

Matteo Prussi, PhD

matteo.prussi@polito.it
Italian

I am an **industrial engineer**, with a scientific background in renewable energy conversion technologies. I have been working in **alternative fuels sector for almost 15 years**.

I completed my **PhD studies in energetic engineering** at the University of Florence, with a thesis on the use of liquid alternative fuels in Micro Gas Turbines. In 2009, in the framework of my PhD thesis, I was **visiting student at CEP of the London Imperial College**, where I performed a market analysis of Italian and European biofuel sector.

I worked as a **research fellow and renewable energy expert at the Energy Department of the University of Florence**, before **being appointed Director of the RE-CORD** renewable energy consortium (2012 - 2016). At RECORD/UNIFI I **developed a strong background in alternative fuels and bioenergy production technologies**.

In **2014 I obtained the National scientific qualification (ASN)** as a university associate professor, for the class **ING/IND 09/C1** (Technology and systems for energy production and Environment).

In the period 2017-2021, I worked as **scientific officer** at the Renewable Energy and Sustainable Transport Unit of the **European Commission Joint Research Center - Ispra**. I joined EC-JRC after a long and valuable experience at the University of Florence. I have also **coordinated** the development of a relevant study for alternative fuels in road sector, the **JEC-WTW study**.

In **2019** I have been **invited as guest editor** of the special issue of **Applied Sciences journal**, and in 2020 I joined the **Editorial Board**.

I am **currently employed as senior researcher** at the Energy Dept. of the **Polytechnic University of Turin**. I am currently focusing **my research activities on the assessment of the environmental impacts of the various modes of transport, and on the potential for alternative fuels**, in particular for **aviation and maritime sectors**. Besides performing research activities, at Polito I teach a course of **“Energy production technologies”**.

Specifically, on aviation sector, **I am co-leader of the CORE-LCA** subgroup of **the Fuels Task Group (FTG)** for the International Civil Aviation Organisation (**ICAO**). In this role, I coordinate the activities of a group of experts from international institutions, among the other MIT, DoE-ANL, etc.

I am also **co-leading the Fuel technical group of Long Term Aspirational Goal** of **ICAO**, aiming at assessing the volumes and GHG saving potential of the uptake of alternative fuels, for the post-COVID and with the time horizon 2030, 2050 and 2070.

On the maritime sector, in 2022 I have been **nominated expert** for supporting the European Commission at **IMO**.

I would define myself as a **resilient, adaptable** person, particularly in the working environment. I have **no concerns in managing stress** when put under pressure, both due to complex situations and high workloads. I would define **enthusiasm** the main added value that I bring to my work environment, together with the willingness to **contribute** with **new ideas** and their development, while remaining **positively open to changes**.

CURRICULUM VITAE

EDUCATION AND TRAINING

- 01/01/2007 - 19/04/2010 **Doctor of Philosophy (PhD) in “Research and development of renewable and alternative system for the energy production”.**
University of Florence – Engineering faculty - “S.Stecco” Department of energetic., Florence (Italy)
Development of a multi-fuel micro gas turbine for pure vegetable oil.
CFD modelling and hardware implementation.
Emissions and performance measurements.
- 01/06/2009–30/09/2009 **Visiting Student.**
Imperial College London – Center for Environmental Policies - “CEP”., London, (United Kingdom)
Research on the interaction between energy and food markets in the framework of the European regulation for the promotion of biofuels.
- 01/01/2003–27/04/2006 **Master degree. 110 cum laude/110 in Mechanical (Energy) Engineering**
University of Florence, Florence (Italy)
Development of a model for the simulation and optimization of solar cooling plant.
- 01/09/2000–31/12/2002 **Bachelor degree. 102/110 in Mechanical Engineering**
University of Florence, Italy., Florence (Italy)
Experimental investigation of advanced cooling system for gas turbine blade and nozzles
(Indagine sperimentale su sistema di raffreddamento ad alta efficienza per palettature di turbina a gas)
- 01/01/1995–01/08/2000 **General Certificate of Education Industrial chemistry 98 / 100**
I.T.I.S “T.Buzzi”, Prato (Italy)

WORK EXPERIENCE

Roles and Contracts

- 01/10/2021 – present **Senior researcher – Professor of “Energy production technologies”**
Dept. of Energy Polytechnic University of Turin, Turin (Italy)
- 01/01/2019 – 30/09/2021 **Contract Agent at EC JRC-Ispra**
Work Packages leader – I4RFF, WTW and AAF
Project Officer
Directorate C – Energy, transport and Climate. Energy Efficiency and Renewables - Unit C.2
- WTW: Scientific support to project Environmental impact assessment of road and aviation transports.
 - AAF: Scientific support to project on alternative fuels for aviation.
 - I4RFF: Scientific support to project focusing on market interreaction assessment of alternative fuel demand in road, aviation and maritime sector.
- 02/11/2017 – 31/12/2018 **Contract Agent at EC JRC-Ispra**
Unit C.4 Sustainable Transport
Scientific support to project Environmental impact assessment of road and aviation transports.
- 02/2017 – 31/10/2017 **Contract on BIOREFLY – FP7 project**
RE-CORD consortium
Scientific support to project activities, related to alternative fuel production, from lignocellulosic residues, for aviation sector.
- 20-21/06/2017 **Teaching at the Master of Scuola Superiore S. Anna Pisa, Italy.**
School of Operation and Maintenance.
Title of the course: “Biomass Technology”,
- 02/2017 – 09/2017 **Consultant for a large Italian gas distributor, on Biomethane**
ESTRA SpA
Scientific support in analysis of new biomethane production plants in Italy
- 01/2017 – 30/09/2017 **Consultant for energy optimization in biofuels production**
SILO SpA
Process analysis and optimization for industrial biofuels production.
- 02-2017 - 30/09/2017 **Contract on D-Factory – FP7 project for IN srl**
Technical support to project management and dissemination.
- 21/03/2012–31/12/2016 **Director of the research consortium RE-CORD (Renewable Energy Consortium for R&D) of the University of Florence**

The Consortium is a private-public body focusing its activities in the field of renewable energies, in particular on biomass and biofuels (www.re-cord.org). The director activities include coordination of the people, management of the on-going project, coordination of specific research activities and funds searching,
- 5/5/2014-4/30/2015 **Contract professor of the IMES master of the University of Florence, Florence (Italy)**
Renewables energy technology on IMES international Master in bioenergy (<http://crear.unifi.it/imes/>)
- 01/02/2016–31/01/2017 **Senior researcher at UNIFI-Dept. Of industrial Engineering (DIEF)**
Investigation of innovative technologies for bioenergy – II year
- 01/02/2015–2016 **Senior researcher at DIEF (Dept. Of Industrial Engineering)/Univ of Florence (Italy)**
- 2013-2016 **College / university teaching professional at University of Florence, Florence (Italy)**
Support to teaching at “Advanced bioenergy systems”: mech. Engineering university course
- 19/06/2014–31/12/2014 **Scientific support at CREAR, Florence (Italy)**

LCA assessment for a bioliquid supply chain

- 05/06/2014–20/06/2014 **College / university teaching professional**
Economy Dept/Univ. of Florence, Florence (Italy)
Lessons on biofuels market at the MASTER in Economy and BioEnergy
- 01/02/2014–31/01/2015 **Research grant at DISPAA/Univ. of Florence, Florence (Italy)**
Research GRANT to support the design of the BIOFAT (EU-FP7) pilot plant.
- 01/02/2013–31/01/2014 **Research grant at DISPAA/Univ. of Florence, Florence (Italy)**
Research GRANT to support the design of the BIOFAT (EU-FP7) pilot plant.
- 01/01/2013–24/06/2013 **Technical support on a legal lawsuit on a BIOGAS plant**
Tree srl, Florence (Italy)
- 01/01/2013–05/07/2013 **College / university teaching professional**
University of Florence, Florence (Italy)
CISA Master: lessons on BioFuels
- 01/02/2012–31/01/2013 **Research grant**
DIBA, Florence
Research on biofuels field on BIOFAT (FP7-EU supported project): algae production systems for biofuel sector.
- 01/01/2011–31/12/2011 **Research grant**
Energy Dept./University of Florence, Florence (Italy)
- 01/04/2011–04/04/2011 **Special education teaching professional**
ARPAT, Florence (Italy)
Course "Analisi energetiche su impianti di potenza di produzione energie rinnovabili e stabilimenti - IPCC " - Regional Agency for Environmental Control
- 01/03/2011–31/12/2011 **College / university teaching professional**
Energy Dept., Florence (Italy)
Teaching activities: Design criteria for turbo-machinery for aero-propulsion and industry. Turbo-machinery course, University of Florence.
- 01/01/2011–31/12/2011 **Technical support**
Tuscany Region, Florence (Italy)
Role: senior expert for the evaluation of the proposal for the Tuscany Region.
- 01/01/2010–31/12/2010 **Research grant**
Energy Dept./Univ. of Florence, Florence (Italy)
- 25/03/2010–26/03/2010 **Scientific support for TIS, Bolzen (Italy)**
Scientific support to plant biomass plant technology selection.

Junior engineer

PERSONAL SKILLS

Levels: A1/A2: Basic user - B1/B2:
Independent user - C1/C2: Proficient user.
[Common European Framework of Reference
for Languages](#)

Italian	English	Spanish	Greek
Native speaker	C2	C2	A2

SCIENTIFIC ACTIVITY

Matteo PRUSSI ORCID Profile: <https://orcid.org/0000-0003-3624-0367>

Total number of articles in published journals included in the main international databases	Total number of citations to his/her own overall scientific production	The overall Hirsch index (H-index)	Database source
36	1423	16	SCOPUS
56	1910	19	GOOGLE SCHOLAR
Co-authors: 47 from 6 Countries			

Sources:

- **Scopus:** <https://www.scopus.com/authid/detail.uri?authorId=26536336500>
- **Google Scholar:** <https://scholar.google.it/citations?user=IMaC8AcAAAAJ&hl=it>

ITALIAN NATIONAL CERTIFICATION TO APPLY IN THE ROLE OF UNIVERSITY PROFESSOR

09/C1 – Macchine e Sistemi per l'Energia e per l'Ambiente.

ASN Call 2014, Validità 22.12.2014 - 22.12.2023

RELEVANT SCIENTIFIC PUBLICATIONS

1	2022	Scarlat, N., Prussi, M., Padella, M. (2022). Quantification of the carbon intensity of electricity produced and used in Europe. <i>Applied Energy</i> , 305. DOI:10.1016/j.apenergy.2021.117901
2	2022	Cai, H., Prussi, M., Ou, L., Wang, M., Yugo, M., Lonza, L., & Scarlat, N. (2022). Decarbonization potential of on-road fuels and powertrains in the European Union and the United States: a well-to-wheels assessment. <i>Sustainable Energy & Fuels</i> , 6(19), 4398-4417.
3	2022	Prussi, M., Panoutsou, C., & Chiaramonti, D. (2022). Assessment of the Feedstock Availability for Covering EU Alternative Fuels Demand. <i>Applied Sciences</i> , 12(2), 740.
4	2022	Testa, L., Chiaramonti, D., Prussi, M., & Bensaid, S. (2022). Challenges and opportunities of process modelling renewable advanced fuels. <i>Biomass Conversion and Biorefinery</i> , 1-36.
5	2022	Buffi, M., Prussi, M., & Scarlat, N. (2022). Energy and environmental assessment of hydrogen from biomass sources: Challenges and perspectives. <i>Biomass and Bioenergy</i> , 165, 106556.
6	2022	Prussi, M., Laveneziana, L., Testa, L., & Chiaramonti, D. (2022). Comparing e-Fuels and Electrification for Decarbonization of Heavy-Duty Transports. <i>Energies</i> , 15(21), 8075.
7	2021	Prussi, M., Weindorf, W., Buffi, M., López, J. S., & Scarlat, N. (2021). Are algae ready to take off? GHG emission savings of algae-to-kerosene production. <i>Applied Energy</i> , 304, 117817.
8	2021	Prussi, M., Lee, U., Wang, M., Malina, R., Valin, H., Taheripour, F., ... & Hileman, J. I. (2021). CORSIA: The first internationally adopted approach to calculate life-cycle GHG emissions for aviation fuels. <i>Renewable and Sustainable Energy Reviews</i> , 150, 111398.

9	2021	M. Prussi, N. Scarlat N, M. Acciaro, V. Kosmas. 2020. Potential and limiting factors in the use of alternative fuels in the European maritime sector. <i>Journal of Cleaner Production</i> , 125849 https://doi.org/10.1016/j.jclepro.2021.125849
10	2021	D. Chiaramonit, G. Talluri, N. Scarlat, M. Prussi. 2021. The challenge of forecasting the role of biofuel in EU transport decarbonization at 2050: a meta-analysis review of published scenarios. <i>Renewable and Sustainable Energy Reviews</i> . <i>STATUS: accepted under publication</i>
11	2021	M. Prussi a, A. Julea , L. Lonza , C. Thiel. Biomethane as alternative fuel for the EU road sector: analysis of existing and planned infrastructure. <i>Energy Strategy Reviews</i> 33 (2021) 100612. https://doi.org/10.1016/j.esr.2020.100612
12	2020	Editorial Prussi, M. (2020). Special Issue on Cutting-Edge Technologies for Renewable Energy Production and Storage.
13	2019	Prussi, M., O'Connell, A., & Lonza, L. (2019). Analysis of current aviation biofuel technical production potential in EU28. <i>Biomass and Bioenergy</i> , 130, 105371.
14	2019	Padella, M., O'Connell, A., & Prussi, M. (2019). What is still Limiting the Deployment of Cellulosic Ethanol? Analysis of the Current Status of the Sector. <i>Applied Sciences</i> , 9(21), 4523.
15	2019	Prussi M, Konti A, Lonza L (2019). Could Biomass Derived Fuels Bridge the Emissions Gap between High Speed Rail and Aviation?. <i>SUSTAINABILITY</i> , Vol. 11, ISSN: 2071-1050, doi: 10.3390/su11041025
16	2019	Prussi M, Padella M, Conton M, Postma ED, Lonza L (2019). Review of technologies for biomethane production and assessment of Eu transport Share in 2030. <i>Journal Of Cleaner Production</i> , vol. 222, p. 565-572, ISSN: 0959-6526, doi: 10.1016/j.jclepro.2019.02.271
17	2018	Prussi M, Lonza L (2018). Passenger Aviation and High Speed Rail: A Comparison of Emissions Profiles on Selected European Routes. <i>Journal Of Advanced Transportation</i> , Issn: 0197-6729, Doi: 10.1155/2018/6205714
18	2018	Chiaramonti, D., Prussi, M., & Rizzo, A. M. (2018). Biopower Technologies. In <i>Power Engineering</i> (pp. 272-313). CRC Press.
19	2017	Buffi Marco, Prussi Matteo, Lotti Giulia, Martelli Francesco, Pari Luigi, Chiaramonti David (2017). Oilseed pressing and vegetable oil properties and upgrading in decentralised small scale plants for biofuel production. <i>International journal of oil, gas and coal technology</i> , vol. 14, p. 91-109, ISSN: 1753-3317, doi: 10.1504/IJOGCT.2017.10002113
20	2017	Chiaramonti David, Prussi Matteo, Buffi Marco, Rizzo Andrea Maria, Pari Luigi (2017). Review and experimental study on pyrolysis and hydrothermal liquefaction of microalgae for biofuel production. <i>Applied Energy</i> , vol. 185, p. 963-972, ISSN: 0306-2619, doi:10.1016/j.apenergy.2015.12.001
21	2017	Rizzo AM, Pettorali M, Prussi M, Nistri R, Pari L, Chiaramonti D (2017). Integration of SRF and carbonization plant for small forestry farms. <i>Energy Procedia</i> , vol. 105, p. 212-217, ISSN: 1876-6102, doi: 10.1016/j.egypro.2017.03.304
22	2016	CHIARAMONTI, DAVID, BUFFI, MARCO, RIZZO, ANDREA MARIA, LOTTI, GIULIA, PRUSSI, MATTEO (2016). Bio-hydrocarbons through catalytic pyrolysis of used cooking oils and fatty acids for sustainable jet and road fuel production. <i>Biomass & Bioenergy</i> , vol. 95, p. 424-435, ISSN: 0961-9534, doi: 10.1016/j.biombioe.2016.05.035
23	2015	Chiaramonti D, Prussi M, Buffi M, Casini D, Rizzo AM (2015). Thermochemical conversion of microalgae: challenges and opportunities. <i>Energy Procedia</i> , vol. 75, p. 819-826, ISSN: 1876-6102, doi: 10.1016/j.egypro.2015.07.142
24	2015	Tredici MR, Bassi N, Prussi M, Biondi N, Rodolfi L, Zittelli GC, Sampietro G (2015). Energy balance of algal biomass production in a 1-ha "Green Wall Panel" plant: How to produce algal biomass in a closed reactor achieving a high Net Energy Ratio. <i>Applied energy</i> , vol. 154, p. 1103-1111, issn: 0306-2619, doi: 10.1016/j.apenergy.2015.01.086
25	2014	Prussi M, Buffi M, Casini D, Chiaramonti D, Martelli F, Carnevale M, Tredici MR, Rodolfi L (2014). Experimental and numerical investigations of mixing in raceway ponds for algae cultivation. <i>Biomass & Bioenergy</i> , vol. 67, p. 390-400, ISSN: 0961-9534, doi: 10.1016/j.biombioe.2014.05.024
26	2014	Chiaramonti David, Prussi Matteo, Buffi Marco, Tacconi Daniela (2014). Sustainable bio kerosene: Process routes and industrial demonstration activities in aviation biofuels. <i>Applied Energy</i> , vol. 136, p. 767-774, ISSN: 0306-2619, doi: 10.1016/j.apenergy.2014.08.065
27	2014	Chiaramonti D, Prussi M, Nistri R, Pettorali M, Rizzo AM (2014). Biomass carbonization: process options and economics for small scale forestry farms. <i>Energy Procedia</i> , vol. 61, p. 1515-1518, ISSN: 1876-6102, doi:

		10.1016/j.egypro.2014.12.159
28	2013	Rizzo AM, Prussi M, Bettucci L, Libelli IM, Chiaramonti D (2013). Characterization of microalga Chlorella as a fuel and its thermogravimetric behavior. Applied Energy, vol. 102, p. 24-31, ISSN: 0306-2619, doi: 10.1016/j.apenergy.2012.08.039
29	2013	Chiaramonti D, Prussi M, Casini D, Tredici MR, Rodolfi L, Bassi N, Zittelli GC, Bondioli P (2013). Review of energy balance in raceway ponds for microalgae cultivation: Re-thinking a traditional system is possible. Applied Energy, vol. 102, p. 101-111, ISSN: 0306-2619, doi: 10.1016/j.apenergy.2012.07.040
30	2013	Matteo Prussi, David Chiaramonti, Lucia Recchia, Francesco Martelli, Fabio Guidotti, Luigi Pari (2013). Alternative feedstock for the biodiesel and energy production: The OVEST project. Energy, vol. 58, p. 2-8, ISSN: 0360-5442, doi: 10.1016/j.energy.2013.02.058
31	2012	G. F. Porzio, Prussi, Matteo, Chiaramonti, David, I. Pari (2012). Modelling lignocellulosic bioethanol from poplar: estimation of the level of process integration, yield and potential for co-products. Journal Of Cleaner Production, vol. 34, p. 66-75, ISSN: 0959-6526, doi: 10.1016/j.jclepro.2012.01.028
32	2012	M.Prussi, D.Chiaramonti, G.Riccio, F.Martelli, L.Pari (2012). Straight vegetable oil use in Micro-Gas Turbines: System adaptation and testing. APPLIED ENERGY, vol. 89, p. 287-295, ISSN: 0306-2619, doi: 10.1016/j.apenergy.2011.07.031
33	2012	Prussi, Matteo, Chiaramonti, David, L. Pari (2012). Assessment of the EU target on renewable energy for transport in the framework of the European vegetable oil sector. INTERNATIONAL JOURNAL OF OIL, GAS AND COAL TECHNOLOGY, vol. 5, p. 80-91, ISSN: 1753-3309
34	2012	Bondioli P, Della Bella L, Rivolta G, Zittelli GC, Bassi N, Rodolfi L, Casini D, Prussi M, Chiaramonti D, Tredici MR (2012). Oil production by the marine microalgae Nannochloropsis sp F&M-M24 and Tetraselmis suecica F&M-M33. Bioresource Technology, vol. 114, p. 567-572, ISSN: 0960-8524, doi: 10.1016/j.biortech.2012.02.123
35	2012	Chiaramonti, David, Rizzo, Andrea Maria, Spadi, Adriano, Prussi, Matteo, Riccio, Giovanni, Martelli, Francesco. (2012). Exhaust emissions from liquid fuel micro gas turbine fed with diesel oil, biodiesel and vegetable oil. Applied Energy, vol. 101, p. 349-356, ISSN: 0306-2619, doi: 10.1016/j.apenergy.2012.01.066 F&M-M33. BIORESOURCE TECHNOLOGY, vol. 114, p. 567-572, ISSN: 0960-8524, doi: 10.1016/j.biortech.2012.02.123
36	2012	Chiaramonti, David, Prussi, Matteo, S. Ferrero, L. Oriani, P. Ottonello, P. Torre, F. Cherchi (2012). Review of pretreatment processes for lignocellulosic ethanol production, and development of an innovative method. Biomass & Bioenergy, vol. 46, p. 25-35, ISSN: 0961-9534, doi: 10.1016/j.biombioe.2012.04.020
37	2011	David Chiaramonti, Andrea Maria Rizzo, Matteo Prussi, Silvana Tedeschi, Francesco Zimbardi, Giacobbe Braccio, Egidio Viola, Paolo Taddei Pardelli (2011). 2nd generation lignocellulosic bioethanol: is torrefaction a possible approach to biomass pretreatment?. Biomass Conversion And Biorefinery, vol. 1, p. 9-15, ISSN: 2190-6815, doi: 10.1007/s13399-010-0001-z
38	2009	D.Chiaramonti, M.Prussi (2009). Pure vegetable oil for energy and transports. International Journal Of Oil, Gas And Coal Technology, vol. 2, p. 186-198, ISSN: 1753-3309, doi: 10.1504/IJOGCT.2009.024886

ADDITIONAL INFORMATION

- Patents**
- **Microturbina alimentata ad olio vegetale**, Inventor, Pat. Applic. N. FI2011A000228, 20/10/2011 [Micro turbine fed by pure vegetable oil]
- Projects**
- **2022-present:** EIC supported project **H2Steel**. Green Hydrogen for steel making.
 - **2021-present:** HorizonEurope supported project **TULIPs**: innovative and sustainable airports <https://tulips-greenairports.eu/>
 - **WpKs leadership at JRC:** WTW2565, AAF3560, I4RFF8423
 - **2017-2018: D-Factory.** Algae biorefinery project - FP7-KBBE
 - **2015-2017: BIOREFLY:** 2,000 ton/y industrial scale demonstration biorefinery on lignin based aviation fuel. 7FP, ED DG ENER.
 - **2012-2016:ITAKA.** Initiative Towards Sustainable Kerosene for Aviation. 7FP GA EC DG ENER.
 - **2015-2016:** BIOSyng. BIOgenic Syngas. Progetto Nazionale - MIPAAF.
 - **2015-2016:** CHPyro. CHP-pyrolysis based investigation. Bando EUROSTAR.

- **2014: COVA:** Vegetable oil production and upgrade.
- **2011-2014: BIOFAT.** BIOfuel From Algae Technologies 7FP GA nr268211, EC DG ENER.
- **2010-2014: BIOLYFE.** Second generation BIOethanol process: demonstration scale for the step of Lignocellulosic hYdrolysis and Fermentation. 7FP GA nr 239204, EC DG ENER.
- **2010-2011: MITICO.** Micro Turbina Innovativa Convertita ad Olio. FIDITOSCANA Tuscany Region.
- **2009-2012: OVEST.** Oli VEgetali ESTerificati. POR/CREO Tuscany Region.
- **2009-2011: UPP-Sol.** Polygeneration with Solar Energy: Urban Photovoltaic. Italian/Israel Cooperation programme and the European FP6 project
- **2009-2010: S.I.En.A.** Olio Vegetale, on the use of pure vegetable oil in rural transports and energy generation. Grant by Tuscany region and MPS.
- **2009-2011: Siena Olio Vegetale Puro.** Regione Toscana - Fondazione MPS.
- **2009-2011: MAMBO** (MicroAlghe: Materia prima per Bio Olio), Oils from Algae. NOVAL (leader of a network of 7 biodiesel industries) and Assocostieri (Ital.Biodiesel Ind.Assoc.).
- **2006-2009: VOICE-**Vegetable Oil Initiative for a Cleaner Environment, LIFE06 ENV/IT/257, DG Env.
- **2005-2006: Solar Cooling** for tourist resorts and reclaimed areas, It.Min.for Environment, IT-Egypt cooperation.
- **2005-2006: BISC** Building Integrated Solar Collector, It.Min.for Environment, IT-Israel cooperation.

Memberships

- **05/2019-21/12/2020:** technical expert for reviewing VERBIO NER300 project.
- **02/05/2019-presnet:** co-leader of CORE-LCA task for Fuel Task Group of ICAO-CAEP CORSIA initiative.
- **10/2018 - Present: European Biomass Conference (EUBCE)** - Member of the Scientific Committee. Topic organiser.
- **09/2018 - Present:** expert observer in CEN/TC 454 (algae and algae products).
- **07/2018 - Present:** expert for FlightPath2050 group.
- **03/2018-04/2019:** expert of the CAEP – AFTF (Alternative Fuel Task Force) working group.
- **2017-2015:** Member of the scientific committee of the Chimica-Verde BIONET cluster (green chemistry)
- **2014:** Member the internal commission GL904 of Italian CTI for the definition of the norm on biomass gasification UNI 11603:2015.
- **2014-2017:** Member the Scientific and Industry committee at the European biomass conference.
- **2013:** Member the internal commission of Italian CTI for the pre-norm CTI13:2013.
- **2011:** Member of the Tuscany Region Commission for the evaluation of projects submitted to the call on Renewable Energies in Rural Areas (Biomass plants).
- **2011:** Expert for Toscana Promozione (Tuscany Region entity for interregional promotion) as scientific expert in the mission to CINA.
- **2010:** Member of the Comunità Montana Montagna Fiorentina (Public institution for forestry resources administration) for the evaluation of projects submitted to the call on burner for district heating plant realization.
- **26/01/2009:** Member of the Engineer Association Prato – a 705

Journal reviewer and editor

- **Guest Editor of the special issue "Alternative Fuels for Transport: Recent Advances and Future Challenges" – Applied Science (MDPI) (IF: 2.679, ISSN: 2076-3417)**
- **Guest Editor of the special issue "Cutting-Edge Technologies for Renewable Energy Production and Storage" – Applied Science (MDPI)**
- **Cleaner Production** (Elsevier)
- **Applied Energy** (Elsevier)
- **Energy Conversion and Management Journal** (ed. Elsevier)
- **Energy Journal** (ed. Elsevier)
- **Fuel Journal** (ed. Elsevier)
- **Biomass & Bioenergy** (Elsevier)
- **Journal of Clean Production** (ed. Elsevier)
- **Fuel Processing Technology** (Elsevier)
- **Biomass Conversion and Biorefinery** (Springer)

- **International Journal of Oil, Gas, and Coal Technology** (Inderscience Publisher)
- **Biomass & Bioenergy** (Elsevier)
- **International Journal of Sustainable Energy** (Taylor & Francis)
- **ECOS -2012 International Conference on Renewable Energy Conversion Systems and Sustainable Technologies**

ADDITIONAL

SEMINAR AND LECTUR

- 04-11-2021. Webinar Sardegna Ricerca. "Le potenzialità del biometano per la decarbonizzazione del settore trasporti"
 - 08-12-2021. ECAC Environment webinar. "SAF: state of the art and environmental saving potentials".
 - 25-01-2022. Opening speech at EU-SOUTH EAST ASIA CCCA CORSIA PROJECT.
 - 11-02-2022. Lecture at University of Bath (UK). "Alternative fuels for international aviation"
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