

CURRICULUMVITAE



PERSONAL INFORMATION

Name	PAOLO ALBERTELLI
Institution	Politecnico di Milano, Mechanical Engineering Department
Address	Via La Masa 1, 20156 Milan, Italy
Mobile	+
E-mail	paolo.albertelli@polimi.it
Nationality	Italian
Date of Birth	
 LinkedIn	
 Orcid ID	
 Scopus ID	

RESEARCH EXPERIENCE

- | | |
|--------------------------------|--|
| • Date (from – to) | Form December 2011 to present |
| • Occupation and Position held | Assistant Professor (09/B1 – ING-IND/16) |
| • Institution | Politecnico di Milano - Mechanical Engineering Department - Manufacturing and Production System Research Group
Via La Masa 1, 20156, Milan, Italy |
| • Date (from – to) | From March 2008 to December 2011 |
| • Occupation and Position held | Post-Doctoral Research Assistant |
| • Institution | Politecnico di Milano - Mechanical Engineering Department - Manufacturing and Production System Research Group
Via La Masa 1, 20156, Milan, Italy |
| Notes | Some research activities were developed at Consorzio MUSP |

QUALIFICATIONS

- | | |
|--------------------|--|
| • Date (from – to) | From 11/09/2019 to 11/09/2025 |
| • Research | National Scientific Qualification for Academic Staff to function as Associate Professor in Italian University |

PROFILE DESCRIPTION

RESEARCH AND INDUSTRIAL COLLABORATIONS

Paolo Albertelli has been developing his research activities as an Assistant Professor of the Mechanical Engineering Department (academic discipline ING-IND/16) of Politecnico di Milano since December 2011. His research has been focused mainly on the development of Advanced Manufacturing Solutions and Manufacturing Processes Sustainability.

More specifically, a branch of his research deals with Machine Tool dynamics and cutting stability. Regenerative chatter modelling, cutting stability prediction, chatter monitoring, vibration suppression and the development of advanced monitoring solutions are some of the covered topics. He is even working on Prognostics and Health Management PHM of Machine Tools and

their functional modules.

Another branch of his research is focused on Energy consumption (assessment, identification, modelling and reduction) in Machine Tools, in linked subunits and in other Automatic Machines. Moreover, he is working on cryogenics as a feasible and sustainable solution for machining hard to cut materials and for some forming processes.

The adopted research methodologies range from the Finite Element FE modelling to the analytical developments and from the experimental procedures to the data analysis techniques.

He is the author of more than 40 publications in peer-reviewed journals and international conferences (**Google Scholar: citations 845, h-index 18, h10-index 23 (May 2022)**)

He is author of a patent

He has been involved in several Research Founded Projects both as principal investigator and as researcher

His research activities are characterized by international collaborations (both in the framework of European founded projects and developed as personal initiatives.

He permanently collaborates with companies and specifically with machine tools manufacturers

TEACHING ACTIVITY

He has been involved in several university courses at Politecnico di Milano as **aggregate professor**, average **CFU/year=6.7** (13 courses editions: Machine Tools Manufacturing Systems, Materials and Manufacturing for Energy Systems, Tecnologia Meccanica e Qualità, Principi progettazione Tecnologia Meccanica, Macchine Utensili e Sistemi di lavorazione a controllo numerico) and **teaching assistant**, average **CFU/year=8.7** (19 courses editions: Tecnologia Meccanica 1, Tecnologia Meccanica 2, Tecnologia Meccanica I, Tecnologia meccanica II, Materials and Manufacturing for Energy Systems, Macchine Utensili e Sistemi di lavorazione a controllo numerico) since 2005

ROLES

<i>AITEM</i>	Member of the Italian Association of Manufacturing Technology (www.aitem.org)
<i>CONSORZIO MUSP</i>	On behalf of Politecnico di Milano, member of the Scientific Committee of Consorzio MUSP (www.musp.it)
<i>ART-ER</i>	On behalf of Politecnico di Milano, member of the Scientific Committee of ART-ER (Attrattività, Ricerca, Territorio Emilia-Romagna) https://www.art-er.it/
<i>CLUST-ER MECH</i>	Member of the Scientific Committee of CLUST-ER MECH (regional industrial research and innovation system) Meccatronica e Motoristica Emilia-Romagna https://mech.clust-er.it/en/
<i>VALUE CHAIN DAAMA</i>	Vice-Chair of the Value Chain (communities of public and private bodies) DaAMa (Digital and Advanced Manufacturing) https://mech.clust-er.it/en/value-chain/digital-and-advanced-manufacturing/ - Regione Emilia-Romagna.
<i>GUEST EDITOR</i>	Topic Editor of the Journal of Manufacturing and Materials Processing
<i>MANUTHON-EMANUTHON</i>	On behalf of AITeM is the responsible of the organization of MANUTHON (www.manuthon.it) and eMANUTHON (www.emanuthon.it), initiatives of OPEN INNOVATION. MANUTHON and eMANUTHON are the first registered Italian Hackathons on manufacturing

JOURNALS REVIEWER

Reviewer for the following international peer-reviewed journals:

Since 2014, reviewer for the journal "International Journal of Machine Tool and Manufacture"

Since 2014, reviewer for the "International Journal of Advanced Manufacturing Technology"

Since 2013, reviewer for the journal "Measurements"

Since 2013, reviewer for the journal "Machining Science and Technology"

Since 2014, reviewer for the journal "CIRP Procedia"

Since 2016, reviewer for the journal "Journal of Cleaner Production"

Since 2017, reviewer for the journal "Mechanical Systems Signal Processing"

Since 2017 reviewer for the journal "Advances in Mechanical Engineering"

Since 2018 reviewer for the journal "Nanomanufacturing and Metrology"

Since 2018 reviewer for the journal "Journal of Manufacturing Processes"

Since 2019 reviewer for the journal "Proceedings of the Institution of Mechanical Engineers, Part

B: Journal of Engineering Manufacture”
 Since 2020 reviewer for the journal “IEEE Access”
 Since 2020 reviewer for the journal “Precision Engineering”
 Since 2022: reviewer for the journal “Journal of Sound and Vibration”

He reviewed more than 48 scientific papers.

AWARDS AND RESPONSIBILITIES

<i>PHD SCHOLARSHIP</i>	2018 – Principal Investigator of a PhD scholarship funded by Regione Emilia-Romagna. Topic: Prognostics and Health Management in Machine Tool and Manufacturing Industry
<i>CNR - MINISTERO SVILUPPO ECONOMICO</i>	2017 – Designated by the Mechanical Engineering Department (Politecnico di Milano) as Responsible for the activity “Metodologia per l’analisi dell’efficienza energetica dei moduli principali dei beni strumentali”. Research developed in the framework of “Accordo di Programma CNR – Ministero dello Sviluppo Economico”
<i>FFABR</i>	2017 – Principal Investigator of “Fondo Finanziamento per le attività base di ricerca FFABR” – ANVUR
<i>UCIMU</i>	Supervisor/Co-supervisor or tutor of several theses that were honoured with the UCIMU National Best Thesis Awards
<i>AITEM - SOAVI</i>	2011 – Supervisor of a Master of science degree thesis that was honoured with the AITeM National Best Thesis Awards in memory of Professor Soavi
Politecnico di Milano “Progetto Giovani Ricercatori”	2012 – Principal Investigator of the “Progetto Giovani Ricercatori 2012” that was funded by the Mechanical Engineering Department (Politecnico di Milano)
<i>FONDAZIONE POLIZZOTTO</i>	2007 – Honoured with the Fondazione Polizzotto Scholarships for PhD students

EDUCATION

• Date (from – to)	March 2005 - June 2008
• Title of Qualification Awarded	Doctoral Studies - PhD in “Manufacturing and Production Systems”
• Institution	Politecnico di Milano - Mechanical Engineering Department - Via La Masa 1, 20156, Milan, Italy Some research activities were developed at Consorzio MUSP (www.musp.it)
• Thesis Title	“High Performance Spindle Design Methodologies for high-speed Machining”
• International Standard Classification	ISCED 8 (ISCED 2011)
• Date (from – to)	From October 2007 to March 2018
• Title of Qualification Awarded	Visiting Exchange PhD Scholar
• Institution	Loughborough University (www.lboro.ac.uk) - Wolfon School of Mechanical and Manufacturing Engineering, Leicestershire (UK), LE11 3TU
• Date (from – to)	From September 2000 to December 2004
• Title of Qualification Awarded	Master of Science MSc in Mechanical Engineering (Robotics and Automation) 100/100 cum laude
• Institution	Politecnico di Milano – Industrial Engineering
• International Standard Classification	ISCED 7 (ISCED 2011)
• Thesis Title	“Simulazione del comportamento meccanico funzionale di un centro di lavoro” – the thesis was honoured with the UCIMU National Best Thesis Awards (www.ucimu.it)
• Date (from – to)	September 1997 to July 2000
• Title of Qualification Awarded	Bachelor of Science BSc in Mechanical Engineering 100/100 cum laude
• Institution	Politecnico di Milano – Industrial Engineering – Piacenza Campus
• International Standard Classification	ISCED 6 (ISCED 2011)
• Thesis Title	“Progettazione attrezzatura per carrelli elevatori” – the thesis was developed during a stage in the Bolzoni Auramo company (https://it.bolzonigroup.com/)

LANGUAGE QUALIFICATIONS

- Mother Tongue
- Other Tongues
 - Certifications

Italian

English fluent

Shenker level 75/100; TOEFL 227/300; *GRADED EXAMINATIONS IN SPOKEN ENGLISH TRINITY COLLEGE-LEVEL 8/12*