

SHORT CURRICULUM VITAE

Juan I. Ramos
Professor
Office 2-139-D
E.T.S. Ingeniería Industrial
Universidad de Málaga
Dr. Ortiz Ramos, s/n
29071 Málaga
Spain

Tel: +34-951952387
E-mail: jirs@lcc.uma.es

EDUCATION

- ❑ B. Aeronautical Engineering (1975, graduated first in class) and Doctor of Engineering (1983), Madrid Polytechnic University, Madrid, Spain
- ❑ Master of Arts (1979) and Ph. D. (1980), Department of Mechanical and Aerospace Engineering, Princeton University, Princeton, New Jersey, USA

CAREER TO-DATE

- ❑ Aeronautical Engineer, AISA, Madrid, Spain, 1976-1977
- ❑ Research assistant (1977-1978) and teaching assistant (1978), Princeton University
- ❑ Instructor (1979-1980), Assistant Professor (1980-1985), Associate Professor (1985-1989) and Full Professor (1989-1993), Department of Mechanical Engineering, Carnegie Mellon University, Pittsburgh, Pennsylvania, USA.
- ❑ Faculty Member (1980-1991), Center for Energy and Environmental Studies, Carnegie Mellon University
- ❑ Full Professor (1992-present), E. T. S. Ingenieros Industriales, Universidad de Málaga, Málaga, Spain
- ❑ Visiting Profesor (1988-1989), Dipartimento di Ingegneria Meccanica, II Università degli Studi di Roma "Tor Vergata," Rome, Italy

FELLOWSHIPS & PRIZES

- ❑ Prize "Francisco Arranz" (1977), Spain's Association of Aeronautical Engineers, Madrid
- ❑ National Award in Aeronautical Engineering (1977), The King of Spain, Madrid
- ❑ Daniel and Florence Guggenheim Fellow (1977-1978), Princeton University
- ❑ Honorary Daniel and Florence Guggenheim Fellow (1978), Princeton University

- ❑ George Van Ness Lothrop (1979-1980), Princeton University
- ❑ Ralph R. Teetor Award (1981), Society of Automotive Engineers, USA
- ❑ NASA Faculty Fellow (1988), NASA Lewis Research Center, USA

EDITORIAL BOARDS

- ❑ Regional Editor (1986-1993), Associate Editor (1993-2013) and Editorial Board member (2013-present), Applied Mathematical Modelling
- ❑ Advisory Editor (1990-2013) and Editorial Board member (2014-present), International Journal of Numerical Methods for Heat and Fluid Flow
- ❑ Associate Editor (2008-2011), Applied Mathematics and Computation Daniel and Florence Guggenheim Fellow (1977-1978), Princeton University
- ❑ Editorial Board member (2000-present), Progress in Computational Fluid Dynamics
- ❑ International Journal of Management Science and Engineering Management (2010-present)

RESEARCH INTERESTS

- ❑ Applied Mathematics: asymptotic methods, nonlinear dynamics, numerical techniques, nonlinear wave propagation
- ❑ Fluid dynamics, combustion, heat and mass transfer, solidification and crystallization

PUBLICATIONS

Books

- ❑ J. I. Ramos, *Modelli Termodinamici dei Motori ad Accensione Commandata e Diesel*, Librerie Editrice Universitarie Tor Vergata, Rome, Italy, May 1988. (v + 238 pp). (Text in English).
- ❑ J. I. Ramos, *Internal Combustion Engine Modelling*, Hemisphere Publishing Corporation, New York, 1989. (xiv +422 pp). ISBN-13: **978-0891161578**

Chapters

- ❑ Author of twelve chapters on internal combustion engine modelling (6), turbulent chemically reactive flows (1), numerical methods for reaction-diffusion equations and combustion (2), drawing of polymer fibers (2) and numerical simulation of volcanic processes (1)

Papers in journals of the JCR

- ❑ Author of over one hundred papers on swirl-stabilized combustors, dynamics of bubbles in glass melts, numerical methods for reaction-diffusion equations and combustion, turbulent chemically reactive flows, jerk dynamics, linearization methods, asymptotic techniques, drawing of polymer optical fibers, nonlinear wave propagation

Papers in Proceedings of International Conferences

- ❑ Author of over one hundred papers in Proceedings of International Conferences on the same subjects as those of **Papers in journals of the JCR** above