## **Curriculum Vitae**



**Personal Information** 

## Name **Stefano Barberis** Address Corso Italia 28B - 16145 Genova Teephone +39 349 0893665 E-mail Barberis.ste@gmail.com Nationality Italian Date of Birth 8/11/1988 Gender Male Professional Interest The world of energy production has always fascinated me since childhood and has led me to choose Mechanical Engineering for my academic training. My curiosity and desire to learn has also encouraged me to continue my training via a PhD, where I actively collaborated in a highly motivated international research group with a strong proactivity in industrial and international collaborations. I have always been interested in renewable energies and technologies related to sustainable production and use of energy and particularly in energy storage technologies, the topic of my doctoral research. The doctoral experience has allowed me to expand my knowledge about the world of energy production with a present and future energy scenario perspective, by studying technical, economic and regulatory issues. Thanks to my PhD and my following career in RINA Consulting, I increased my attention to innovation, always thinking about how to make R&D results ready and viable for market and end-users. In the recent past I came back to academia to work as Researcher in an "industry/market" oriented perspective, leveraging my previous consulting experience and valorising it also as R&D consultant for BluEnergy Revolution innovative SME to promote hydrogen technologies widespread. Currently From February 2022 Assistant Professor and Researcher at the Thermochemical Power Group – TPG - Department of Mechanical Engineering – University of Genova – R&D consultant at BluEnergy Revolution My scientific interests are about energy storage solutions, fuel cell and hydrogen solutions, fossil based power plant flexibility, smart grids and industrial plants decarbonization. PREVIOUS PROFESSIONAL Since September 2016 – to January 2022 Project Manager Innovation for Energy R&D Division of RINA Consulting SpA. **EXPERIENCE** Coordination and Proposal Writing of Industrial and EU funded project. I've been coordinator of the H2020 Projects named PLANHEAT, SunHorizon, MUSE GRIDS, FLEXNCONFU, SOLARSCO2OL, ENGIMMONIA and EVERYWH2ERE. Redaction of more than 150 H2020 proposals with a personal success rate of around 40%: Coordinator for RINA Consulting SpA of all EC Funding initiatives related to energy topics. Technical supervision and support in H2020 projects related to renewables, energy efficiency in buildings and in industrial project, fuel cell and hydrogen technologies, renewable energy. Thanks to this job I acquired expertise in product development, energy management and auditing, innovation management and development, IPR and business modeling, energy market analysis and team management. Since early 2020 I'm part of RINA Carbon Reduction Excellence Centre Agile team aiming to boost RINA Activities, business, expertise in the topic of hydrogen, CCUS, energy transition. **PREVIOUS ACADEMIC** From January 2012 to September 2016 **EXPERIENCE** Associated Researcher and, before, PhD Student at the Thermochemical Power Group - TPG -Department of Mechanical Engineering – University of Genova My PhD research project focused on the study and implementation of a smart grid at the university campus in Savona. I supported "Energy Systems" and "Machinery and Systems for Energy and Propulsion" courses in the Mechanical Engineering Course at the Polytechnic School of Genoa (Academic Year 2013-2014, 2014-2015) and I supervised as assistant supervisor more than twenty BSc and MSc thesis.

| PREVIOUS PROFESSIONAL<br>EXPERIENCE IN THE FIELD OF<br>AGROENERGY AND BIOGAS | Since January 2016 collaborator for the agricultural enterprise Sweet Milk, based in Chiusa Pesio (C<br>Italy) for the development of project proposals for National and European call of proposals, as well<br>technical activities related to biogas plants, to their design and their management.<br>Since January 2016 Assistant for the Centro Italiano Biogas (CIB) for engineering consultancy activiti<br>regulatory audits, development of research |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
| Other Previous Experience  |  |  |  |  |  |  |  |
| Date   | Since 2008 to 2014   |  |  |  |  |  |  |
| Position   | Scientific divulgator at the Genova Science Festival (Festival della Scienza di Genova – Matefitness)  |  |  |  |  |  |  |
|  | Since 2013 until today<br>Didactic activities and lessons for various local professional training entities such as Università degli<br>Studi di Genova – ASSEFORM – Scuola Edile IM – Studio Saj – Scuola Edile SV – Former - Università<br>Uni-eCampus (Cultore della Materia)  |  |  |  |  |  |  |
|  | Since 1 September 2015 to 20 December 2015<br>Research Engineer at KTH – Energy Department – Solar Group led by prof Bjorn Laumert in the<br>framework of a collaborative research project about the use of concrete as Thermal Storage media for<br>CSP Direct Steam Generation power Plant   |  |  |  |  |  |  |
| Education  |  |  |  |  |  |  |  |
| PhD  | DOTTORATO IN INGEGNERIA DELLE MACCHINE A FLUIDO – PhD IN TURBOMACHINERY  |  |  |  |  |  |  |
| 112  | Università degli Studi di Genova - University of Genova  |  |  |  |  |  |  |
|  | European PhD Title – Defence in April<br>Thesis: "Polygenerative Smart Grids and interaction with energy storage systems"  |  |  |  |  |  |  |
| Master Degree  | LAUREA MAGISTRALE IN INGEGNERIA MECCANICA Energia e Aeronautica – Master Degree (MSc)<br>in Mechanical Engineering – Energy and Aeronautics  |  |  |  |  |  |  |
|  | University of Genoa – Italy  |  |  |  |  |  |  |
|  | Valutation 108/110<br>DATE: 25/10/2012   |  |  |  |  |  |  |
|  | Thesis: Thermoeconomic Optimization of Innovative Concentrated Solar Power Plants  |  |  |  |  |  |  |
| Bachelor Degree  | LAUREA IN INGEGNERIA MECCANICA – Bachelor Degree (BSc) in Mechanical Engineering   |  |  |  |  |  |  |
|  | University of Genoa – Italy<br>Valutation 98/110<br>DATE: 28/10/2010   |  |  |  |  |  |  |
|  | Thesis: Experimental and FEM analysis of Friction Stir Welding Joints  |  |  |  |  |  |  |
| Other Professional Certifications  | Professional Engineer Certification Exam – 2012<br>Registered as P.E. in the Ordine degli Ingegneri di Genova – N.10114A<br>Energy Auditor for Building Energy Efficiency for Liguria Region Environmental Agency  |  |  |  |  |  |  |
| Prize and Award  | HYDROGEN EUROPE RESEARCH YOUNG ENGINEER OF THE YEAR - 2024<br>Category: Cross Cutting  |  |  |  |  |  |  |
|  | "ASME – Young Engineer Travel Award ASME TurboExpo 2015"<br>American Society of Mechanical Engineering   |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

## Most relevant scientific Publications

c | have been author of more than 40 publications on International Journal and conferences

All references can be found on the following SCOPUS and ORCID profiles

https://www.scopus.com/authid/detail.uri?authorId=56501749300 - H-INDEX: 10 CITATIONS: >300

https://orcid.org/0000-0001-6643-9989

I received in 2023 the "ABILITAZIONE SCIENTIFICA NAZIONALE" as Associate Professor (Professore di Seconda Fascia) in the Scientific Sector SSD: ING-IND-09 – Sistemi per l'Energia e l'Ambiente

|                |   | Comprehension |  |         |  | Speaking    |  |            |  | Writing |
|----------------|---|---------------|--|---------|--|-------------|--|------------|--|---------|
| European Level |   | Listening     |  | Reading |  | Interaction |  | Production |  |         |
| INGLESE        | 1 | C1            |  | C1      |  | C1          |  | C1         |  | C1      |
| FRANCESE       | 2 | B2            |  | B2      |  | B1          |  | B1         |  | B1      |

Computer Skills Excellent knowledge of OFFICE Package software (Word, Powerpoint, Excel) - Programming language MATLAB, C + + - Visual Basic – Fortran – Pythom Expertise in self-development of tools/algorithms for business

Other transversal skills Excellent team working and problem solving capabilities thanks to my professionalism in managing international teams in EC funded projects as well as my personal experiences in the AGESCI Scout Movement (where I'm still a leader), and my sport experience as volleyball player and manager.

Other Projects l've been part of several entrepreneurial projects that, starting from a simple concept/ideas, brought to the birth of two startups (BluEnergyRevolution– focused on advanced hydrogen energy systems - and SIT advanced microturbines) and of new products. I'm interested in International Cooperation also towards a sustainable and responsible development of Developing countries.

Final Remarks I have always been focused on research and scientific and technological innovation and after my PhD I moved to RINA Consulting, the largest Italian independent engineering and consultancy company. I am interested in all the aspects and technologies related to energy: hydrogen, power production, energy harvesting, renewable energy, storage and innovative systems for the generation of energy from non-conventional sources, energy management, energy efficiency of buildings and processes. I'm now sharing my experience to University of Genova Team as well as to BluEnergy Revolution team.

Signature

GENOVA, 19/09/2024