Curriculum Vitae Annalisa Pola

Scopus: ID 8616888900

ORCID: 0000-0002-0722-6518

Full Professor of Metallurgy, IIND-03/C, at the Department of Mechanical and Industrial Engineering (DIMI) - University of Brescia - since 2019.

Associate professor from 2014 to 2019 and Assistant professor from 2000 to 2013 in Metallurgy - University of Brescia.

From 1998 to 2000 she obtained a fellowship on Metallurgical Plants - University of Brescia, awarded by the Ente Universitario Lombardia Orientale.

She graduated in Mechanical Engineering at University of Brescia in 1997.

Throughout her professional career, she has engaged in various activities that can be summarized as follows:

- a) Scientific research
- b) International activity
- c) Institutional teaching activities
- d) Institutional activities
- e) Coordination/participation in funded projects
- f) Third mission activities and technology transfer

a) SCIENTIFIC ACTIVITY

- Her main research activities include studies on: the correlation between mechanical properties and the microstructure of metallic materials (mechanical properties, corrosion resistance, cavitation, wear, etc.); performance analysis of recycled aluminum alloys; characterization of components for additive manufacturing; standard and innovative foundry processes (mainly HPDC, LPDC, sand casting, and gravity casting) from a metallurgical, technological, and simulation perspective, such as mold filling and casting solidification; and more.
- She is the author/co- author in more than 130 indexed papers published in international journals and conference proceedings. She has also authored numerous scientific articles published in national conference proceedings and industrial journals (foundry field).
- Speaker in many conferences (including invited presentations, keynotes, and plenary sessions) and in many courses, seminars, training sessions and workshops organized by institution and associations of inter/national relevance on topics related to her scientific research fields.
- Since 2005, she has been the scientific supervisor for research fellowships, many funded by local companies, and has served as advisor/tutor for PhD students.

- She is a member of international scientific committees (e.g., S2P, IFM, TPMS-5, HTDC) and organizing committees for conferences. In 2023, she served as Chairperson of the International Conference "Semisolid Processing of Alloys and Composites."
- In 2019, she was the director of the Winter School of Metallurgy ("Metal Additive Manufacturing" 2020, for Comet-AIM) and was a member of the organizing committee for the Metallurgy Summer Schools ("Simulation of Phase Transformations in Metal Processing" 2018, and "Metal Additive Manufacturing" 2024, for Comet-AIM). She was coordinator and member of the scientific committee for the Summer School "Materials for Industry" 2017 and Director of the Summer School "New Advances in Materials for Additive Manufacturing" 2022 at the University of Brescia.

b) INTERNATIONAL ACTIVITY

- Since 2024 he has been a member of the board of FEMS (the Federation of European Materials Societies), contact Italy.
- During her career she has/had the opportunity to develop various research and teaching
 collaborations at an international level. She is/has been in fact referent/representative for UniBs in
 several international cooperation agreements (e.g. German University of Technology in Oman, RWTH
 Aachen University, etc.). Collaborations with these institutions can also be deduced from the
 presence of foreign co-authors in various publications.
- Member of the project GetInnovative4Impact, Erasmus+ Capacity Building in Higher Education (CBHE).
- Member of international scientific committees (S2P, IFM, TPMS-5, HTD, ecc.)
- He has had/has teaching positions and carries out/has carried out research activities at qualified foreign universities and research institutes (LKR – ARC Leichtmetallkompetenzzentrum Ranshofen GmbH, GUtech).
- Tutor of foreign students in intership at DIMI since 2014.

c) INSTITUTIONAL TEACHING ACTIVITIES

- Alongside her scientific responsibilities, Annalisa Pola conducts teaching activities at the University of Brescia in the following courses: "Light alloys" (MSc in Materials and Product Innovation Eng., since A.Y. 2018/2019, course in English); "Foundry" (MSc in Materials and Product Innovation Eng. and BSc in Mechanical and materials Eng. since A.Y. 2018/19, MSc Mechanics of Materials Eng. from A.Y. 2010/11 to A.Y. 2017/18 and in BSc in Materials Eng. from 2003 to 2006); "Metallic Biomaterials and Coatings" (MSc in Mechanical Eng. Biomechanics CV, since A.Y. 2017/2018, course in English); "Metallurgical Process Simulation Laboratory" (BSc in Industrial Product and Process Techniques).
- Supervisor at the University of Brescia of over 180 theses (both Master's and Bachelor's) on research
 topics related to her scientific sector, as well as tutor for numerous internships for students of the
 University of Brescia.

d) INSTITUTIONAL ACTIVITIES

- Alongside her scientific and teaching responsibilities, she carries out various institutional activities as a member of University and/or Department committees:
 - President of the Nucleo di Valutazione (University Assessment Commission) of the University of Brescia (since 2025, from 2020 to 2024 member),
 - Member of the Academic board of the "DRIMI PhD course" University of Brescia since 2107 (referent for the Materials area),
 - Member of the University of Brescia Orientation Committee (since 2016);
 - Member of the Scientific Council of the University of Brescia Library Service (SBA) (since 2012),
 - Member of the Scientific/Editorial Committee BUP, Brixia University Press (dal 2023),
 - Representative of the DIMI University of Brescia in the Lombard Mobility Cluster in the thematic table: Materials and lightning (since 2019).

e) COORDINATION/PARTICIPATION IN FUNDED RESEARCH PROJECTS:

- Throughout her academic career, she has taken on roles of leader and coordinator as well as member for funded projects:
 - <u>Leader for UniBs</u> of SPOKE 11-Innovative Materials & Lightweighting in PNRR Sustainable Mobility Center (Centro Nazionale per la Mobilità Sostenibile) – CN00000023, decreto 1033 del 17/06/2022, CUP D83C22000690001, from 01-09-2022 to 28-02-2026.
 - <u>Unit leader</u> in the Scalability project FLIGHT, in the frame of PNRR Sustainable Mobility Center (Centro Nazionale per la Mobilità Sostenibile), from 01-01-2025 to 31-08-2025
 - Member in the POC project SMART, in the frame of PNRR Sustainable Mobility Center (Centro Nazionale per la Mobilità Sostenibile), from 01-01-2025 to 31-08-2025.
 - <u>Unit leader</u> in the POC project ALCOM, in the frame of PNRR Sustainable Mobility Center (Centro Nazionale per la Mobilità Sostenibile), from 01-10-2023 to 30-06-2024.
 - Member in the project "SteelPro 4.0", Bando Linea R&S per Aggregazioni di Regione Lombardia, 2017-2019.
 - <u>Unit leader</u> in the project "ECO-ZINC", Regione Lombardia POR 2014-2020 Asse 1 Azione I.1.b.1.3, 2018-2019.
 - <u>Coordinator and Unit leader</u> in the project "HAF —Hybrid aluminum forging Azione 3", Cariplo-Regione Lombardia, 2014-2016.
 - <u>Coordinator and Unit leader</u> in the project o "HAF Hybrid aluminum forging Azione 2", Cariplo-Regione Lombardia, 2014-2015.
 - <u>Unit leader</u> in the project "HAF —Hybrid aluminum forging" Azione 1", Cariplo-Regione Lombardia, 2013-2015.
 - Member in the project "SMART BREAK", Regione Lombardia, 2014-2016;
 - Member in the project "LIGHT-FORK", MIUR-Regione Lombardia, 2012-2014;
 - Member in the project "TECNOENERGY", MIUR-Regione Lombardia, 2012-2014;
 - Member in the project "REMS", Rete Lombarda, 2011-2013;
 - Member in the project "ENERCLEAN", INDUSTRIA 2015, 2011-2013;
 - "Member in the project COFIN 2004-2006.

f) THROUGHOUT THIRD MISSION ACTIVITIES AND TECHNOLOGY TRANSFER

- During her career, she has participated (as leader and/or member) in several research projects between UniBs and private companies, as well as numerous contract activities for industries. In the last five years alone, she has been responsible for over twenty research contracts and more than thirty third-party activities.
- Since 2016, she has been a member of the Technical-Scientific Committee and lecturer at the Die Casting School, organized by AQM and CSMT (under the patronage of DIMI, Amafond, Assofond, Assomet, NADCA, Metef, Industria Fusoria, and Aluplanet), as well as a member of the Committee and lecturer of the Low Pressure School, organized by AQM and CSMT, since 2017.
- She has also been a member of the AIM (Italian Metallurgy Association) Die Casting Study Center since 2010 and a member of the Assofond Foundry Committee (Italian Foundry Association) since 2012, where she actively participates in organizing study days and conference sessions.
- Since 2017, she has been the Technical Director of the industrial magazine "Fonderia e pressofusione"
 ISSN 0015-6078.
- Inventor on three patents related to the use of a new Zn alloy developed as part of an ATP Regione Lombardia project (patent numbers 1.407.309, 1.407.308 e 1.407.307).

Other

• In 2023 she was awarded the European Foundry Women's Award, promoted by the European foundry association CAEF (The European Foundry Association).