

PERSONAL INFORMATION

Guido Callegari



Affiliation
 Politecnico di Torino
 Department of Architecture and Design



SSD ICAR12 -Architecture Technology

Sex M | Date of birth 14/07/1968 | Nationality Italian

Enterprise	University	EPR
<input type="checkbox"/> Management Level	<input type="checkbox"/> Full professor	<input type="checkbox"/> Research Director and 1st level Technologist / First Researcher and 2nd level Technologist / Principal Investigator
<input type="checkbox"/> Mid-Management Level	<input checked="" type="checkbox"/> Associate Professor	<input type="checkbox"/> Level III Researcher and Technologist
<input type="checkbox"/> Employee / worker level	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level / Technical collaborator	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

WORK EXPERIENCE

from 2016- to present

Associate Professor of Architecture Technology

Politecnico di Torino - Department of Architecture and Design (<https://www.dad.polito.it/en>)

2018 – 2019 **Coordinator of the Masters course** in Architettura delle Costruzioni in Legno (wood construction architecture)

2016 – to present **Member of PhD Board** in Architecture. History and Project, Politecnico di Torino

2014 – to 2019 **co-founder of the innovative start-up be-eco**. Participation in government bodies as a member of the Board of Administration with reference to the Spin-Off Regulation, Politecnico di Torino

2019 – 2023 **Vice-chairmen of the Ph.D. course** in Architecture. History and Project, Politecnico di Torino

2023 – to present **Vice-chairmen of the Ph.D. course** in Design and Technology, Politecnico di Torino

Teaching modules in Architecture /Design bachelor degree and Science master degree

Research and Management activity

from 2005- to 2016

Assistant Professor of Architecture Technology

2005 – to 2013 **Member of PhD Board** in Architecture and Building Design, Politecnico di Torino 2014 – to

2016 **Member of PhD Board** in Architecture. History and Project, Politecnico di Torino

2014 – to 2016 **Co-founder of the innovative start-up be-eco**. Participation in government bodies as a member of the Board of Administration and President, with reference to the Spin-Off Regulation, Politecnico di Torino

2013 – 2016 **Expert evaluation of research projects and technological innovation** with reference to basic research activities, industrial research and experimental development in businesses and start-up s, in accordance with provincial law 14.2006 on research and innovation. Sector wooden constructions and design.

Public Institution: Provincia Autonoma di Bolzano

from 1999- to 2004

Fellowship researcher SSD ICAR/12 – Architectural Technology Politecnico di Torino

from 1999- to 1998

Collaborator

Gio Ponti Archive– Milan directed by Lisa Licitra Ponti

EDUCATION AND TRAINING

from 1999 – to 2002

PhD in “in Architecture and Building Design”

Ministry of University and Scientific and Technological Research

XIV cycle PhD – Politecnico di Torino

Dissertation: Culture and technology in the project for the recovery of twentieth-century architecture

Master Degree in Architecture

from 1995 – to 1996

Master Degree Thesis evaluation: 110/110 cum laude

Politecnico di Torino

WORK ACTIVITIES**Main projects**

ARV-Climate Positive Circular Communities project, Programme H2020-EU.3.3. - SOCIETAL CHALLENGES - Secure, clean and efficient energy, topics LC-GD-4-1-2020 - Building and renovating in an energy and resource efficient way. NTNU: Norwegian University of Science and Technology, DTU Technical University of Denmark, Utrecht University, University of Trento, Eurac Research, Politecnico di Torino DAD and DISEG departments. Total costs project 21.316.651 Eur. Total costs Polito 345.937 Eur. Scientific Coordinator for Polito-DAD research Unit. (2022 – 2025).

Research project: SUPREMO. Development, experimentation and realization on industrial scale of new modular prefabricated architecture with augmented wood. Pre-competitive research project. Provincia autonoma di Trento. Project Partners: Xlam Dolomiti S.p.A., Politecnico di Torino DAD, University of Trento, University of Firenze, Bruno Kessler Foundation (FBK). Scientific Coordinator for Polito-DAD research Unit. (2022- 2023)

Research project: Facade Design in Building Integrated Photovoltaics. the research project reviews and analyzes technological design options, which have become available to date for BIPV systems on roofs and facades. The starting point is an analysis of the relevance of BIPV technologies for the decarbonization of energy systems, Project Partner Eff&Giemme, Politecnico di Torino DAD and DENERG departments, Scientific Coordinator. (2020- 2023)

Polo formativo LED (Legno Design edilizia). Training Center for the field of professional training in the wood sector. Technical feasibility study for Associazione Scuole Tecniche San Carlo. Scientific Coordinator for Polito-DAD research Unit. (2022)

Research project: Eco3R a "Community for Circular end of Waste" to determine circular economy strategies for Reuse / Recycling. Participants: 19 municipalities involved in the CCS-Politecnico di Torino agreement (125.000 inhabitants) for the realization "Circular eco-design laboratory" and launch of the "Observatory for the circular territorial economy" a research service dedicated to industrial partners. Scientific Coordinator for Polito-DAD research Unit. (2021- 2022)

Research project: "IoT Solutions For Timber Construction. Quality assurance of timber structures". The research project focuses on the realistic estimation of the risks for the timber structure during the construction and operation phase as well as the distribution of wood moisture content in the timber load bearing elements. Wood Control start up Scientific Coordinator (2021- 2022)

Research project: "The re-qualification in Italy and France between training, research and professional practice", Direction générale de l'aménagement, du logement et de la nature (DGALN), Ministère du Logement et de 'Habitat durable, Ministère de l'Environnement de l'Energie et de la Mer. Scientific Coordinator: Gustavo Ambrosini, Guido Callegari . (2017 – 2019).

Research project: Environment Carbon Offset Wall for Retrofit (ECO-WALL plus). Call for feasibility study 2014 – Activity I.1.3 – PMI FONDO EUROPEO DI SVILUPPO REGIONALE page O.R. 2007 – 2013. Scientific Coordinator for Polito-DAD research Unit. (2015)

Project: Biosphera 2.0. Scientific consultancy for the design of a Passivhaus residential module. Institutional partners: Politecnico di Torino, Università della Valle d'Aosta, Istituto ZEPHIR - Passivhaus Italia, Agenzia Minergie Svizzera italiana, Vallée d'Aoste Structure, Aktivhaus. Scientific Coordinator (2015-2016)

Research project: Construction of experimental module for the Ostension of the Holy Shroud 2015. Institutional partners: Comitato della Sindone, iSBE Italia, Politecnico di Torino DAD and DENERG Head of scientific project (2015-2016)

Research project: Cluster Legno Piemonte: for the development of the piemontese timber production chain. The project was included in the Community project ACE–Achieving Cluster Excellence, by Finpiemonte as an activity for the strategic analysis of the construction timber production chain in Piemonte. Promoters: Politecnico di Torino DAD, Provincia di Torino and the Environment Park. Scientific Coordinator for Polito-DAD research Unit (2015).

Rifugio Carlo Mollino project at the ski resort of Weissmatten, Gressoney Saint Jean (AO) built to the model of the project Casa Capriata for the X Triennale di Milano (1954) by Carlo Mollino The building site was set up in July 2010 at the ski resort Weissmatten (AO) and concluded with the inauguration on December 5th 2014 of the mountain shelter named for the Torino-born architect "Rifugio Carlo Mollino". Head of scientific project (2010 –2014).

Project "800x1200 eco-design" for the Consorzio Conlegno FederlegnoArredo relating to the production and sale of a furnishing system using recycled Epal pallets. Guidelines for the production of a catalogue of furnishing elements. Research contract: 20.000. Head of scientific project (2013 – 2014).

Research project: Valorizzazione della filiera foresta legno". Analysis of the heritage of experiences and projects nationally, with the aim of drawing up a tool for professionals, promoting the forest- wood chain, to encourage sustainability and eco-efficiency of buildings. Research contract from the Provincia di Torino, Programme ALCOTRA 2007-2013, ruling N. 15-3538.2011, 6.5.2011; Scientific Coordinator for Polito research Unit. (2011).

Research project: Preparation "Manual for the use of wood in building design, for technicians and professionals" and "Atlas for the forest-wood chain in the province of Torino". Research contract from the Provincia di Torino, Programme ALCOTRA 2007-2013, Ruling N. 67-MD6 -37454.2011. Scientific Coordinator for Polito-DAD research Unit. (2011).

Research project: "Development of the forest-wood chain". Research into the potential of regionally sourced wood in the construction industry. Research contract from the Provincia di Torino, Programme ALCOTRA 2007-2013, Scientific Coordinator for Polito-DAD research Unit. (2011)

Supervision of 1 PhD Student - PhD Program in Architecture. History and Project (2022- to present)
Supervision of 1 PhD Student - PhD Program in Architecture. History and Project (2021-to present)
Supervision of 1 PhD Student - PhD Program in Architecture and Building Design (2010-2013)

Tutoring activities

Coordination projects as part of research grants:

Complex(C)ity. Retrofitting Existing Buildings to Improve Sustainability, Energy and Seismic Performances, Progetto Lagrange 2015 – Applied Research Grant. Scientific head Prof. Guido Callegari, Politecnico di Torino DAD (2015 – 2016)

Development, experimentation, realisation of new plywood panels on an industrial scale. Grant for research activities reserved for students enrolled at the doctoral school in architecture and construction. Financed Programme for Rural Development 2007-2013, Regione Piemonte Scientific head Prof. Guido Callegari, Politecnico di Torino DAD (2012 – 2013)

Trees as a resource in the Piemontese landscape. Permanence, innovation and prospects for use of regional wood in architecture. Research grant: Master dei Talenti della Società Civile 2011 Fondazione Giovanni Gorla Scientific head Prof. Guido Callegari, Politecnico di Torino DAD (2010 – 2011)

Invited presentations

Lecture "Come on City, We're Going On the Roof" **organized by** The Liebling Haus – The White City Center with Arts and Culture department of the Tel Aviv. The lecture is part of the building competition "Layer 2.0". January 17, 2022

"Il contributo del legno allo sviluppo sostenibile urbano" – Seminar organized by Swiss Wood Innovation Network and Lignum, timber industry Switzerland, Mezzana, Ticino CH, April 17, 2022

"Il legno come strategia europea per la decarbonizzazione delle città" Seminar "Il panorama europeo dell'edilizia in legno" organized by Klimahouse, Bolzano, January 27, 2022

"ReLand: Parco sperimentale per la Resilienza e il Riuso" - Seminar "Nuove opzioni gestionali e strumenti di valutazione per accelerare la transizione verso l'economia circolare organized by - Ecomondo, Rimini, November 4, 2020

Roundtable "(Se) Former à la réhabilitation" **organized by** Plan Urbanisme Construction Architecture (PUCA), Ministère de la Cohésion des territoires et des Relations avec les collectivités territoriales. Maison de l'architecture en Ile-de-France Paris, May 29, 2019

"Impatto e potenzialità di innovazione e digitalizzazione nella filiera legno", Stati generali del legno, **organized by** Confindustria Cuneo, Museo dell'Arpa Piasco, May 14, 2019

Roundtable "La Sostenibilità d'impeesa. Innovazione Ricerca Ambiente Progetto", Brera Design Days, Palazzo Giureconsulti, Milano, October 16, 2018

"Edilizia in legno: edifici amministrativi, scolastici, residenziali" – Seminar organized by Swiss Wood Innovation Network and Lignum, timber industry Switzerland, Accademia di Mendrisio CH, September 22, 2017

Roundtable "The Energy Efficiency Awards" **organized by** Saint Gobain Isover, Casa Llotja de Mar, Barcelona, June 6, 2011

"Sustainable Mountain Hut Design. Energy-efficient constructions in the Alpine space", SB11 World Sustainable Building Conference. vol. I, Helsinki, October 18-21, 2011

"The production of hardwood XLam panels to valorize the forest-wood chain in Piemonte (Italy)", WCTE 2010 - World Conference on Timber Engineering, Riva del Garda (TN), June 20- 24, 2010

Patents

Patent n. 0001427210 - Cladding system Naturwall™ for retrofitting existing buildings - 2014, in collaboration with M.Miroglio, A. Spinelli (Be-eco start up)

ADDITIONAL INFORMATION**Publications**

Total number of publications: 92

Total number of publications in peer-review journals: 17

Total number of citations: 214 (google scholar - ICAR/12 is a non-bibliometric sector)

Hindex(Scopus):3 (ICAR/12 is a non-bibliometric sector)

10 selected publication

1. Ambrosini, Gustavo; Callegari, Guido, *Roofscape Design. Regenerating the City upon the City*, Jovis Verlag GmbH (GERMANIA), pp. 176, 2021, ISBN: 9783868596656
2. Fregonara, Elena; Lo Verso, Valerio Roberto Maria; Lisa, Matteo; Callegari, Guido, *Retrofit scenarios and economic sustainability. A case-study in the Italian context.*, ENERGY PROCEDIA, Elsevier, pp. 11, 2017, Vol. 111C, ISSN: 1876-6102, DOI: 10.1016/j.egypro.2017.03.026
3. Ambrosini, Gustavo; Callegari, Guido, *Roofscape: Urban Acupuncture*, SHIJIE JIANZHU, World Architecture Magazine Publications (REPUBBLICA POPOLARE CINESE), pp. 79, 2017, Vol. 11/2017, ISSN: 1002-4832
4. Callegari, Guido; Spinelli, Antonio; Bianco, Lorenza; Serra, Valentina; Fantucci, Stefano, *NATURWALL© - A Solar Timber Façade System for Building Refurbishment: Optimization Process through in Field Measurements*, ENERGY PROCEDIA, Elsevier, pp. 6, 2015, Vol. 78, ISSN: 1876-6102, DOI: 10.1016/j.egypro.2015.11.641
5. Bianco, Lorenza; Callegari, Guido; Serra, Valentina; Spinelli, Antonio., *Timber solar facade: A responsive façade for the refurbishment of existing buildings*, In: Energy Forum, Economic Forum, 10th Conference on Advanced Building Skins, Bern 3-4 November 2015, pp. 11, 2015, ISBN: 978-3-98120538-1

6. Callegari, Guido; Sassone, Mario; Spinelli, Antonio; Zanuttini, Roberto, MonaLisa Wood Pavilion: Poplar pl(a)ywood, In: Structures and Architecture. Concepts, Application and Challenges, CRC Press/Balkema, International Conference on structures and architecture, Guimaraes, Portugal 24-26 JULY 2013, pp. 3, 2013, ISBN: 9780415661959
7. Bottero, Marta Carla; Ambrosini, Gustavo; Callegari, Guido, Valuing the Impact of Social Housing Renovation Programs: An Application of the Social Return on Investment (SROI), Green Energy and Technology, In: Appraisal: from theory to practice, Stanghellini S., Morano P., Bottero M., Oppio A., Springer (GERMANIA), pp. 12, 2017, ISSN: 1865-3529, ISBN: 9783319496757, DOI: 10.1007/978-3-319-49676-4_22
8. Callegari Guido; Zanuttini Roberto, Boislab: il legno per un'architettura sostenibile, Alinea (ITALIA), pp. 176, 2010, ISBN: 9788860555748
9. Callegari Guido; De Rossi Antonio; Pace Sergio; Paesaggi in verticale. Storia, progetto e valorizzazione del patrimonio alpino, Marsilio (ITALIA), pp. 212, 2006, ISBN: 8831788841
10. Callegari, Guido, Woodlab. Costruire in legno tra didattica e ricerca, Edicom Edizioni (ITALIA), pp. 86, 2016, Vol. 1, ISBN: 8896386519

Torino, 08.03.2024

A handwritten signature in black ink, appearing to be 'G. Callegari', with a large circular flourish at the beginning and a horizontal line extending to the right.