

Prof. Canu Paolo – Short Curriculum Vitae

Career

2006 Full Professor (Applied Physical Chemistry) at Department of Industrial Engineering, University of Padua

1998-2006, Associate Professor (Applied Physical Chemistry) Department of Chemical Engineering Principles and Practice, University of Padua

1994-1998, Lecturer (Chemical Plants) Institute of Chemical Plants University of Padua, Italy

1992-1994, Process Engineer ACTEA (Radici Group) Environmental Engineering R&D

1992 - PhD in Applied Molecular Chemistry (Scuola Normale Superiore di Pisa)

1988 – Chem Eng MSc, Politecnico di Milano

Tutoring

PhD Student Advisor or co-advisor (>15 students), University of Padua, Italy

Graduate Student Advisor (>150 students), University of Padua, Italy

Undergraduate Student Advisor (>10 students), University of Padua, Italy

Teaching

Chemical Reaction Engineering, 12 ECTS, M.Sc. Chemical Engineering, Univ. of Padua

Combustion, 6 ECTS M.Sc. Energetic Engineering, Univ. of Padua

Research interests

Research activity developed at Politecnico di Milano, Univ. of Wisconsin (Madison), and mostly at the University of Padua. Research interests are multidisciplinary, centered around the fundamentals of multiphase reactors, where the solids are reactants, products or catalysts. Special attention for solids like biomass or industrial by-products, including wastes. Methods combine custom experimental techniques and multiscale modelling, from molecular models to fluid mechanics of multiphase flow.

Institutional commitments

2006-2010 Chair of the Chemical Engineering School (Bachelor and Master courses)

Member of several commissions: Industrial Eng. PhD School, Industrial Area Scientific Research, Dept.

Resources and Development, Students orientation and advisory, Local coordinator of Erasmus agreements with the following institutions: Institute National Polytechnique de Toulouse (F), Royal Institute of Technology, Stockholm, (S), Åbo Akademi, Turku, (F), Umeå University, Umeå (S), Heriot-Watt University, Edinburgh (UK) Technical University of Eindhoven (NL).

Member of selection committees at Dept and University level, including foreign Universities, for PhD Defense, Research fellowships, temporary and permanent staff, both technical and teaching/research.

Journals

Associated editor: Waste Management

Reviewer: Applied Catalysis A: General, Applied Catalysis B: Environmental, Acta Mechanica, Catalysis Today, Chemical Engineering Journal, Chemical Engineering Science, Chemical Engineering and Processing, Powder Technology, Ceramics International, Chemical Engineering Research and Design, Chemical Engineering Science: Fluidized Bed Applications, Catalysis Science and Technology, Drug Development and Industrial Pharmacy, Energy, Energy and Fuels, Fuel, Environment Development and Sustainability, Environmental Science & Technology, Industrial & Engineering Chemistry Research, International Journal of Chemical Reactor Engineering, International Journal of Pharmaceutics, Journal of Analytical and Applied

Pyrolysis, Journal of Agricultural and Food Chemistry, Journal of Chemical & Engineering Data, The Journal of Supercritical Fluids, Waste Management.

International collaborations

Prof. Eric Climent, Laboratoire de Génie Chimique, Toulouse (F), Transport and adhesion in colloidal suspensions

Prof. L. Pettersen, K. Engval, R. Lanza, KTH, Stockholm-(S),
Catalysis in methane partial oxidations and automotive applications

Prof. M. Sint-Annaland, F. Gallucci TU/e, Eindhoven-(NL), Reacting solids for chemical looping combustion

Prof. T. Salmi, D. Murzin, AboAkademi, Turku (F), GLS reactors (direct H₂O₂ synthesis)

Prof. J-P Mikkola, Department of Chemistry Technical Chemistry, Umeå University (S), GLS reactors

Prof. N. Papayannakos, NTU Athens (GR), Catalysts and reactors for automotive applications

Prof. J-P Paul, Université Lille (F), DFT kinetics of oxides catalysts

Research evaluation (at 2018; ASN criteria: ratio to the average of the scientific sector, SSD)

Number of papers = 1.84 times

Number of citations = 1.74 times

H index = 1.2 times