



1ST INTERNATIONAL CONFERENCE ON SMART ENERGY CARRIERS

21-23 JANUARY 2019
NAPOLI, ITALY

Energy carriers are gaining a central role in the panorama of energy production systems as they can be considered a viable answer to environmental sustainability while accomplishing supply security issue. Coupled with advanced combustion technologies, they are synergistic twin strategies that can satisfy the requirements of geo-political and environmental sustainability and security.

A Smart Energy Carrier (SEC) identifies any molecule (derived from standard, alternative or unconventional sources) locally produced or made available to be safely and cleanly transformed into energy by means of the best accessible combustion technology. The study of SECs related to their use in combustion-based energy production systems, in all its aspect, has been so far the framework within the networking activities of the SMARTCATs COST Action.

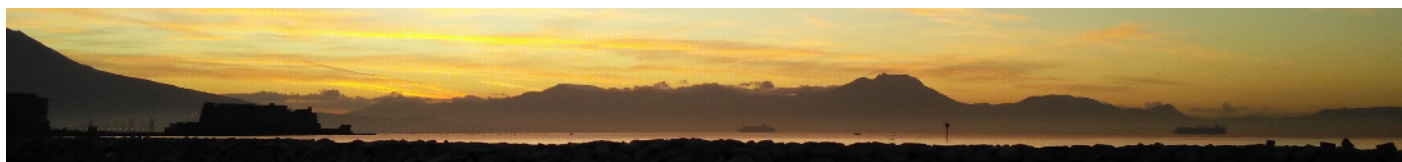
The network has grown over the years and after several successful Action meeting, the time has come to organize the

First International Conference on Smart Energy Carriers

ICSEC 2019 will take place in Naples on January 21st-23rd, 2019 (at the Congress Center of the University Federico II) with the aim to point out (Smart) Energy Carriers Chemistry and Technologies current state of knowledge and perspectives. The Conference will also be the last General and Committee Members meeting of the SMARTCATs COST Action.

Invited lecturers

- A. Valera Medina, Cardiff University
"Hydrogen through Ammonia"
- J. Bergthorson, McGill University
"Metal fuels for compact zero-carbon power"
- N. Sebbar, Karlsruhe Institute of Technology
"Sulfur combustion as closing step in a sulfur based solar-thermal cycle"
- M. Agraniotis, Mitsubishi Hitachi Power Systems Europe
"EU policy on energy carriers. The power plant manufacturers' view and response"
- K. Lucka, TEC4FUELS GmbH
"Synthetic Fuels – the wild card for the energy transition?"
- B. Dally, University of Adelaide
"Adaptation of Carbon Free Fuels to Industrial Processes"



Round-tables:

Energy carriers in industrial applications: issues and perspectives

Moderator: F. Mauss, TU- Cottbus

A. della Rocca, Tenova

Process fuels in the metals industry: a general overview

H. Levinsky, DNV GL Oil&Gas

The right fuel for the right job

M. Agraniotis, Mitsubishi Hitachi Power Systems Europe

**Role of hydrogen towards achieving EU decarbonisation targets.
How to overcome existing barriers?**

A. Casillo, Technip

An industrial perspective on energy transition: challenges and opportunities

C. Romano, Baker Hughes General Electric

Gas Turbine Fuel Flexibility in BHGE

Energy carriers production and exploitation: perspective analyses

Moderator: A. Cavaliere, University Federico II of Napoli

L. Gouveia, Laboratório Nacional de Energia e Geologia - Lisbon

Microalgae-based fuels. Utopia or Reality?

T. Katrašnik, University of Ljubljana

Eliminating negative impact of combustion.

The role of advanced fuels and advanced combustion devices

K. Triantafyllidis, Aristotle University of Thessaloniki

The potential of waste ligno-cellulosic biomass for the production of fuels and chemicals

J. B. Michel, University of Applied Sciences and Arts of Western Switzerland

What is preferable: renewable carbon for energy or for materials ?

Local Organizing Committee

Raffaele Ragucci, Istituto di Ricerche sulla Combustione – CNR, chair

Mara de Joannon, Istituto di Ricerche sulla Combustione – CNR

Fabrizio Scala, DICMAPI – Università Federico II di Napoli

Pino Sabia, Istituto di Ricerche sulla Combustione – CNR

Giancarlo Sorrentino, DICMAPI – Università Federico II di Napoli

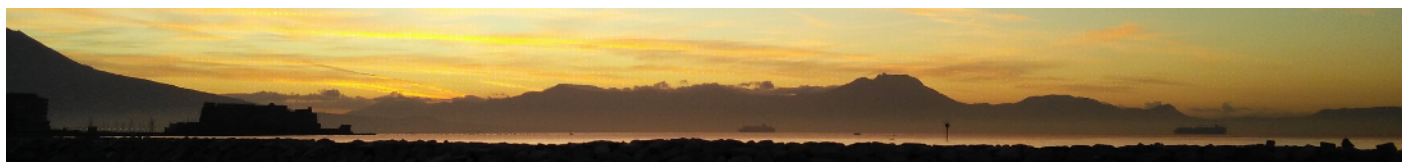
Antonella Napolitano, Istituto di Ricerche sulla Combustione – CNR

M. de Joannon (IRC-CNR)

Action Chair

G. Skevis (CPERI-CERTH)

Action Vice-Chair





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Napoli, January 21-23, 2019

PROVISIONAL TIMETABLE



Monday January 21 st		Tuesday January 22 nd		Wednesday January 23 rd	
8:00 - 9:00	Registration				
9:00 - 9:30	Welcome	9:00 - 9:45	Invited lecture	9:00 - 9:45	Invited lecture
9:30 - 10:15	Invited lecture				
10:15 - 11:30	Contributed Posters	9:45 - 11:00	Contributed Presentations	9:45 - 11:15	Roundtable
		11:00 - 11:15	Coffee Break		
11:30 - 13:00	Contributed Presentations	11:15 - 13:00	Contributed Presentations	11:15 - 13:00	Contributed Posters
13:00 - 14:00	lunch break	13:00 - 14:00	lunch break	13:00 - 14:00	lunch break
14:00 - 14:45	Invited lecture	14:00 - 14:45	Invited lecture	14:00 - 14:45	Invited lecture
14:45 - 16:00	Contributed Presentations	14:45 - 15:00	Coffee Break		
		15:00 - 16:15	Contributed Presentations	14:45 - 16:15	Roundtable
16:00 - 18:00	Contributed Posters			16:15 - 16:30	Coffee Break
17:00 - 19:00	Management Committee Meeting			16:30 - 18:00	Contributed Presentations
		18:00	Networking event		

