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Born: Cosenza (Italy) July 14, 1959

Current Position

Full Professor of Transport Phenomena since 2017 at University of Calabria, Department of Informatics, Modeling, Electronics and Systems Engineering - DIMES.

Coordinator of the degree course in Food Engineering – Univ. of Calabria since 2019

Teacher in Food Engineering course degree and in Master course degree in Chemical Engineering and in Materials Science and Engineering .

Scientific Responsible of Integrated System of Laboratory for the Environment, SILA 2.0 project.

Member of the Committee of PhD School "LIFE SCIENCE AND TECHNOLOGY" – University of CALABRIA

Member of the Technical-Scientific Committee of Arts, Music and Spectacle Center – CAMS, at University of Calabria

Member of the Technical-Scientific Committee of BATS - Technical and Scientific Library of University of Calabria.

Education and Academic Career

Master degree in Chemical Engineering *cum laude*, at University of Calabria, April 3, 1985,

PhD in Chemical Science and Technologies at University of Calabria in 1989.

Winner of a fellowship of ENI PFE in 1986. Researcher at ENIRICERCHE 1989-90. Researcher National Council of Research (CNR), 1990-92, to the Membrane Research Institute-CNR-IRMERC. Researcher in Chemical Engineering at University of Calabria from 1992 to 2001

Associate Professor of Transport Phenomena from 2001 to 2017.

Research Activity

Responsible and co-responsible for several research projects funded from Government and Industrial Houses such as Ministry of Economy or University and from local and national companies as well as from European Community, in the field of Biotechnology, Agro food_Separation, Environment and Biofuels, more recent: PRIR SILA and PONA3_00341SILA; POR CALABRIA FESR-FSE 2014-2020, CUP J28C17000340006 COFFEEPADS; PON01_01840F Master course SEI in PON PON01_01840 microPERLA; AP-MISE-PAR 2011-RSE; INPATH-TEG G.A. 657466- H2020; PON COMESTO, PON FOREST-COMP.

Scientific Responsible and Coordinator of the activities of Technological Hall for the mitigation of Pollution -HTI, for the project PONA3_00341 "PON INFRASTRUTTURE S.I.L.A."

Awards: Winner of a Silver medal for the technological research 1988, from "SCI"; selected paper European Society of Membranes Poland, 2001.

Member of Scientific Association in the field of Chemical Engineering and Membrane processes and technologies.

Responsible for the del Master in "Innovative Energetic Systems" – SEI (2013-2015) PON01_01840/F1 "MicroPERLA".

Supervisor of several PhD thesis

Supervisor and Responsible for several Post-doc fellowship.

Admitted to final selection of Start CUP Calabria2018, with the proposal "BergaYò".

Chair Person, Invited plenary lecture, in several international Conferences

Member of scientific and organizing Committee of International and National Conferences and meeting, and member of editorial board of conferences proceedings.

Responsible of Scientific Committee and Laboratory.

Editor of Conferences Book of Abstracts.

Peer reviewer of several scientific international journals.

Reviewer of research projects submitted to the Italian Ministry of Scientific Research,.

Research and cooperation activity with research foreign center and research & development companies.

Visiting researcher at: Fraunhofer-Institute Stoccarda (Germany), Technical University of Denmark - Division Membrane DTU Lyngby (DK), KU Leuven, (B). Invited lecturer at international University: Jadavpur University KOLKATA, NITT Tiruchirapalli, Indraprastha University, and IIT DBEB Delhi (INDIA); NIT Raipur, India; UCLA Los Angeles and Columbia University New York (USA).

Teaching activity in European University: TEMPUS programme, JEN Project course, "Intensive Course in Membrane Processes" course; Socrates Teaching Mobility and LLP Erasmus Programme.

Research field and interest

She did her research activity in the Laboratory of Transport Phenomena and Biotechnologies.

Research Field: European Research Council: PE8 Products and Process Engineering; PE8_2 Chemical engineering, technical chemistry, PE8_13 Industrial bioengineering, PE8_6 Energy processes engineering.

Research interests

- 1) Transport phenomena in separation processes and bioreactors and with immobilised enzymes; Modelling and control of reactant systems. Kinetic and thermodynamics aspect in reactions biocatalysed from enzymes
- 2) Production of advanced biofuels from waste and effluents (Production of biodiesel from waste cooking oil –PON COMESTO; Production of biogas by anaerobic co-digestion –PON MICROPERLA; POR FORSU; Production of microalgae in open photobioreactors – PON ALGENCAL)
- 4) New materials for food industry applications (POR COFFEE PADS; POR My Darling Clementine)
- 5) Integrated systems of separation and bioconversion in the treatment of wastewaters from food industry (PON SILA), (Agreement ENEA – UNICAL).
- 6) Energetic engineering and characterization of phase change materials PCMs for energy storage (PON BATTERIE, PON RES NOVAE; INPATH TES-HORIZON)

PUBLICATIONS

<https://iris.unical.it/cris/rp/rp35431>

ORCID ID 0000-0002-0381-7169

SCOPUS ID 7003809015

Author of 335 papers published on international peer-reviewed scientific journals, proceedings and books, 1 italian patent, and of more than 150 presentations held in international conferences and published in the Conference proceedings

Teaching Activity

Current teaching activity

Degree Course in Food Engineering A.A. 2019/2020

Course of Processes and technologies in Food Industry -Module 2 of Industrial and Food Technologies

Master Degree Course in Chemical Engineering A.A. 2019/2020

Course of Transport Phenomena

Master Degree Course in Science and Engineering of Innovative Materials since A.A. 2014/2015

Course of Transport Properties in Materials

Course of Modeling of production processes and transformation of complex materials

Previous Academic Teaching activity in the Courses of Food Engineering, Chemical Engineering and Science and Engineering of Materials, in the PhD Course of Life Sciences.

She was also Professor of European Research and Educational Project Courses and Professor at Advanced Master Courses.

Supervisor of large number of Master thesis.

List of Publications on international peer-reviewed scientific journals (SCOPUS / ISI-WOS)

Aaron Bivins, Devin North, Arslan Ahmad, Warish Ahmed, Eric Alm, Frederic Been, Prosun Bhattacharya, Lubertus Bijlsma, Alexandria B. Boehm, Joe Brown, Gianluigi Buttiglieri, Vincenza Calabro, Annalaura Carducci, Sara Castiglioni, Zeynep Cetecioglu Guro, Sudip Chakraborty, Federico Costa, Stefano Curcio, Francis L. de los Reyes, III, Jeseth Delgado Vela, Kata Farkas, Xavier Fernandez-Casi, Charles Gerba, Daniel Gerrity, Rosina Girones, Raul Gonzalez, Eiji Haramoto, Angela Harris, Patricia A. Holden, Md. Tahmidul Islam, Davey L. Jones, Barbara Kasprzyk-Hordern, Masaaki Kitajima, Nadine Kotlarz, Manish Kumar, Keisuke Kuroda, Giuseppina La Rosa, Francesca Malpei, Mariana Mautus, Sandra L. McLellan, Gertjan Medema, John Scott Meschke, Jochen Mueller, Ryan J. Newton, David Nilsson, Rachel T. Noble, Alexander van Nuijs, Jordan Peccia, T. Alex Perkins, Amy J. Pickering, Joan Rose, Gloria Sanchez, Adam Smith, Lauren Stadler, Christine Stauber, Kevin Thomas, Tom van der Voorn, Krista Wigginton, Kevin Zhu, and Kyle Bibby, Wastewater-Based Epidemiology: Global Collaborative to Maximize Contributions in the Fight Against COVID-19, *Environ. Sci. Technol.*, (2020), 54, 7754–7757, <https://dx.doi.org/10.1021/acs.est.0c02388>

C. G. Lopresto, M. G. De Paola, L. Albo, M. F. Policicchio, S. Chakraborty, V. Calabro, Comparative analysis of immobilized biocatalyst: study of process variables in trans-esterification reaction, *3 Biotech* (2019) 9:443. <https://doi.org/10.1007/s13205-019-1985-0>

Loizzo Monica Rosa, Sicari Vincenzo, Tundis Rosa, Leporini Mariarosaria, Falco Tiziana, Calabrò Vincenza; (2019), The Influence of Ultrafiltration of *Citrus limon L. Burnm.* cv Femminello Comune Juice on Its Chemical Composition and Antioxidant and Hypoglycemic Properties, *Antioxidants*, 8 (1), 23; doi:10.3390/antiox8010023, www.mdpi.com/journal/antioxidants.

Siciliano, A., Limonti, C., Curcio, G.M., Calabrò, V., (2019), Biogas generation through anaerobic digestion of compost leachate in semi-continuous completely stirred tank reactors, *Processes* 7 (9), 635, <https://doi.org/10.3390/pr7090635>.

CG Lopresto, A Meluso, G Di Sanzo, S Chakraborty, V Calabrò, (2019), Process-intensified waste valorization and environmentally friendly -limonene extraction, *Euro-Mediterranean Journal for Environmental Integration* 4 (1), 31. DOI <https://doi.org/10.1007/s41207-019-0122-0>; Print ISSN 2365-6433; Online ISSN 2365-7448. Springer International Publishing.

Siciliano Alessio, Limonti Carlo, Mehariya Sanjeet, Molino Antonio, Calabrò Vincenza, (2018), Biofuel Production and Phosphorus Recovery through an Integrated Treatment of Agro-Industrial Waste, *Sustainability*, 11(1), 52; <https://doi:10.3390/su11010052>

Verardi A., Blasi A., Marino T., Molino A., Calabrò V., (2018), Effect of steam-pretreatment combined with hydrogen peroxide on lignocellulosic agricultural wastes for bioethanol production: Analysis of derived sugars and other by-products, *Journal of Energy Chemistry*, Volume 27, Issue 2, 535-543, <https://doi.org/10.1016/j.jechem.2017.11.007>

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LIGUORI S, PINACCI P, SEELAM P K, KEISKI R, DRAGO F, CALABRO' V, BASILE A, IULIANELLI A (2012). Performance of a PD/PSS membrane reactor to produce high purity hydrogen via WGS reaction . *CATALYSIS TODAY*, vol. 193, p. 87-94, ISSN: 0920-5861, doi: 10.1016/j.cattod.2012.02.005

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