

Simona Silvia Merola

Birth: [REDACTED] - Milano (Italy)

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Simona Silvia Merola (SSM) received her “Summa cum Laude” Degree in Physics in 1995 and PhD in Chemical Engineering in 2001, from the University of Naples in Italy.

Since 2001 she is a tenured Researcher of CNR, Italian National Research Council, first at Istituto Motori and now at Institute of Science and Technology for Sustainable Energy and Mobility (STEMS).

Since 2010 she is senior researcher and responsible of a research team involved in the application of advanced methodologies for investigating thermal and fluid-dynamic phenomena that occur in complex systems for propulsion.

Since 2012, SSM has the role of expert and project evaluator for several International Funding Organizations, including the European Commission. In addition, she is actively involved in the organization of technical sessions of international conferences and supports ISI journals as reviewer. SSM has authored more than 150 scientific articles with more than 2500 citations.

Current Position:

Senior Researcher (tenured position 2020 - today)

Institute of Science and Technology for Sustainable Energy and Mobility CNR National Research Council (Naples - Italy).

Previous position

Senior Researcher (tenured position)

2010- 2020 Istituto Motori – CNR National Research Council (Naples - Italy).

Researcher (tenured position)

2001- 2010 Istituto Motori – CNR National Research Council (Naples - Italy).

Recent activities (2010 – present)

Direct responsibility and/or participation in

European Project

- **COST Action FP1306** _ Valorisation of lignocellulosic biomass side streams for sustainable production of chemicals, materials & fuels using low environmental impact technologies. (2014-2018)
- **ETNA2020 Academy** _ The network of the Horizon 2020 National Contact Points for ‘Smart, Green and Integrated Transport’

National Governative Project

- **PON01_02211 MAIR** - Multi-air Evolution - Next Generation Ultra low CO₂ Spark Ignition Powertrain. (2011-2013)
- **MIT - Fincantieri- CNR** " High Efficiency Ship and Innovative Electrical Generation"
- **POR CAMPANIA FESR 2014/2020 _ VEDO** - Design and realization of EGR valves with integrated digital diagnostics (2018-2020)
- **FOE Strive** – 2023-2024 WP 2. Refurbishment of light duty vehicles

Industry Funded Project

- **GM_Powertrain** _ DAT117: Evaluation of the HC-vaporizer benefits on PM reduction at the exhaust of a small-diesel engine equipped with DOC+DPF after-treatment device (2011-2012)
- **Eldor spa** “Optical characterization of plasma-assisted ignition in spark-ignition engines” (2013-2014)
- **Eldor spa** “OH diagnostic of combustion due to plasma-assisted ignition in spark-ignition engines” (2015)
- **Eldor spa** “Characterization of a plasma ignition system in a s.i. engine through ion current diagnostic” (2016-2019).

Project Reviewer and Expert activities

- MIUR _Italian Ministry of Education, University and Research_ since 2012
- Israel Science Foundation, ISF since 2014.
- Romanian Executive Agency for Higher Education, R&D and Innovation Funding since 2014
- Innovation Fund Denmark since 2015
- European Commission and EUREKA for EUROSTARS since 2015
- European Commission for H2020_CLEANSKY since 2016
- Grant for Division of Research & Graduate Studies of United Arab Emirates University 2016

- FNRS Bourses et Mandats/Grants and Fellowships since 2018
- MISE _ Italian Ministry of Economic Development since 2018
- Poland National Science Centre since 2018
- Ministry of Education and Science of the Republic of Kazakhstan since 2020

Standards committee

- **Member of SAE Technical Committee E-33 In-Flight Propulsion Measurement** since 2017
- **Member of SAE Technical Committee G-48 System Safety** since 2017
- **Member of SAE Systems Sensors Committee** since 2021
- **Advisory Board Member of SAE MobilityRxiv®** - since 2021

Awards and Scientific Recognitions

- 2010 _ **SAE International Member Service Award** 2001-2010
- 2015_ **SAE International Recognition** for the Organization of Technical Sessions in Powertrain, Fuel & Lubricants Meeting
- 2017_ **Award for High-quality paper** at Small Engine Technology Conference SETC2017, Jakarta (Indonesia)
- 2018 _ **Outstanding Reviewer for Journal of Energy Engineering**. ASCE_ American Society of Civil Engineers
- 2019_ **Outstanding Reviewer Award** from Energies (ISSN 1996-1073, MDPI journal)
- 2019_ **Eminent Reviewer Award** from Betham Science Publishers
- 2019_ **Reviewer recognition** for the valuable contribution to the quality of the journal "Polish Journal of Environmental Studies" (ISSN: 1230-1485)
- 2019 _ **SAE International Contributor of the Year 2019**
- 2019 _ **Award for High-quality paper** at Small Engine Technology Conference SETC2019, Hiroshima (Japan)
- 2022_ **SAE International "Forrest-McFarland Award"**

Editorial activity and Review Board participation

- **Expert & Editorial Review Board Member _ World Academy of Science, Engineering and Technology (WASET)** since 2014
- **Editorial Board Member of Int. Journal of Automotive Engineering and Technology (IJAET)** since 2013
- **Associate Editor DOAJ_ Directory of Open Access Journals**, since 2014
- **Editorial Board Member of Trends in Renewable Energy (ISSN: 2376-2136)** since 2015.
- **Review Editor for Engine and Automotive Engineering of Frontiers in Mechanical Engineering**, since 2014
- **Editorial Board Member of Advances in Automotive Engineering (AAE)**, International journal of KAIST_ Korea Advanced Institute of Science & Tech. since 2016
- **Associate Editor SAE Journal of Engines** (ISSN 19463936, Coverage 2009-ongoing) since 2017
- **Reviewer Panel member of Bentham journal on Current Alternative Energy** since 2017
- **Editorial Board Member of Progress in Energy & Fuels** (ISSN(P): 2251-2640) since 2018
- **Editorial Board Member of International Journal of Mechanical Engineering and Applications** ISSN Print: 2330-023X since 2018
- **Advisory Board Member of Taylor & Francis Energy Sources**, Part A: Recovery, Utilization, and Environmental Effects, since 2019
- **Reviewer Board Member of Energies** MDPI _ ISSN 1996-1073 since 2019
- **Editorial Board Member of Journal "Current Chinese Science"** – since 2020
 - **Editorial Board Member of Applied Science** MDPI _ ISSN 2076-3417 since 2021