Curriculum of Walter Ambrosini

Professore Ordinario presso il <u>Dipartimento di Ingegneria Civile e Industriale</u> Settore scientifico disciplinare: Impianti Nucleari ING-IND/19

Cariche

Presidente del Corso di Laurea Magistrale: Ingegneria Nucleare (Corso di Laurea Magistrale)

Curriculum

Prof. Ing. Walter Ambrosini Research Doctor, Full Professor Born in Pistoia, Italy, on May 6th, 1958 Nationality: Italian

Working Address: Università di Pisa Dipartimento di Ingegneria Civile e Industriale (DICI) Largo Lucio Lazzarino, 2 56126 – PISA, Italy

Web Page: www.dimnp.unipi.it/walter-ambrosini/

Career:

- Degree in Nuclear Engineering, University of Pisa, 1985 (110 / 110 cum laude)
- Research Doctorate in Nuclear Engineering, 1989
- Researcher at the University of Pisa since 1992
- Associate Professor at the University of Pisa since 2001

Professional Charges and Memberships

President of the European Nuclear Education Network Association (March 2013 - March 2016) President of the Research Doctorate Course in Nuclear and Industrial Safety at DIMNP of University of Pisa (up to March 2016).

Past -President of the MSc Course in Nuclear Engineering (2011 – 2018)

Past-President of the Library of the Faculty of Engineering (up to September 2012)

Past or present Teacher in the Courses of Thermal Fluid Dynamics and Elements of CFD, Numerical Models for Nuclear Reactors, Computational Thermal and Fluid Dynamics and Nuclear Safety at the University of Pisa.

Associate Editor of the ASME Journal of Nuclear Engineering and Radiation Science (from March 2016).

Co-Editor for Heat and Mass Transfer of the Latin American Applied Research (LAAR) Journal (up to March 2016).

Italian Responsible for the former International Inter-university Agreement between the University of Pisa and the Shanghai Jiao Tong University.

Italian Responsible for the present Project of S&T Cooperation Between The People's Republic of China and The Italian Republic For The Years 2006-2009 and 2010-2012 (Tsinghua University, Beijing, Thermal Energy Department).

Italian Responsible for the former Project MST-10 (Indo-Italian Program of Cooperation in Science & Technology 2005–2007) with the Bhabha Atomic Research Centre, Mumbai, India.

Member of the American Nuclear Society (ANS).

Member of the American Society for Mechanical Engineers (ASME). Member of the Italian Union for Thermo-fluid-dynamics (UIT).

Research Experience:

- thermal-hydraulic system code application and development for the analysis of the dynamic behaviour of nuclear reactor systems;
- experiments on heat and mass transfer problems (filmwise condensation in the presence of noncondensable gases and falling film evaporation);
- experiments on falling film superficial behaviour, devoted to the statistical characterization of main film parameters and the validation of available models;
- experiments and modelling of natural circulation in flow loops;
- numerical analysis of instabilities in flow systems, including single-phase thermosyphon loops, boiling channels and heated channels with supercritical fluids;
- development and application of numerical methods for heat transfer and fluid flow problems; CFD models for basic fluid-dynamic phenomena relevant for nuclear reactors and, in particular, for SCWR applications.

More than 200 publications in reputed Journals, International and National Conferences