



CV

NAME

Ingrid Paoletti

ADDRESS
TELEPHONE
E-MAIL

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CURRENT POSITION

- ASSOCIATE PROFESSOR of Building Technology at Architecture, Built Environment and Construction Engineering (ABC) at Politecnico di Milano, she teaches at the AIUC school in Milan.
- DEAN'S DELEGATE for International relations with EXPO2020 DUBAI.
- MEMBER OF CIB WORKING GROUP Task Group W 119 Customized Industrial Construction.
- CO-FOUNDER AND DIRECTOR of Actlab, Research Unit and Scientific Coordinator of SAPERLAB, RESEARCH LAB of DIGITAL FABRICATION @DABC, Politecnico di Milano University.

EXPERTIZE

- Innovative materials and building technologies, mass customization in construction industry, advanced envelope components and systems, digital fabrication, off site manufacturing, history of industrialization, dry assembly and light-weight construction.

EDUCATION

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| 2011 | VISITING LECTURER in Building Construction and Energy efficiency at Maharashtra Institute of Technology, Pune, India. |
| 2010 | TEAM MANAGEMENT COURSE at Bocconi University. |
| 2008 | Selected by ARCHITECTURAL ASSOCIATION for the VISITING TEACHING PROGRAM, thus participating with 12 international universities with a final workshop and a paper about professional profile of architects in Europe. |
| 1999-2003 | PHD at THE POLITECNICO DI MILANO with the Thesis: "A window on technology transfer. Innovative technologies for architecture" Tutor: Pr. Arch. Anna Mangiarotti. The thesis was published by Clup in 2003. |
| 2001 | RESEARCH ASSOCIATE at the Building Technology Group at MIT, Massachusetts Institute of Technology on Building envelopes software tools (one semester). |
| 1999 | Registered at the PROFESSIONAL ARCHITECTS REGISTER of the Province of Milan. |
| 1998 | DEGREE OF ARCHITECTURE at the Politecnico di Milano, on 7 April 1998 with the vote 100/100 and praise. Thesis title: "The "engines" of innovation. Contemporary technology systems for architectural envelope", Prof. Guido Nardi, co-Prof. Andrea Campioli. |
| 1997 | ERASMUS student at South bank University, London. |
| 1992 | DIPLOMA in Scientific Science. |

RESEARCH

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| 2017-Today | DA-MA-TRA
Partner of the project "DATi MATERIALI TRAcciabilità" |
| 2017-Today | SMART LIVING PROJECT
Coordinator of the project titled "ECO-ACUSTIC project on innovative projects for adaptive acoustic". 3d digital -BIM Maintenance and survey experimental research. |
| 2017 | HEART HORIZON 2020
Responsible of the building envelope team. Member of CIB working group Task Group W 119 Customized Industrial Construction. |
| 2016 | 3D PRINTING TECHNOLOGIES FOR AEC
FUNDED PROJECT FOR BUYING TECHNOLOGIES OF FDM from Lombardy Regione Funds. |
| 2013-2014 | COMPUTATIONAL OPTIMIZATION
Responsible of Research Contract for Building Information Modeling of UAE Expo 2015 Pavillion for RIMOND S.R.L. |
| 2013 | MADE EXPO exhibition
Design and manufacturing of a 3d printed pavillion. |
| 2012-2011 | INNOVATIVE TECHNOLOGIES DESIGN
Research Contract with Monte dei Paschi di Siena Bank for Innovative technologies design for rehabilitation of buildings in old contexts. |
| 2012-2011 | BASF
Research on building components for external wall of new constructions. |

2011	MAE MINISTRY OF FOREIGN AFFAIRS OF ITALY Financed research exchange India – Italy. Proposal L FOR MARIE CURIE IOF – over threshold. Mass Inno- C Evaluation over 75,8
2010	STUDY OF INNOVATIVE CONSTRUCTIVE SYSTEMS Research Contract with Metra Component Supplier.
2010	POLDI PEZZOLI MUSEUM Public Cariplo Funded Research on Innovative technologies for museum spaces: comfort and energy efficiency.
2010	WOMEN AT WORK IN R & TD Province of Milan. Scientific coordinator of the winner project “Construction of a database of digital models and parametric components and materials’.
2009	MEMBRANE AND SHELLS FOR ARCHITECTURE Research activity in public financed research P.R.I.N. Coordinated by prof. Andrea Campioli.
2007	ARCELOR Research Contract on “Innovative design technologies for steel car parks”.
2006	CTG ITALCEMENTI Research Contract coordinated by prof. Anna Mangiarotti on “The effects of volumes of buildings and surface coatings on temperatures in urban areas. The building envelopes implications”.
2005	MIUR 2005 RESEARCH PROJECT Participation in the research project “components for diffused architecture” referee prof. Andrea Campioli (Politecnico di Milano) within the national research “Paths and technical information management for the promotion and control of technical information in architecture”, coordinated by Prof. Attilio Nesi (University of Reggio Calabria).
2000	COST13 “Glass and interactive building envelopes” through design studio of Experimental Architecture 2 LSA2 responsible Guido Nardi, Anna Mangiarotti, Andrea Campioli, Ingrid Paoletti.
1999	POLITECNICO DI MILANO Funded research titled “Active facades: the threshold of the transfer. Guidelines for the applicability of active technology in architectural envelope from evolved tertiary to building residential sector”.
1998	FOUNDATION ARCHITECT AUGUSTO RANCILIO FAAR CSAR Research titled “Thresholds and synergies in the process of technological innovation in diffused and monumental architecture.”

TEACHING

2007-08 / today	PROFESSOR of “Building Technology Studio” in the EU Degree Course in Architecture and of “Design of constructive systems and components” in the Design studio EU Degree Course in Architecture and Production of the AIUC school in Milan.
2006-07 / today	PROFESSOR of “Building Technology” in the Design studio of “Constructive Systems”, of prof. Anna Mangiarotti and of “Technical project evaluation” in the EU Degree Course in Architecture of Construction of the Faculty of Architecture, Politecnico di Milano-Bovisa.
2005-06	PROFESSOR of “Architectural Technology” in the “Design studio of technical and economic evaluation “ with Prof. Gianfranco Brusa in the EU Degree Course in Architecture and Production of the Faculty of Architecture, Politecnico di Milano-Leonardo.
2004-05 / 2009-10	PROFESSOR for teaching “Constructive Technologies” in the Design studio of Design and Construction 1, prof. Emilio Battisti (4 CFU) in the EU Degree Course in Architecture of Construction of the Faculty of Architecture, Politecnico di Milano-Bovisa.
2003-04	PROFESSOR of “Designing constructive systems “ LSF “Innovative scenarios for the project of architecture. Rehabilitation and new construction”.
1997-98 / 2003-04	ASSISTANT in various courses of Degree course in Architecture
TEACHING IN PHD COURSES	“Innovative design and construction technologies” and “Innovative software for design and construction”.
PHD TESIS TUTOR 2009-today	<ul style="list-style-type: none"> ▫ Material Performance Design, Roberto Naboni ▫ Building Information Models for Existing Buildings, Matteo Lo Prete ▫ The design of architectural envelopes through the use of computational tools and parametric-generative modeling, author Pierandrea Angius ▫ Technologies for rehabilitation of buildings, Elena Magarotto

MAIN PUBLICATIONS AND PRIZES

BOOKS

2014	“Advanced Customization for Architectural Design and Construction”, SPRINGER
2011	“Mass innovation. Emerging Technologies for customized industrialization”, MAGGIOLI, Rimini.
2010	“Future Systems. Research, experimentation and technology transfer for architecture”, FRANCO ANGELI, Milano.
2009	“Innovative Design and Construction Technologies”, MAGGIOLI, Rimini.
2006	“Building complex shapes”, EDIZIONI CLUP, Milano.
2003	“Una finestra sul trasferimento. Tecnologie innovative per l’architettura”, EDIZIONI CLUP, Milano.

BOOKS WITH OTHER AUTHORS

2008 "Dall'idea al cantiere", with Anna Mangiarotti, HOEPLI, Milano.

PAPERS IN A BOOK

2018 "Design Approaches for a New Indian Healthcare" with G. Tavecchi; A. Rebecchi in "Healthcare Facilities in Emerging Countries". S. Capolongo, M. Gola, A. Rebecchi. SPRINGER.

2018 "Architectural Morphogenesis Through Topology Optimization" with R.S. Naboni, in "Handbook of Research on Form and Morphogenesis in Modern Architectural Contexts", IGI GLOBAL.

2017 "Mass Customization in the Era of Industry 4.0: Towards Immaterial Building Technology". in "Informed Architecture: Computational Strategies in Architectural Design". M.Hemmerling; L.Cocchiarella. SPRINGER, pp. 77-88.

2016 "Indigenous technologies and self construction", in "Warm Modernity", M.D'Alfonso, SILVANA EDITORE, pp. 188-191.

SELECTION OF ARTICLES

2017 "Mass customization with additive manufacturing: new perspectives for multi performative building components in architecture". PROCEDIA ENGINEERING, vol. 180, p. 1150-1159.

2017 "Load-responsive Cellular Envelopes with Additive Manufacturing", in "JOURNAL OF FACADE DESIGN AND ENGINEERING", vol. 5, with R.Naboni, A.Kunic, L.Breseghello

2017 "LICD/ITKE Research Pavillions". ARKETIPO, vol. 108

2017 "Night stars stay during the day: the Louvre Abu Dhabi". COMPASSES. Vol. 25

2017 "Healthcare for all in emerging countries: a preliminary investigation of facilities in Kolkata, India" with A.Rebecchi, M.Gola, M.Kulkarni, E.Lettieri, S.Capolongo in "ANNALI DELL'ISTITUTO SUPERIORE DI SANITÀ", Vol. 52.

2016 "Choosing the partner in a Digital Fabrication Case", with Elza Miyasaka, F. M. M. in "XX Congreso de la Sociedad Iberoamericana de Gráfica Digital", SIGRADI, pp. 374-380.

2016 "Load-responsive skin systems for lightweight architecture" with Naboni, R., Kunic, A. in ADVANCED BUILDING SKIN, pp. 123-133.

2016 "Load-responsive skin systems for lightweight architecture" with R.S. Naboni, A. Kunic, L. Breseghello, in JOURNAL OF FACADE DESIGN AND ENGINEERING, pp. 37-49.

2016 "Nuovi processi e tecnologie innovative per l'architettura", AGATHON, vol.5 pp. 115-118.

2015 "Computation and materialization in architecture", with R.S. Naboni, in Barazzetta, G. (Ed.), "Digital takes command", RUBETTINO, pp. 60-71.

2015 "Advanced Customization", with R.S. Naboni, in "Architectural Design and Construction", Vol. IX, SPRINGER.

PRIZES

1999 "Young Researchers Project" funded by the Politecnico di Milano with a research titled "Active facades: the threshold of the transfer. Guidelines for the applicability of active technology in architectural envelope from evolved tertiary to building residential sector".

1998 Research Prize from Foundation Architect Augusto Rancilio FAAR CSAR edition 1998, with the research titled "Thresholds and synergies in the process of technological innovation in diffused and monumental architecture." Nomination thesis.

2017-2018 Winner of the "Re Dot Book Awards" with "Indigenous technologies and self construction", in "Warm Modernity", M.D'Alfonso, SILVANA EDITORE.

CONFERENCES, WORKSHOP AND COURSES ORGANIZATION

2013 "Unexpected Materiality": form finding pavilion with students.
Workshop

2011-12 "Mass Re Clad". Mass customization for innovative re-cladding components with industry suppliers sponsors Permasteelisa, AGC Glass and 3M
Workshop

2010 Digital Design of Building Envelopes, Within Milan International Architecture, with software Digital Project by Ghery Associates, invited tutor John Nastasi, Stevens Institute of Technology, NY suppliers sponsors Permasteelisa, AGC Glass and 3M
Workshop

2009 ADAD Advanced Digital Architecture Design at Deltmod, as Politecnico di Milano
Workshop

2002-06 Organization of the international conference with call for papers e peer review Innovative Design and construction Technologies , Politecnico di Milano, 5-6th May 2009.
Organization and scientific coordination of Student Award Guido Nardi, organized in collaboration with major Italian companies operating in the world of construction (Permasteelisa SpA, GranitiFiandre SpA, Metra SpA).
Conference and Award

2008 Coordination of the Student Competition "Planning our spaces" for the Faculty of Architecture.
Student Competition

2005 Organization of the international conference "innovative technologies and steel architecture", October 25th.
Conference

2004 Organization of a cycle of seminars titled "Innovative Technologies for architecture" for the Final Degree Design studio "Innovative scenarios for the project of architecture. Rehabilitation and new construction" Prof. Anna Mangiarotti.
Conference

LANGUAGES

FIRST LANGUAGES
mother tongue

Italian
French

OTHER LANGUAGES

English
fluent
Swedish
basic
Arabic
basic