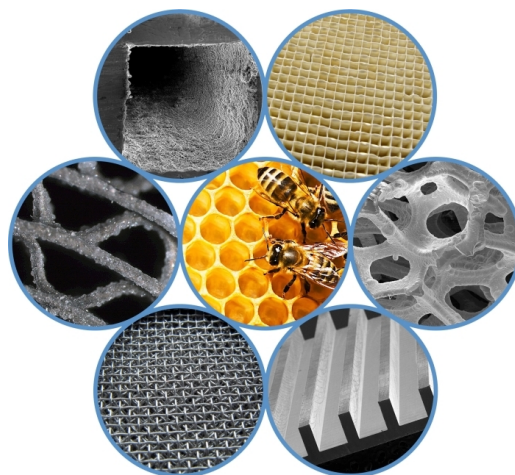




# ICOSCAR5. 5th International Conference on Structured Catalysts and Reactors



**21.Jun - 24.Jun 2016**

**Cod. 095-16**

**Mod.:**

Face-to-face

**Edition**

2016

**Activity type**

Workshop

**Date**

21.Jun - 24.Jun 2016

**Location**

Miramar Palace

**Languages**

English

**Academic Validity**

40 hours

**Organising Committee**



## Description

Structured catalysts and reactors have become significant process intensification technology in catalytic gas and gas-liquid reactions due to the unique advantages that they offer for heat and mass transfer, and reaction kinetics in comparison with more conventional reactors. Due to this, a multi-disciplinary study on structured catalysts and reactors is emerging involving chemistry, chemical engineering, environmental engineering, energy engineering and materials engineering. This is rarely encountered in other research fields. In practice, monolithic structures have been widely used to deal with automobile exhaust gases, flue gas from power plants, catalytic combustion, etc., while open cross-flow structures were the earliest in the family of structured catalysts and reactors to be used in chemical engineering for catalytic distillation at large scale, which, of course, can be extended to other counter-current or co-current operations, coupling reaction and separation. Moreover, structured microreactors can be used in fuel processors as well as to produce fine chemicals, but exciting new applications can be expected in this field. From the scientific point of view, it is still required to explore the microscopic relationship between catalytic active phases, carriers and structural substrates in order to understand the catalytic performance. New catalytic coating methods adapted to complex substrate geometries and novel manufacturing technologies, as additive manufacturing should be explored to improve current processes and offer new solutions to new challenges of the chemical and energy sectors. Modeling and simulation of structured systems remains a great need for effective control of these processes and to explore new geometries that will be possible with the new manufacturing methods of production, guiding the process optimization of complex systems.

## Course specific contributors



**Directed by**



**Mario Montes Ramírez**

---

# Registration fees

<b>REGISTRATION</b>	<b>UNTIL 04-04-2016</b>	<b>UNTIL 23-06-2016</b>
Member of the Organizing Committee	0 EUR	0 EUR
Registration (One day)	250,00 EUR	300,00 EUR
Student	300,00 EUR	350,00 EUR
Academic and Industry Delegate	500,00 EUR	550,00 EUR

# **Place**

## **Miramar Palace**

Gipuzkoa