Short CV for Dr. Ricard Garcia-Valls (2014)

Ricard Garcia Valls is a professor at the Universitat Rovira i Virgili, Tarragona (URV). He obtained his PhD at the Autonomous University of Barcelona in 1995 and made his stay potdoctoral the prestigious Massachusetts Institute of Technology (MIT) in Boston, MA, USA, for two years (1996-1998). In 1998 arrived at the URV, Department of Chemical Engineering and Systemic group which launched the investigation in this group of membranes. This was possible thanks to his experience in the field of membranes from the beginning of his doctoral research in 1991.

His main research is in development, production and characterization of membranes and microcapsules (as a particular form of membranes).

Dr. R. Garcia-Valls has supervised nine Ph.D. theses. Currently, he is supervising four Ph.D. theses. All doctors trained under his guidance are currently developing their professional activities in fields directly or closely related to the scientific research; therefore, the good training capacity of Dr. Garcia-Valls is justified. From the 4 theses ongoing at the moment, two of them are industrial (at DOW Water Solutions Tarragona).

As a result of this work, and as a lecturer in Chemical Engineering, he has about 67 publications including international peered articles and book chapters.

He was director of the School of Chemical Engineering from the URV, after being vice-director for almost 4 years, in addition to responsibility for international relations and head of a Bologna Master's in Chemical Engineering, which also had an international agreement with other European universities: INPL-Nancy (France) and ICTP-Prague (Czech Republic).

As for his teaching exercise he had the role of course coordinator and integrated project leader in the bachelor in Chemical Engineering. He has been responsible for master and pilot plan in the Bologna European system, responsible for developing implementing ECTS in the center in its first phase (2004).

Since July 2008, is the director of the innovation center of CIDEM / COPCA METEOR, a center that is their new tool for technology transfer with priority for membrane technology, the only center that specializes in this area existing in that network.

Over the years, Dr. Garcia Valls has participated in more than 30 projects including public and private, mostly in membrane technology and microencapsulation, and has been principal researcher or coordinator in 9 of them. The Meteor center bills around half a million euros per year, between public and private, the latter representing about 80% last year. The distinguishing fact of the research team is the integration of the materials design and the production of membranes on demand for very specific applications but with the possibility of arriving at the pilot scale, and this is also applicable for microcapsules.

Among the major industrial customers and collaborators of the center are Procter and Gamble, the former AGBAR, Dow Chemical, Carburos Metalicosair Products, Institut catala d'Investigació Química (ICIQ), the University of Malaga, Polytechnic of Turin (Italy), European Institute of Membranes Montpellier (France), the Universidade Nova de Lisboa (Portugal), Universitat Autonoma de Barcelona (UAB), the Centre Tecnologic de Manresa (CTM) and Catholic University of Leuven (UKL) (Belgium), among others.

About two years ago, the center has joined the Centre Tecnologic de la Quimica de Catalunya (CTQC) with the intention of transferring technology in a stable and permanent form with business objectives by following the campus Campus of excellence of URV (CEICS).

The active funded projects at the moment deal with: advanced microencapsulation methods and its CFD simulation, membrane based water treatment, enzymatic membranes, membrane based CO_2 capture for methanol synthesis, membranes for energy systems based on fuel cells and related to artificial photosynthesis systems.

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