

Mara de Joannon-Curriculum Vitae

Personal information

Mara de Joannon (Mariarosaria Ceglia de Joannon), Italian, Born in 1968

Affiliation: Istituto di Ricerche sulla Combustione - Consiglio Nazionale delle Ricerche (IRC-CNR)

P.le Tecchio n°80, 80125, Napoli, Italy

Education

- PhD degree in Chemical Engineering at University Federico II of Naples (1999)
 - Master degree in Chemical Engineering at University Federico II of Naples(1994)
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Work experience and recent positions

- Researcher at IRC-CNR in Naples, Italy since 2001
 - Temporary researcher at Dept. Chemical Engineering, University Federico II, 2000-2001
 - Fellowship Grantee, ENEL/University of Naples 1999 – 2000
 - International Fellowship grantee at Molecular Physics Laboratory, SRI California, 1998
 - Fellowship grantee at IRC-CNR 1995 - 1996
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Expertise:

She currently develops research on 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: Advanced Combustion technologies, MILD/diluted/flameless combustion, Ignition and combustion of energy carriers (e.g.fossil fuel, biofuels, no carbon fuel), Pollutants formation and reduction in combustion systems, Optical diagnostics for reactive structure characterization, High pressure spray combustion

Involvement in and service to the international community

- **Associated Editor** of *Proceedings of the Combustion Institute* (2018-2024)
- *Managing Guest editor: FUEL* (Elsevier)
- *Guest Editor: Energy&FUEL* (ACS)
- *Guest Editor: Frontiers*

Combustion Institute Committees:

- Member of the **Governance Policy** Committee
 - Member of Bernard Lewis Committee, 2010-2014
 - Member of Gold medal nomination Committee, 2009-2010
 - Chair of Gold medal nomination Committee, 2013-2014.
 - Member of **By-law Committee**, 2010-2013
 - Member of Program advisory committee for 36th Int. Symposium of Combustion, Korea, 2016
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Invited/Keynote Lectures

- *Stability of MILD Combustion in temperature tailored reactors: A perspective on thermal conversion of energy carriers*, Australian Combustion Meeting, December 2019
- *MILD Combustion: From ignidiffusion to temperature tailored reactors*, 9th 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: Combustion in Extreme Conditions, KAUST, Saudi Arabia, March 5 to 7, 2018
- *Elusive features of MILD Combustion*, 12th International Conference on Energy for a Clean Environment, Lisbon, 5-9 July 2015, Opening Lecture.

Combustion Institute Summer School:

- Lecture on: Ignition and Oxidation Characteristics in Advanced Internal Combustion Engines Technologies, Combustion Institute Summer School, Creta, 2016

International Roles and Recognitions

1) Fellow of The Combustion Institute since 2020

2) CHAIR of the COST Action Management Committee: CM1404: SMARTCATS: Chemistry of smart energy carriers and technologies (2015-2019), a European Network with 30 participant countries (www.smartcats.eu) and about 70 entities. In this role, she coordinated the scientific organization of several meetings, workshops and International Conference as well as a Short Scientific Mission Program which supported more than 70 researchers all over Europe.

In this role, she was responsible of scientific organization and program of:

International conferences

- 1st International Conference on Smart Energy Carriers, Napoli, 21-23 January 2019
- 3 Annual General International Meetings on Chemistry of Smart Energy Carriers and Technologies (2015, 2017, 2018)

International Topical Workshops

- *Ammonia for Fueling Future Energy* - Workshop, Lisbon, Portugal 13 – 14 April 2019
- MILD Combustion modelling challenges, experimental configurations and diagnostic tool, Napoli, Italy, 24-25 January, 2019
- Sustainable and Smart Energy Carriers for Decentralised Energy Production, Bruxelles, Belgium 16 – 17 March 2017
- Data collection and mining toward virtual chemistry of smart energy carriers, Naples, Italy 4 -5 April 2016.

3) International Combustion Symposium Colloquia:

- **Colloquium Coordinator** in New Technology Concepts, Reacting Flows and Fuel Technology colloquium, 35th International Symposium on Combustion, The Combustion Institute, 2014
- **Colloquium Co-chair**, New Technology Concepts, Reacting Flows and Fuel Technology, 34th International Symposium on Combustion, The Combustion Institute, 2012
- **Colloquium Co-chair**, New Technology Concepts, Reacting Flows and Fuel Technology, 33rd International Symposium on Combustion, The Combustion Institute, 2010

4) Mediterranean Combustion Symposium Colloquia:

- Co-Chair at the Colloquium on CO₂ Capture Processes and New Concepts, 10th Mediterranean Combustion Symposium, Napoli, Italy, 17 – 21 September 2017
- Co-Chair at the Colloquium on CO₂ Capture Processes and New Concepts, 11th Mediterranean Combustion Symposium, Tenerife, Spain 16 – 20 June 2019

5) International Combustion Symposium session chair:

- 34th, 35th, 36th 37th International Symposium on Combustion

6) Italian Section of the Combustion Institute meetings:

- Session Chair at 34th Meeting Italian Section of the CI, Napoli, Italy, 4-6 July, 2016
- Scientific Committee member at 28th Event of the Italian Section of the CI, Second S4FE, Continental Terme Hotel, Ischia, June 27-30, 2010
- Colloquium Co-Chair, Innovative Combustion Technologies, Combustion Colloquia, XXXII Event of The Italian Section of the CI Napoli, University Federico II, 26-28 April, 2009

7) Member Role in other international meetings:

- Scientific Committee International Bunsen Discussion Meeting, Chemistry and Diagnostics for Clean Combustion Center for Interdisciplinary Research Bielefeld June 21–23, 2017

- Organizing committee at Workshop on Gas-phase Reaction Kinetics of Biofuels Oxygenated Molecules, Milan, Italy, 23 – 24 April 2018

Referee role

Proposal evaluator for several entities:

- European Research Council
- European Community (FP7, H2020 frameworks)
- Technology Foundation SWT (The Netherland)
- Fonds de la Recherche Scientifique (Belgium)
- Agencia Nacional de Evaluación y Prospectiva A.N.E.P. Ministerio de Economía y Competitividad (Spain)

PhD Thesis evaluator/member of jury for:

University of Cambridge (UK), University of Zaragoza (Spain), University of Adelaide (Australia), Politecnico di Milano, Université Libre de Bruxelles, Eindhoven University of Technology (The Netherland), Indian Institute of Technology di Bombay (India), Lund University (Sweden)

Tutor/member of scientific committee of PhD awarded by the University of Naples, Italy

Publications

[Mara de Joannon's google profile](#)