François Fajula is CNRS Research Director. From 2004 to 2010 he was the president of the International Zeolite Association (IZA). He has received several awards, such as the CNRS Bronze Medal, the AIChE Award, the Award of the French Chemical Society and, more recently in 2013, the Award of the International Zeolite Association (IZA). This Award gives François Fajula the title of Ambassador of IZA for a period of three years. After a PhD in physical chemistry prepared in Strasbourg (1978) and a post-doctoral stay at Texas A & M University (1980) François joined the Ecole Nationale Supérieure de Chimie of the University of Montpellier in 1981 where he established a research group working in the fields of the synthesis and modification of zeolites and their uses in catalysis. From 1994 to 2002 he headed the laboratory of Catalytic Materials and Catalysis in Organic Chemistry (a join CNRS/University research unit), which activities cover the synthesis of porous materials and nano-particles by self-assembly, heterogeneous catalysis applied to refining, fine chemicals production, environment protection and remediation, biocatalysis, theoretical chemistry modeling, immobilization and delivery of drugs. In 2007 he became the director of the Institute for Molecular and Materials Chemistry, an Institution dedicated to research and education.

“Hydrocracking of long chain alkanes and VGO over hierarchical zeolite Y catalysts with improved middle distillate semectivity”

Zeolite Y crystals with a trimodal interconnected pore system consisting of micropores (0.7 nm) small mesopores (3-8 nm) and large mesopores (30 nm) have been prepared by controlled alkaline treatment of a previously steamed and acid-leached dealuminated material. The large mesopores have been formed during the dealumination process while the small mesopores result from mild desilication upon base leaching. The truly hierarchical nature of the pore network was demonstrated by combining physisorption and electron tomography. These zeolite Y crystals displayed ideal hydrocracking selectivity for model n-hexadecane and squalane feedstocks and demonstrated improved yields in middle distillates in the conversion of a refinery VGO feed.