

Carlo Antonini, PhD

Associate professor

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EDUCATION

- 2008-2011 PhD, Industrial Engineering, Technologies for Energy and Environment, University of Bergamo, Italy. Thesis: “Superhydrophobicity as a strategy against icing”. Visiting PhD student at University of Alberta, Canada (2008).
- 2004-2007 MSc, Aeronautical Engineering (major: Aerodynamics), Politecnico di Milano, Italy. Thesis: “Prediction of the dynamic response of pipe systems” (105/110). Erasmus exchange student, RWTH Aachen, Germany (2005).
- 2001-2004 BSc, Aerospace Engineering, Politecnico di Milano, Italy. Thesis: “Introduction to glider design: aerodynamic design” (110/110 cum laude).

RESEARCH AND MANAGEMENT APPOINTMENTS

- since 2021 Associate professor, Department of Materials Science, University of Milano-Bicocca, Milan, Italy. Founder and director of SEFI Lab, Surface Engineering and Fluid Interfaces Laboratory.
- since 2017 Scientific Advisor, ApiTech. Innovative start-up, providing support in R&I for SMEs associated to Api Lecco, Italy.
- 2018-2021 Tenure-track researcher, Department of Materials Science, University of Milano-Bicocca, Milan, Italy.
- 2015-2018 Scientist, EMPA - Swiss Federal Laboratories for Materials Science and Technology (ETH Domain), Dübendorf, Switzerland.
- 2012-2014 Marie Curie Fellow (Post-doc), Laboratory of Thermodynamics in Emerging Technologies, Department of Mechanical and Process Engineering, ETH Zurich, Switzerland.
- 2011-2012 Post-doc and Group Leader for the area “drops and spray”, Thermal Physics Laboratory, Department of Industrial Engineering, Università degli Studi di Bergamo, Italy.
- 2006 Intern, Performance Department, Rolls-Royce plc, Derby, UK.

GRANT SUPPORT, FELLOWSHIPS AND AWARDS

- 2023-2026 Funding for a PhD project on polysaccharide-water-ice interaction (eq. value 70 k€).
- 2022-2025 Funding for an executive PhD project on Wasterwater treatment for domestic appliances (eq. value 70 k€), ROLD.
- 2022-2025 Funding for a PhD project on biopolymers for artificial eye drops (70 k€), Istituto Farmaco Biologico Sperimentale Srl and national funding.
- 2022-2024 “Fondo Ateneo Quota Competitiva” (25 k€), UNIMIB internal funding.
- 2021-2024 Coordinator MSC-ITN proposal, SURFICE “Smart surface design for efficient ice protection and control”. Overall budget: 3.5 M€ (UNIMIB unit: 780 k€).
- 2021-2025 Supervisor of a post-doc project on “Atmospheric water for harvesting” (100 k€), UNIMIB internal funding.

- 2019-2022 Funding for a PhD project on Metal additive manufacturing (63 k€), Regione Lombardia-Enea.
- 2019-2022 “Fondo Ateneo Quota Competitiva” (25 k€), UNIMIB internal funding.
- 2019-2024 Support to SMEs (150 k€), ApiTech.
- 2018-2021 Rita Levi Montalcini Fellowship for the project: “REPHOB: REsilient superhydroPHOBic surfaces under adverse conditions” (230 k€), MIUR.
- 2017-2021 Visiting Research Grant from Xi’an Jiaotong University, China, for two projects: “Characterization and optimization of lightweight cellulose foams for oil/water separation by drop impact tests” and “Efficient separation of compound drops for clean water” (17 k€).
- 2012 – 2014 Marie Curie Fellowship, funded by ERC (192 k€).

SCIENTIFIC PUBLICATIONS

I am the author of 50+ peer-review international journal publications, 2 book chapters on anti-icing surfaces, 1 patent (and 2 submitted patents), and several conference proceeding and presentations. An up-to-date list of refereed journal publications is available here:

Google Scholar: <http://scholar.google.ch/citations?user=2CKjmrCAAAAJ&hl=en>

Scopus: <http://www.scopus.com/authid/detail.url?authorId=37119842300>

I hereby authorize the use of my personal data in accordance to the GDPR 679/16 - "European regulation on the protection of personal data".

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