechanics and 5th European Congress on Computational Methods in Applied Sciences and Engineering*”. Venice, Italy. June 30-July 4, 2008, Plenary Lecturer at the “*European Conference on Computational Fluid Dynamics ECCOMAS CFD'06*”, Egmond aan Zee, The Netherlands, 5-8 September, 2006, Plenary Lecturer at the “*WCCM VI, Sixth World Congress on Computational Mechanics*”, Beijing, China, September 5-10, 2004. Plenary Lecturer at the “*Quinto Congreso de*

*Métodos Numéricos en Ingeniería*". Madrid, Spain, 3-6 June, 2002. Plenary Lecturer at the "International Conference in Finite Elements on Fluids". Venice, Italy, October 1995.

**Funding ID:**

He has been the Principal Researcher in more than 25 RTD projects since 1990. Many of these projects were carried out in the framework of the Argentinean Agency of Scientific and Technological Promotion (ANPCyT) and the Argentinean National Council of Scientific and Technological Research (CONICET). In the last 4 years, he has been the Main Researcher in some 10 projects funded by the European Commission, in particular an Advanced Grant of the European Research Council and several National R+D Programme of Spain (10 projects).