



**The Combustion Institute**

5001 Baum Boulevard, Suite 644

Pittsburgh, Pennsylvania 15213-1851 USA

Ph: (412) 687-1366

Office@CombustionInstitute.org

Fax: (412) 687-0340

CombustionInstitute.org

---

**Mara de Joannon**

*2020 Candidate Profile: The Combustion Institute Board of Directors*

**Reasons for Nomination**

Despite mainstream perception, Combustion science and technology will play in the future a key role both for providing secure and affordable energy in widely ranging sectors and for synergistically supporting renewable energy sources increased penetration. Once again the Combustion community is called to recast and expand combustion knowledge and practice to address the new energy scenarios.

During the last several years, I have actively pursued the above goals both working/expanding key sustainable combustion technologies and setting up networks for promoting the Combustion cause. With my role as coordinator of a wide network of scientists and companies working on smart energy carriers, involving several countries with diverse capacities and interests, I worked to spread the idea of using combustion as the enabler of renewable energy source deployment to funding institutions, policymakers and the general public.



Serving as a member of the Board, with my experience I will pursue this effort with greater emphasis to *help our community (re)-gain the position to contribute to the development and implementation of sustainable energy policies in different regional areas.*

As a key step, I will promote the interaction between scientists and key actors from the energy sector aimed at identifying common interests and development perspectives.

*See the next page for the candidate's curriculum vitae.*

# Mara de Joannon - Curriculum Vitae

## Personal Data

Italian, Born in 1968

Senior Researcher - Istituto di Ricerche sulla Combustione - CNR - (IRC-CNR), Napoli, Italy  
[mariarosaria.dejoannon@cnr.it](mailto:mariarosaria.dejoannon@cnr.it), [http://www.irc.cnr.it/institute/dejoannon\\_mara](http://www.irc.cnr.it/institute/dejoannon_mara)

## Education

PhD degree in Chemical Engineering at University Federico II of Naples (1999)

Master degree in Chemical Engineering (cum laude) at University Federico II of Naples (1994)

## International roles and recognitions

- Fellow of the Combustion Institute 2020
- CHAIR of the COST Action Management Committee: CM1404: SMARTCATS: **Chemistry of smart energy carriers and technologies** (2015-2019, 30 countries, [www.smartcats.eu](http://www.smartcats.eu))
- **Associated Editor** of Proceedings of the Combustion Institute (2018-2024)
- Managing Guest editor: FUEL (Elsevier) 2017 and 2019,
- Guest editor: Frontiers 2019
- Guest editor: Energy&FUEL (ACS) 2018

## Service to the Combustion Institute

- Member of By-law Committee, 2010-2013
- Member of the Governance Policy Committee
- Member of Bernard Lewis Committee, 2010-2014
- Chair of Gold medal nomination Committee, 2013-2014.
- Member of Gold medal nomination Committee, 2009-2010
- Member of Program advisory committee for 36th Int. Symp. on Combustion, Korea, 2016
- Colloquium Co-Chair at 33rd and 34th Int. Symp. on Combustion
- Colloquium Coordinator at 35th Int. Symp. on Combustion
- Colloquium Co-Chair at 10th and 11th Mediterranean Combustion Symposium

## Research interests

Advanced combustion processes and technologies, focusing on the conversion of gaseous and liquid energy carriers (fossil and alternative fuels as well as unconventional molecules), in efficient and fuel flexible processes/systems. The main expertises refer to MILD/diluted/flameless combustion, Ignition and combustion of energy carriers (e.g.fossil fuel, biofuels, no/low carbon fuel), pollutants formation and reduction in combustion systems, high pressure spray combustion

## Invited-Keynote Lectures

- "Stability of MILD Combustion in temperature tailored reactors", Australian Combustion Symposium, Adelaide, December 2019
- "MILD Combustion: From ignidiffusion to temperature tailored reactors", 9<sup>th</sup> European Combustion Meeting, Lisbon 14 -17 April 2019, Opening lecture
- "Smart Energy Carriers Chemistry and Technologies: Perspectives in New Energy Scenario", IEA – Clean and Efficient Combustion-meeting, Fréjus, France, 12 -15 June, 2018.
- "Beyond Combustion dichotomy: toward fuel flexible technologies", Joint meeting of the Italian and German Sections of the Combustion Institute, Sorrento, Italy, May 2018
- "MILD Combustion: toward highly fuel flexible solutions", KAUST Research Conference, KAUST, Saudi Arabia, March 5 to 7, 2018
- "Elusive features of MILD Combustion", 12<sup>th</sup> Int. Conf. on Energy for a Clean Environment, Lisbon, 5-9 July 2015, Opening Lecture.