

## Short Curriculum Vitae of Prof. Gerardo Catapano



2006-2017 Full Professor of Industrial Bioengineering, University of Calabria, Rende (CS)

1992-2006 Associate Professor of Principles of Chemical Engineering, Rende (CS)

1998-1999 Visiting Professor, University of Applied Science Giessen-Friedberg, Giessen (Germany), on a grant of the Deutscher Akademischer Austauschdienst (DAAD)

1989-1990 External Research Consultant, Institute for Medical Membrane Applications, Akzo Nobel Faser AG (today 3M), Wuppertal (Germany)

1987-1989 Research Associate, Kidney Disease Program, University of Louisville, Louisville (KY) (USA)

1987 Ph.D. in Chemical Engineering, University of Napoli, Napoli (Italy)

1981 Master in Chemical Engineering, University of Napoli, Napoli (Italy)

2002-today Participates in the organization of international and national scientific congresses as President, or as member of the organization or scientific committee in the field of artificial, bioartificial and tissue engineered organs and biomaterials

2009-2011 co-organizer of the Erasmus Mundus Summer School on "Teamwork in Biomedical Engineering" at the Trinity College Dublin and the Royal College of Surgeons, Dublin (Ireland), with colleagues of other 7 European Universities

2010-today co-organizer and founder of the first European Master's Course in Biomedical Engineering (CEMACUBE) together with colleagues of other 14 European Universities.

### Scientific activity

Co-author of the textbook "Cell and tissue reaction engineering". Author or co-author of more than 90 publications in peer-reviewed journals and books and of more than 150 publications in international congress proceedings.

More than 200 presentations at national and international scientific conferences and institutions, with more than 70 invited lectures.

Organizer of scientific congresses, seminars and workshops.

### Scientific Societies

Italian Society for Biomaterials (vice-President, 2013-2023), European Society for Artificial Organs (Governor, 2013-2017), European Society for Engineering and Medicine (member of Directive Council, 2007-2014). Member of: European Society for Artificial Organs (ESAO), American Institute of Chemical Engineering (AIChE), Society of Biological Engineering (SBE), International Federation for Artificial Organs (IFAO), National Group of Bioengineering (GNB), Group of Italian Researchers in Chemical Engineering (GRICU), Italian Society for Biomaterials (ISB) (till 2023).

### Editorial activity

Editor-in-Chief of the International Journal of Artificial Organs (2008-2013)

Editorial board member of: Artificial Organs; Technology and Healthcare; the International Journal of Artificial Organs (2004-2008); the Journal of Membrane Science (2004-2008).

Reviewer for more than 20 peer-reviewed scientific journals in the field of artificial, bioartificial and tissue engineered organs, and the development of cellular system for personalized medicine

### Research interests

Development, design, and optimization of bioreactors for therapeutic and technological applications

- Modelling and experimental validation of transport and reaction phenomena in cellular and enzymatic bioreactors, bioseparation devices, and the body
- Modification and characterization of biomaterials, scaffolds, and membranes
- Development and optimization of artificial, bioartificial and bioengineered organs and tissues
- Development of in vitro tests alternative to animal tests for preclinical drug toxicity screening