

ACCOMMODATION

PARTIAL-PGMS Summer School is organised in the beautiful Albarella, a private environmentally protected island in the lagoon south of Venice, covered by Mediterranean scrubland, with 2 million trees and 150 different tree species.

Ideas will be fostered in an incredibly different silent and quiet environment, in close contact with nature, with shops and sports centres at a close range.



HOTEL CAPO NORD

Isola di Albarella
Via Po di Levante, 4
45010 Rosolina (RO)
ITALY

ORGANIZING COMMITTEE



in collaboration with
W.TRAINING

MORE INFO

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Powered by Warrant Hub Spa



PARTIAL-PGMS SUMMER SCHOOL

Novel Automotive Catalysts
production – materials modelling and
synthesis, characterisation, scale-up
and industrial process

17-20 June 2019
Isola di Albarella (Italy)

EARLY BIRD: 870 euro
all inclusive

After April 21 - 980 euro - all inclusive



THE SCHOOL IS ADDRESSED TO:



Post-graduates



Researchers



Professionals

OBJECTIVES

PARTIAL-PGMs Summer School focuses on the process of creation and production of novel automotive catalysts, from materials modelling to the industrial scale-up, going through materials synthesis, characterisation and testing.

The Summer School will give to the participants the unique opportunity of learning from and network with eminent academics and professionals in the field.

WHY PARTICIPATING



Improve your knowledge



Meet important people



Network and interact



Relax, sport and nature

SCHOOL PROGRAM

Monday 17th June 2019

A bus transfer from the airport will be arranged during Monday morning.

13:00: Welcome Cocktail

14:30 – 16:00: School meet and greet

The organizing committee: **Massimo Rinaldi, Antonella Glisenti and Fotis Katsaros**

16:00 – 17:00 | PARTIAL-PGMs Horizon 2020 Funded Project

Massimo Rinaldi, Warrant Hub

Fotis Katsaros, Demokritos

17:00 – 18:00: Background to automotive emissions control

Andrew York, Johnson Matthey Technology Centre

Tuesday 18th June 2019

9:00 – 9:45 | Ceria Catalysts at Nanoscale: Engineering particle shapes to shape catalysis

Alessandro Trovarelli, University of Udine

9:45 – 10:30 | Catalysts based on perovskites

Antonella Glisenti, University of Padova

10:30 – 11:15 | A unitary preliminary vision of the processes underlying surface characterization tools

Gaetano Granozzi, University of Padova

11:15 – 11:30 | Coffee Break

11:30 – 12:15 | FTIR Drifts

Christophe Dujardin, University of Lille

12:15 – 13:00 | Space- and time-resolved operando methodologies

Atsushi Urakawa, Institut Català d'Investigació Química

13:00 – 14:00 | Light Lunch

14:00 – 14:45 | Critical issues in testing the catalyst activity

Paolo Canu, University of Padova

14:45 – 15:30 | Application of operando/synchrotron techniques to TWC

Davide Ferri, Paul Scherrer Institut

15:30 – 16:15 | Designing the next generation of environmental catalysts through multiscale modelling

Emiel Hensen, Eindhoven University of Technology

16:15 | Open Discussion

17:30 | Networking time: cycling tour of the island (about 2 hours)

20:00 | Dinner

Wednesday 19th June 2019

9:00 – 9:45 | How do perovskite-based three ways catalysts work? Hints from operando Raman spectroscopy

Elise Berrier, University of Lille

9:45 – 10:15 | Using Neutrons to measure diffusion in NOx emissions control catalysts

Andrew York, Johnson Matthey Technology Centre

10:15 – 11:00 | Hybrid Nanoarchitectures for Sustainable Catalysts from 2D Materials

Gaetano Granozzi, University of Padova

11:00 – 11:15 | Coffee Break

11:15 – 12:00 | Water-based synthesis routes towards dispersed metal-oxide activated porous catalysts

Fotis Katsaros, Demokritos

Pegie Cool, Universiteit Antwerpen

12:00 – 12:30 | Surface Analysis Principles: XPS

Antonella Glisenti, University of Padova

12:30 – 13:00 | The modelling approach to TWC catalysis

Andrea Vittadini, National Research Council

13:00 – 14:00 | Light Lunch

14:00 – 14:45 | Use of DFT results in actual catalysts' kinetic studies

Paolo Canu, University of Padova

14:45 – 15:30 | Pore-scale modelling of mass transport in 3D reconstructed catalysts and filters

Petr Koci, University of Chemistry and Technology, Prague

15:30 | Open Discussion

17:00 | Networking time

20:00 | Gala Dinner

Thursday 20th June 2019

9:00 – 9:40 | Magnetic Resonance Imaging for Investigating Particulate Filters

Andrew York, Johnson Matthey Technology Centre

09:40 – 10:20 | Filters and membranes

Haris Kadrishahic, Liq-tech

10:20 – 11:00 | Building a 4-Way Catalytic Converters: System architecture and engine technology

Athanasios Tsolakis, University of Birmingham

11:00 – 11:15 | Coffee Break

11:15 – 11:45 | LCA: principle and strategies of approach toward a circular economy

Francesco Cavallini, eAmbiente

11:45 – 12:30 | Recycling CRMs: Potential, Challenges and Future

Ioanna Giannopoulou, National University of Athens

12:30 – 13:00 | Horizon Europe

Isella Vicini, Warrant Hub

13:00 – 13:30 | GRADUATIONS

13:30 – 14:30 | Light Lunch

A bus transfer to the airport will be arranged during the afternoon.