

Peña Llorente, José Ángel

Catedrático de Universidad del área de Ingeniería Química de la Escuela de Ingeniería y Arquitectura (EINA) de la Universidad de Zaragoza (UNIZAR) desde junio de 2017. Es licenciado (1989) con grado (1990) en Ciencias (Químicas) en la especialidad de Química Técnica/Industrial y doctor por la misma universidad (1994) en el programa de doctorado de Ingeniería Química.

Su investigación se centró originalmente en la desactivación de catalizadores por formación de coque (predoctoral) y la seguridad de reactores fuera de control -runaway reactions- (postdoctoral).

Desde 2002 trabaja en campos vinculados a la producción, purificación y uso de hidrógeno por métodos no convencionales a partir de productos de la pirólisis de gas natural, biogás y bio-oil como materias primas, y a la producción de biocombustibles (biometano, biogasolina, biodiesel) a partir de residuos agrícolas, ganaderos y urbanos.

Es coautor de más de cincuenta artículos indexados (JCR), en su mayor parte Q1, y más de ciento cuarenta contribuciones a congresos (mayoritariamente extranjeros).

Farriol Roigés, Francesc Xavier

My research career has been spent in the Department of Chemical Engineering at the Rovira i Virgili University in Tarragona, from my postdoctoral stay in the Department of Chemical Engineering at the University of Sherbrooke (Quebec, Canada) during the year 1987.

During the period from 1987 to 1998, I was responsible for creating and directing a research group focused on the valorisation, energy and products, of lignocellulosic materials.

Throughout these years my research activity focused on two major areas related to the use of lignocellulosic materials:

The hydrolytic processing of lignocellulosic biomass with the objective of separating its constituent polymers, highlighting the activities in obtaining high purity cellulose and the synthesis of polymeric derivatives, as well as the production and purification of xylo-oligosaccharides (XOS) by hydrolysis controlled

The thermo-catalytic conversion of biomass and its fractions

Obtaining fuels from microalgae

The gasification of biomass and fuels derived from urban solid waste to obtain liquid fuels.

Since 2007 and until June 2018, my preferential scope of activity has been oriented to management, with the position of Vice-Rector of Organization and Resources of the Rovira i Virgili University and as Delegate of the Rector with the same function with additional responsibilities regarding the Environment Plan and the Office of Occupational Risk Prevention of the University, all in three consecutive rector teams.

Suarez Ojeda, Maria Eugenia

Dr. María Eugenia Suárez-Ojeda (Caracas, 1975) is chemical engineer (Universidad Simón Bolívar, 1999). She also holds a MSc. in Chemical Engineering (Dissertation with honours: “Liquid-Liquid Equilibrium of Ternary Mixtures of Polar Liquids Using Molecular Simulation”, Universidad Simón Bolívar, 2001) and a PhD in Chemical and Process Engineering (Universitat Rovira i Virgili, 2006) with the thesis entitled “Catalytic wet air oxidation coupled with an aerobic biological treatment to deal with industrial wastewater” awarded with Cum Laude, European Mention. During her PhD studies, she has also worked with Prof. Ian S. Metcalfe at the University of Manchester (Department of Chemical Engineering and Analytical Sciences) performing Wet Air Oxidation Studies. Later, she did a post-doctoral stay with Prof. Liu Yu at Nanyang Technological University (School of Civil and Environmental Engineering) focusing in granular biomass technologies applied for industrial wastewater treatment.

María Eugenia’s research is devoted to the biological treatment of industrial wastewater and to the recovery of valuable materials from wastewater treatment as follows:

- Biological treatment of industrial wastewater, in particular, the one containing toxic and recalcitrant organic compounds using granular biomass.
- Nitrogen removal using two-steps systems based on partial nitrification and Anammox.
- Production of biopolymers using mixed cultures.
- Coupling of chemical oxidation methods and biological treatments.

Moreover, she is currently collaborating with Dr. Gara Villalba ([Sostenipra](#)) in the quantification of CH₄, H₂S and N₂O in municipal sewer networks to assess the carbon footprint of these infrastructures into the entire urban water cycle.

Iborra Urios, Montserrat

Montserrat Iborra Urios has a degree in Chemical Sciences (Technical Chemistry Specialty) from the University of Barcelona (1979-1984). She obtained a doctorate in Chemical Sciences from the University of Barcelona in 1989. She is currently Professor of Chemical Engineering at the University of Barcelona where she teaches at the undergraduate level (Introduction to Chemical Engineering, Chemical Reactors, Multiphase Reactors and Experimentation in Chemical Engineering). Since 2013 she has coordinated the Consolidated Teaching Innovation Group (University of Barcelona) of Chemical Reaction Engineering, participating as director or collaborator in 14 teaching improvement and innovation projects. It is also part of the consolidated research group of Catalysis and Applied Kinetics.

His preferred field of research is on topics related to technological development in the field of fuels, especially obtaining oxygenates. Thus, she focuses on solid acid catalysis (preferably ion exchange resins) and in catalytic and multiphase reactors. Among the reactions studied are the reactions for obtaining asymmetric branched ethers by adding light alcohols to branched olefins (MTBE, ETBE ...), dehydration of linear alcohols to symmetric linear ethers (DNPE, EOE ...). Also, the oligomerization of linear and branched C₅-C₈ olefins to compounds in the range of gasoline or diesel. The research

has been carried out with applied orientation, looking for both the catalyst and the optimal reaction conditions and determining the kinetics and thermodynamics of the reactions. By-products have been minimized in working conditions, following the green chemistry guidelines. He has also investigated the reduction of SO₂ emissions in thermal power plants by injection of Ca(OH)₂ and water, including the effect of operating variables and the presence of CO₂, NO₂ and O₂, proposing a reaction mechanism and kinetic model; and simulation of non-isothermal non-adiabatic fixed bed multitubular reactors. She currently works on the production of oxygenated biofuels from biomass, i.e. butyl levulinates.

Masip Vernis, Lluís

Lluís Masip graduated in Chemical Engineering at Universitat Rovira i Virgili in 1999 and obtained a PhD in Chemical Engineering from the University of Texas at Austin under the supervision of Dr. George Georgiou in 2006. After a short postdoc at Dr. Georgiou lab, in 2007 he accepted a postdoctoral position at the Process Research and Development Department at Genentech Inc. (South San Francisco, CA). In 2010, he joined the Departament d'Enginyeria Química at Universitat Rovira i Virgili as an Assistant Professor and Marie Curie Research Fellow. In 2019 he became an Associate Professor in the same department.

González Olmos, Rafael

Doctor en Ingeniería Química (2008, URV). Máster en Ingeniería Ambiental (2004, URV). Ingeniería Química (2003, URV).

Experiencia

Professor Titular 2022

Cap del Departament d'Enginyeria Química i Ciència dels Materials 2022

Director del grup GESPA 2022

Profesor contratado doctor en IQS (2014- 2022)

Investigador y profesor de la Universidad de Girona (2011-2014)

Investigador del Centro de Investigaciones Energéticas y Medioambientales (2011)

Investigador del UFZ-Helmholtz Centre for Environmental Research, Alemania (2008-2011)

Líneas de investigación

- Captura y transformación de CO₂
- Reutilización de aguas
- Economía circular
- Simulación y optimización de procesos
- Análisis de ciclo de vida