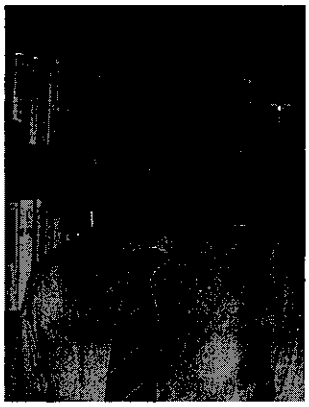
Curriculum vitae Prof. Fabio Inzoli



Fabio Inzoli
[redacted]

Full Professor
Department of Energy
Politecnico di Milano
Via [redacted]
Phone: [redacted]
Email: [redacted]

University Education
1988 Master in Mechanical Engineering, Politecnico di Milano, Milano, Italy
1991 PhD in Energy Engineering, Politecnico di Milano, Milano, Italy

Professional Activities
1984-1988 Research assistant in Energy Engineering Department, Politecnico di Milano.
1991-1992 Research fellows at University of Study, Milano, Italy
1994-1996 Research fellows at Scientific Institute H. San Raffaele, Milano. Italy.

Academic record
1996-1997 Assistant Professor of Thermodynamics, Politecnico di Milano, Milano, Italy.
1997-2010 Associate Professor, Politecnico di Milano, Milano, Italy.
2010- Full Professor, Politecnico di Milano, Milano, Italy.

Academic Governance
Head of Department of Energy since 2013
Member of Academic Senate of Politecnico di Milano since 2013
Member of Board of Governors of Politecnico di Milano (2011-2012)
Member of Board of Department of Energy at Politecnico di Milano since 2008
Member of Academic Senate of Politecnico di Milano (2006-2010)
Member of Study Programme Board of Environmental and Geomatic Engineering Course of Study (2002-2012)

Institutional Roles
- Member of Project Management Group of Partnership Agreement between ENEL spa and Politecnico di Milano since 2016, for promoting research cooperation related to the global energy challenges involving resource assessment, processes and technological development, breakthrough innovation, energy system analyses and scenarios including economics, environmental and social impact of energy systems.
- Member of Project Management Group of Partnership Agreement between Goppion spa and Politecnico di Milano since 2016, for promoting research cooperation in the field of museum industry.
- Member of Scientific Committee of Research Center on Wind Engineering, of Politecnico di Milano (www.windtunnel.polimi.it) since 2014
- Member of Project Management Group of Partnership Agreement between ITER International Fusion Energy Organisation and Politecnico di Milano since 2014, for promoting research cooperation related to Fusion Technology, cryogenic, electrical and nuclear engineering.

- Member of Project Management Group of Partnership Agreement between ANSALDO Energia spa and Politecnico di Milano since 2013, for promoting research cooperation in the field of Innovative technology applied to Power production Plants.
- Member of Project Management Group of Partnership Agreement between Solvay Specialty Polymers Italia spa and Politecnico di Milano since 2013 for promoting research cooperation in the field of new materials for production, conversion and storage of energy.
- Member of Strategic Committee of Res4Med organization (www.res4med.org) since 2014. Res4Med is a non-profit Association established in 2012 as a network of utilities, industries, agencies, technical service providers, research institute and academia engaged in promoting clean energy solutions in the Southern and Eastern Mediterranean Countries.
- Member of Project Management Group of Partnership Agreement between Maire Technimont spa and Politecnico di Milano (2013-2015)

Main Active Funded Research Projects

Principal Investigator of Project "Heat transfer in Process Gas Heater of Nucor Power plant", funded by Tenova spa, (2016).
Principal Investigator of Project "Numerical Simulation of heat transfer inside autoclave for glass production", funded by Terruzzi Fercalx spa, (2014).
Principal Investigator of Project "Design of humidity control system for sterile processing lines", funded by Steriline S.p.A. (2014).
Principal Investigator of Project "Heat transfer and fluid dynamics in Heat Recovery Steam Generator", funded by Nooter-Eriksen S.p.A. (2013).
Principal Investigator of Project "Innovative process for acid gas absorption in tubing", funded by eni S.p.A, (2010).
Principal Investigator of Project "Water Alternate Gas Injection", funded by eni S.p.A. (2011).

Research interest

Prof. Fabio Inzoli is Full Professor in Thermodynamics, Heat transfer and Applied CFD at the Department of Energy in Politecnico di Milano.
His current areas of interest is related to heat transfer and multiphase flows modelling, power plant flue gas cleaning and oil and gas processes.
He is author of more than 160 scientific papers published on international journal or presented in national and international conferences. He started setting up in 2001 a research group on CFD which is currently focused on the development and implementation of turbulence and multi-phase models applied to the design of complex and innovative power plant devices.
In January 2013 he becomes Head of Department of Energy, in Politecnico di Milano, a research infrastructure that joins together different skills existing at Politecnico di Milano in various fields of engineering to provide, through interdisciplinary approach, convenient solutions to the complex problems that currently affect the energy sector. Today more than 330 people work in the 5 Research Division within 18 research units. The experimental laboratories are more than 10.000 m^2 dedicated to research, education, services to the industry.

Technology transfer

Team leader of research activities in energy field supported by companies as Nooter Eriksen, STF, eni, Redecam group, ENEL, Tenova.

Bibliography

Prof. Fabio Inzoli is author of more than 150 publications in the field of energy conversion and Computational Fluid Dynamics.

Recent pubblications:

M. Siena, J. D. Hyman, M. Riva, A. Guadagnini, C. L. Winter, P. K. Smolarkiewicz, P. Gouze, S. Sadhukhan, F. Inzoli, G. Guédon, E. Colombo, **"DIRECT NUMERICAL SIMULATION OF FULLY SATURATED FLOW IN NATURAL POROUS MEDIA AT THE PORE SCALE: A COMPARISON OF THREE COMPUTATIONAL SYSTEMS"**, Computational Geosciences, 19 (2), pp. 423-437, 2015

G. Besagni, R. Mereu, F. Inzoli, **"CFD STUDY OF EJECTOR FLOW BEHAVIOR IN A BLAST FURNACE GAS GALVANIZING PLANT"**, Journal of thermal Science, 24 (1), pp. 58-66, 2015.

L. Moghadasi, A. Guadagnini, F. Inzoli, M. Bartosek, **"INTERPRETATION OF TWO-PHASE RELATIVE PERMEABILITY CURVES THROUGH MULTIPLE FORMULATIONS AND MODEL QUALITY CRITERIA"**, Journal of Petroleum Science and Engineering, Vol. 135, pp. 738-749, 2015.

G. Besagni, R. Mereu, G. Di Leo, F. Inzoli, **"A STUDY OF WORKING FLUIDS FOR EJECTOR REFRIGERATION USING LUMPED PARAMETER MODELS"**, International Journal of Refrigeration, doi:10.1016/j.ijrefrig.2015.06.015, 2015

G. Besagni, R. Mereu, F. Inzoli, P. Chiesa, **"AN INTEGRATED LUMPED PARAMETER-CFD APPROACH FOR EJECTOR PERFORMANCE EVALUATION"**, Energy Conversion and Management, Vol. 105, pp. 697-715, 2015

M. Colombo, A. Cammi, G. Guédon, F. Inzoli, M.E. Ricotti, **"CFD STUDY OF AN AIR-WATER FLOW INSIDE HELICALLY COILED PIPES"**, Progress in Nuclear Energy, Vol. 85, 2144, pp. 462-472, 2015

G. Besagni, R. Mereu, F. Inzoli, **"EJECTOR REFRIGERATION: A COMPREHENSIVE REVIEW"**, Renewable and Sustainable Energy Reviews, Vol. 53, pp. 373-407, 2016

G. Besagni, F. Inzoli, **"COMPREHENSIVE EXPERIMENTAL INVESTIGATION OF COUNTER-CURRENT BUBBLE COLUMN HYDRODYNAMICS: HOLDUP, FLOW REGIME TRANSITION, BUBBLE SIZE DISTRIBUTIONS AND LOCAL FLOW PROPERTIES"**, Chemical Engineering Science, Vol. 146, pp. 259-290, 2016

G. Besagni, F. Inzoli, **"BUBBLE SIZE DISTRIBUTIONS AND SHAPES IN ANULAR GAP BUBBLE COLUMN"**, Experimental Thermal and Fluid Science, Vol. 74, pp. 27-48, 2016

G. Besagni, F. Inzoli, **"INFLUENCE OF INTERNALS ON COUNTER-CURRENT BUBBLE COLUMN HYDRODYNAMICS: HOLDUP, FLOW REGIME TRANSITION AND LOCAL FLOW PROPERTIES"**, Chemical Engineering Science, Vol. 146, pp. 162-180, 2016

G. Besagni, G, Guedon, F. Inzoli, **"ANNULAR GAP BUBBLE COLUMN: EXPERIMENTAL INVESTIGATION AND COMPUTATIONAL FLUID DYNAMICS MODELING"**, Journal of Fluids Engineering, Transactions of the ASME, 138 (1), 011302, 2016

L. Moghadasi, A. Guadagnini, F. Inzoli, M. Bartosek, D. Renna, **"CHARACTERIZATION OF TWO- AND THREE-PHASE RELATIVE PERMEABILITY OF WATER-WET POROUS MEDIA THROUGH X-RAY SATURATION MEASUREMENTS"**, Journal of Petroleum Science and Engineering, 145, pp. 453-463, 2016

G. Besagni, F. Inzoli, G. De Guido, L.A. Pellegrini, **"EXPERIMENTAL INVESTIGATION ON THE INFLUENCE OF ETHANOL ON BUBBLE COLUMN HYDRODYNAMICS"**, Chemical Engineering Research and Design, 112, pp. 1-15, 2016

R. Secareanu, R., Mereu, M., Takahashi, F., Inzoli, I. Prisecaru, **"EXPERIMENTAL AND NUMERICAL STUDY OF FREEZING AND FLOW CHARACTERISTICS OF WOOD'S METAL INJECTION IN A WATER POOL"**, Applied Thermal Engineering, 103, pp. 1261-1277, 2016.

G. Besagni, F. Inzoli, **"COMPREHENSIVE EXPERIMENTAL INVESTIGATION OF COUNTER-CURRENT BUBBLE COLUMN HYDRODYNAMICS: HOLDUP, FLOW REGIME TRANSITION, BUBBLE SIZE DISTRIBUTIONS AND LOCAL FLOW PROPERTIES"**, Chemical Engineering Science, 146, pp. 259-290, 2016