

All courses in blue will take place at FONTANE Amphitheater (DARWIN building) on the LyonTech La Doua Campus

Monday, July 8th	Tuesday, July 9th	Wednesday, July 10th	Thursday, July 11th	Friday, July 12th	
Morning sessions - Theoretical Courses - Campus Lyon Tech La Doua - Darwin Building - Room Fontannes					
9:00 AM - 10:15 PM					
Fundamentals in the preparation of heterogeneous catalysts Leonarda Liotta	Surface characterization of porous solids and redox properties investigation: basic principles and case studies Leonarda Liotta	Advanced applications of MOF materials for adsorption and catalysis Jorge Rodriguez Navarro	Valorisation of biomass by electrocatalysis Jesus Gonzalez Cobos		
10:15 - 10:30 AM Coffee/Tea Break					
10:30 AM - 11:45 AM					
Transport processes in reactions catalyzed by solids Jose Luis Valverde	Electrocatalysis Jesus Gonzalez Cobos	Generation of acidity and basicity on catalytic surfaces and their characterization Antonella Gervasini	The concept of circular economy for adsorbent and catalytic materials, an example in the field of air and water environmental remediation processes Antonella Gervasini		
11:45 AM - 00:30 PM					
FLASH PRESENTATIONS Leonarda Liotta Jorge Rodriguez Navarro Anne Giroir-Fendler	In-situ and operando XPS for interface characterization applied to catalysis and electrochemistry Luis Cardenas	Heavy-Duty vehicles sustainable transport: emissions aftertreatment, sustainability and decarbonization roadmap Eduard Iojoiu	Evaluations and Conclusions Anne Giroir-Fendler Jose Luis Valverde		
0:30 PM - 1:30 PM					
From 1:30 PM Darwin Building - Room Fontannes	LUNCH BREAK DOMUS building	LUNCH BREAK DOMUS building	LUNCH BREAK DOMUS building	LUNCH BOX to take away	
2:00 - 6:00 PM Theoretical Courses	2:00 - 6:00 PM Practical courses	2:00 - 6:00 PM Practical courses and Flash presentations	2:00 - 6:00 PM Practical courses and Flash presentations		
2:00 - 2:15 PM					
Introduction Anne Giroir-Fendler	Campus ENS Gerland	Campus Lyon Tech La Doua Darwin Building - Room Fontannes	Campus Lyon Tech La Doua Darwin Building - Room Fontannes		
2:15 - 3:45 PM					
Reaction kinetics and chemical reactors Jose Luis Valverde	PRACTICAL 1 Methods of theoretical chemistry Carine Michel Jose Luis Valverde ENS school 46 allée d'Italie, 69007 Lyon	PRACTICAL 2 (90 mn per team of 10 students) xxxxxxxxxxxx a) Research Data Management in Catalysis-related Sciences Michael Liebau Darwin building xxxxxxxxxxxx b) Visit of Characterisation platform at IRCELYON Leonarda Liotta Luis Cardenas Pretre Building	PRACTICAL 3 Kinetic analysis data Jesus Gonzalez Cobos Jose Luis Valverde Darwin building		
3:45 - 4:00 PM Coffee/Tea Break					
4:00 - 5:30 PM					
Synthesis and Characterization of Metal-Organic Frameworks Jorge Rodriguez Navarro			5:00 - 6:00 PM	5:00 - 6:00 PM	
5:30 - 6:00 PM					
Practical courses and Flash Presentation Informations Anne Giroir-Fendler		FLASH PRESENTATIONS Luis Cardenas Michael Liebeau Anne Giroir-Fendler	FLASH PRESENTATIONS Antonella Gervasini Jose Luis Valverde Anne Giroir-Fendler		
8:00 - 11:00 PM					
		Social event for all participants Dinner cruise on the Rhone and Saone rivers			