

University Academic Curriculum Vitae

Personal information

Name: Margherita Molinaro

Education since leaving school

- 2024 - **Italian National Habilitation as Associate Professor** in SSD ING-IND/35 (now IEGE-01/A, received in November 2024)
- 2021, **Abilitazione all'esercizio della professione di Ingegnere Industriale** (Engineering License), University of Udine (Udine, Italy)
- 2020, **Cultore della materia** (Expert) in the field of Management Engineering, 2020-2023, University of Udine (Udine, Italy)
- 2020, **Doctor of Philosophy** in Industrial and Information Engineering, University of Udine (Udine, Italy), Thesis title: "Contexts and mechanisms to develop supply chain integration and improve performance: a multi-method investigation."
- 2019, **Visiting PhD student** at Texas Christian University (Fort Worth, Texas), January 15th 2019 – May 15th 2019
- 2016, **Master degree** in Management Engineering, University of Udine (Udine, Italy), graduation grade: 110/110 (Magna Cum Laude), Thesis title: "Sales and Operations Planning process in the food industry: the Morato Pane case."
- 2016, **Double Degree Program**, FH-Joanneum, University of Applied Sciences of Graz (Austria), Thesis title: "Sales and Operations Planning process in the food industry: the Morato Pane case."
- 2013, **Bachelor degree** in Management Engineering, University of Udine (Udine, Italy), graduation grade 110/110, Thesis title: "The use of MS-Excel to analyze financial investments."

Present appointment

Tenure Track Assistant Professor (RTT)

Starting date: July 1st 2025

Institution name: Free University of Bozen-Bolzano (Bolzano, Italy)

Activities: Research activities in the following areas:

- Digitalization/Industry 4.0
- Sustainability Management
- Interplay between digitalization and sustainability
- Supply Chain Management

Teaching activities in the following courses:

- Digital Transformation and Sustainability Management
- Economics and Management of Energy Systems
- Product Development

Participation in research projects.

Organizational and administrative activities in support to the Faculty of Engineering (e.g., Deputy Director of the Course Council of the Master Degree LM-33 “Industrial Mechanical Engineering” since October 2024, Representative of the RTDs for the Faculty of Engineering since March 2023)

Professional experience

<i>From / to</i>	<i>Job title</i>	<i>Name of academic Institution</i>	<i>Academic level</i>	<i>Responsibilities</i>
Academic years: 2021-22, 2022-23, 2023-24	Contract professor	Fondazione Ernesto Illy (Trieste, Italy)	Post-Graduate (I level Master)	Teaching of part of the module “Complexity and the Supply Chain” (4 hours) within the I level Master in Coffee Economics and Science “Ernesto Illy”. Supervision of project works (i.e., final Master’s thesis).
Academic year 2023-24	Contract professor	University of Udine (Udine, Italy)	Post-Graduate (I level Master)	Teaching of the course “Distribuzione fisica e gestione dei trasporti” (4 hours) within the I level Master in “Acquisti, Logistica e Gestione della Supply Chain”
Oct. 2021 – Sep. 2022	Contract professor	University of Udine (Udine, Italy)	Bachelor’s Degree	Teaching of the course “Reti di fornitura e distribuzione del settore agroalimentare e della ristorazione” (48 hours - 6 ECTS)
Jul. 2022 – Jun. 2025	Assistant Professor (RTDa)	Free University of Bozen-Bolzano (Bolzano, Italy)		Teaching of the following courses: Digital Transformation and Sustainability Management; Economics and Management of Energy

				Systems; Product Development. Research activities in the areas of Industry 4.0/Digitalization and sustainability management. Participation in research projects. Organizational and administrative activities in support to the Faculty of Engineering
Dec. 16 th , 2020 – June 15 th , 2022	Post-doctoral Research Fellow	University of Udine (Udine, Italy)		Involvement into the POR FESR 2014/2020 project: ALSO 4.0 - Automated Laser Scanner Operations. Research activities on Supply Chain Management, Industry 4.0 and sustainability-related topics. Co-supervision of Master theses.
Academic years: 2016-17, 2017-18, 2018-19, 2019-20, 2020-21, 2021-22	Contract professor	Fondazione I.T.S. Meccatronico (Treviso, Italy)	Post-diploma course	Teaching of the course “Pianificazione e controllo della produzione” - “Production planning and control” (20 hours)
Dec. 15 th , 2019 – Dec. 14 th , 2020	Research Fellow	Free University of Bozen-Bolzano (Bozen, Italy)		Research activities on Industry 4.0 in the wood industry, Supply Chain Management and Blockchain technology. Student tutoring activities. Co-supervision of Master theses. Involvement in research projects writing.
Jul. 2020 – Jul. 2020	Contract professor	LUM Business School & Consulting (Bari, Italy)	Post-graduate (I level Master)	Teaching of part of the course “Project Management” (10 hours) in the Lifelong Learning Programme “Health, Safety and Environmental

				Management”
Nov. 2016 – Oct. 2019	Doctoral student	University of Udine (Udine, Italy)		Research on Supply Chain Integration, Inventory Management and Blockchain technology. Presentation of papers at international conferences. Didactical support on university courses. Co-supervision of Master and Bachelor theses. Administrative support for the management of regionally funded projects (POR-FESR 2014-20), including both projects writing and financial reporting activities.

Experience in academic teaching

Teaching activities in Master’s Degree courses:

- Responsible and lecturer of the course “Product Development” for the Master’s Degree in Industrial Mechanical Engineering (LM-33) – 28 hours – 3 ECTS – I semester – SSD: IEGE-01/A (ING-IND/35), teaching language: English, since A.Y. 2024-25, Free University of Bozen-Bolzano (Bolzano, Italy)
Evaluation by students: “Are you generally satisfied with the way this course was taught?”
A.Y. 2024-25: 100% Generally Yes + Definitely Yes
- Responsible and lecturer of the course “Digital Transformation and Sustainability Management” for the Master’s Degree in Industrial Mechanical Engineering (LM-33) – 46 hours – 5 ECTS – II semester – SSD: IEGE-01/A (ING-IND/35), teaching language: English, since A.Y. 2022-23, Free University of Bozen-Bolzano (Bolzano, Italy)
Evaluation by students: “Are you generally satisfied with the way this course was taught?”
A.Y. 2022-23: 100% Generally Yes + Definitely Yes
A.Y. 2023-24: 100% Generally Yes + Definitely Yes
A.Y. 2024-25: evaluations not available yet
- Responsible and lecturer of the course “Economics and Management of Energy Systems” for the Master’s Degree in Energy Engineering (LM-30) – 14 out of 46 hours – 5 ECTS – II semester – SSD: IEGE-01/A (ING-IND/35), teaching language: English, since A.Y. 2022-23, Free University of Bozen-Bolzano (Bolzano, Italy)
Evaluation by students: “Are you generally satisfied with the way this course was taught?”
A.Y. 2022-23: 100% Generally Yes + Definitely Yes
A.Y. 2023-24: evaluations not available (less than 5 students provided them)

A.Y. 2024-25: evaluations not available yet

- Co-responsible, co-organizer and lecturer of the Erasmus+ Blended Intensive Programme “Digital Transformation in Manufacturing and Engineering Design” for the Master’s Degree in Industrial Mechanical Engineering (LM-33) – 10 out of 30 hours – 3 ECTS – II semester – SSD: IEGE-01/A (ING-IND/35), teaching language: English, A.Y. 2022-23, Free University of Bozen-Bolzano (Bolzano, Italy).

Teaching activities in Bachelor’s Degree courses:

- Lecturer of the module “Industry 4.0 and sustainability” within the “Summer School International Operations Management and Sustainability” offered by the University of Udine – 2 hours – II semester – SSD: IEGE-01/A (ING-IND/35), teaching language: English, A.Y. 2023-24. The school was attended by Bachelor and Master level students from University of Udine (Italy), University of Graz Joanneum (Austria), Jonkoping University (Sweden), Széchenyistván University (Hungary).
- Contract professor (responsible and lecturer) of the course “Reti di fornitura e distribuzione del settore agroalimentare e della ristorazione” (“Food supply chain management”) for the Bachelor Degree in “Science and culture of food” (L-GASTR) – 48 hours – 6 ECTS – II semester – SSD: IEGE-01/A (ING-IND/35), teaching language: Italian, A.Y. 2021-22, University of Udine (Udine, Italy)
Evaluation by students: “Are you generally satisfied with the way this course was taught?”
A.Y. 2021-22: 97% Generally Yes + Definitely Yes

Other teaching activities (seminars, exercises, exams’ management) in Bachelor and Master’s Degree courses (from A.Y. 2016-17 to A.Y. 2021-22):

- “Gestione dei sistemi logistici” (“Supply Chain Management”) – SSD: IEGE-01/A (ING-IND/35) – responsible: prof. Pietro Romano, Bachelor’s degree in Management Engineering, University of Udine (Udine, Italy)
- “Marketing and Product Development” – SSD: IEGE-01/A (ING-IND/35) – responsible: prof. Pietro Romano, Master’s degree in Management Engineering, University of Udine (Udine, Italy)

Teaching activities in PhD programs:

- Lecturer of the research seminar “Qualitative research in action: how to develop and analyze case studies” (7 hours) organized by the Graz University of Technology (Austria) and targeted to Master’s and PhD students / early stage researchers, teaching language: English, date: 13.01.2025, held online
- Invited speaker on “Circular economy and climate change mitigation: do Reduce, Reuse and Recycle practices affect CO₂ emissions?” (1 hour) within the “PhD Seminar Series” targeted to PhD Students of Worcester Polytechnic Institute, teaching language: English, date: 29.09.2023, Worcester Polytechnic Institute (Massachusetts, USA)
- Lecturer of the course “Managing Digital Transformation” (3 hours) as

part of the training programme for the PhD in Industrial and Information Engineering, teaching language: English, A.Y. 2022-23, 2023-24, 2024-25, University of Udine (Udine, Italy)

- Lecturer of the course “Supply chain risk management” (3 hours) as part of the training programme for the PhD in Industrial and Information Engineering, teaching language: English, A.Y. 2020-21, 2021-22, University of Udine (Udine, Italy)
- Invited speaker on “Supply chain risk management” (2 hours) within the “Series of lectures” targeted to PhD Students of the Free University of Bozen-Bolzano, teaching language: English, date: 12.11.2021, Free University of Bozen-Bolzano (Bolzano, Italy)

Teaching activities for post-graduate students:

- Contract professor (responsible and lecturer) of part of the module “Complexity and the Supply Chain” (4 hours) within the I level Master in Coffee Economics and Science “Ernesto Illy”, teaching language: English, A.Y. 2021-22, 2022-23, 2023-24, Fondazione Ernesto Illy (Trieste, Italy)
- Contract professor (responsible and lecturer) of the course “Distribuzione fisica e gestione dei trasporti” (4 hours) within the I level Master in “Acquisti, Logistica e Gestione della Supply Chain”, teaching language: Italian, A.Y. 2023-24, University of Udine (Udine, Italy)
- Contract professor (responsible and lecturer) of part of the course “Project Management” (10 hours) for the Master in “Health, Safety and Environmental Management – MASEM”, teaching language: English, A.Y. 2019-20, LUM Business School & Consulting (Bari, Italy)

Teaching activities in post-diploma courses:

- Contract professor (responsible and lecturer) of the post-diploma course “Production planning and control” (20 hours), teaching language: Italian, A.Y. 2016-17, 2017-18, 2018-19, 2019-20, 2020-21, 2021-22, Fondazione I.T.S. Meccatronico (Treviso, Italy)

Co-Supervision of PhDs:

- Co-supervision of the following PhD candidates:
 - Nunzia Zecchillo, “Leveraging on sustainability standards and policy incentives to improve social and environmental sustainability of companies”, PhD in Sustainable Energy and Technologies, 38th cycle, Free University of Bozen-Bolzano

Supervision of I level Master project works:

- Supervision of **3** project works within the I level Master in Coffee Economics and Science “Ernesto Illy”:
 - “Innovating Sustainability: Repurposing Coffee Waste for a Greener Future” (A.Y. 2023-24)
 - “Sustainability assessment in the coffee industry” (A.Y. 2022-23)

- “Circular economy in coffee supply networks” (A.Y. 2021-22)

Supervision of Master’s Degree theses:

- Supervision of **2** Master’s Degree theses for the degree in Industrial Mechanical Engineering at the Free University of Bozen-Bolzano:
 - “Development of a Quality Assessment Framework for Artificial Intelligence Systems: The BMW Case” (A.Y. 2023-24)
 - “Additive Manufacturing applications: Typology and Supply Chain impacts” (A.Y. 2023-24)

Supervision of Bachelor’s Degree theses:

- Supervision of **2** Bachelor’s Degree theses for the degree in Science and Culture of Food at the University of Udine:
 - “Organizzazione e gestione di un evento in Latteria Perenzin: caseifici artigianali ed agricoli aperti” (A.Y. 2022-23)
 - “Progettazione e sviluppo di un nuovo packaging alimentare per farine: il caso Molino Moras” (A.Y. 2021-22)

Co-supervision of Master’s Degree theses:

- Co-supervision of **3** Master’s Degree theses for the degree in Industrial Mechanical Engineering at the Free University of Bozen-Bolzano:
 - “Industry 4.0 and Sustainability: A Multiple Case Study Analysis” (A.Y. 2023-24)
 - “Performance impact of ISO 45001 adoption: a secondary data analysis” (A.Y. 2021-22)
 - “A sand cone model of sustainability performance: a secondary data analysis” (A.Y. 2019-20)
- Co-supervision of **1** Master’s Degree theses for the degree in Engineering and Industrial Management at the Polytechnic of Porto - School of Engineering (Portugal):
 - “The impact of digitalisation on corporate sustainability” (A.Y. 2023-24)
- Co-supervision of **1** Master’s Degree theses for the degree in Entrepreneurship and Innovation at the Free University of Bozen-Bolzano:
 - “Optimising the buying process: the Markas case study” (A.Y. 2022-23)
- Co-supervision of **2** Master’s Degree theses for the degree in Management Engineering at the University of Udine:
 - “La resilienza delle supply chain ai tempi del Covid-19. il caso studio Electrolux” (A.Y. 2020-21)
 - “Analisi strategica del portafoglio fornitori con l’utilizzo dei dati presenti nel sistema ERP: il caso studio Fincantieri” (A.Y. 2020-21)
- Co-supervision of **1** Master’s Degree thesis for the degree in

Management Engineering at the University of Padova:

- “Un approccio e un applicativo software per l'integrazione del Lean e della Teoria dei Vincoli nella gestione dei materiali: caratteristiche e criticità” (A.Y. 2016-17)

Co-supervision of Bachelor's Degree theses:

- Co-supervision of **1** Bachelor's Degree thesis for the degree in Science and Culture of Food at the University of Udine:
 - “Analisi delle ricadute socio-economiche di un'azienda alimentare sul territorio: il caso Roncadin” (A.Y. 2021-22)
- Co-supervision of **2** Bachelor's Degree theses for the degree in Management Engineering at the University of Udine:
 - “Blockchain: applicazioni e benefici per il Supply Chain Management” (A.Y. 2017-18)
 - “La gestione della supply chain nel settore alimentare: criticità e soluzioni operative” (A.Y. 2017-18)

Supervision of internships

- Academic tutor of **3** internships at the Free University of Bozen-Bolzano (A.Y. 2023-24, 2024-25)
- Academic tutor of **2** curricular internships for the Bachelor Degree in Science and culture of food of the University of Udine (A.Y. 2021-22)

Tutoring activities:

- Tutor within the Professional Bachelor in Wood Engineering of the Free University of Bozen-Bolzano (A.Y. 2019-20)

PhD examination and reviewing

- 21.06.2024. Member of the final examination committee for the PhD exam in “Industrial and Information Engineering” at the University of Udine.
- 2024. Reviewer of a final PhD thesis within the Doctoral Programme in “Industrial and Information Engineering” at the University of Udine.

Other academic responsibilities

Institutional activity at the Free University of Bozen-Bolzano:

- Second member (Deputy Director) of the Course Council of the Master's Degree in Industrial Mechanical Engineering (LM-33) of the Free University of Bozen-Bolzano since October 2024.
Main responsibilities: co-organization of and participation in course council meetings, support for promoting the degree program to prospective students, assistance in preparing official documents (e.g., revisions to regulations and curricula), students' tutoring.
Other responsibilities:
 - “Docente di riferimento” for the Master in A.Y. 2023-24
- Member of the Study Council of the Master's Degree in Energy

Engineering (LM-30) of the Free University of Bozen-Bolzano and of the University of Trento since A.Y. 2022-23.

Main responsibilities: member of the peer teacher-students subcommittee (CPDS) since October 2024 – Activities: preparation of the annual report of the committee.

- Representative of the RTDs for the Faculty of Engineering since March 2023.

Main responsibilities (shared with the other RTD representative): member of the Faculty Council of the Faculty of Engineering, organization and management of meetings among RTDs, management of communications between RTDs and the Faculty Council / Dean of Engineering.

- Member of the several commissions for the selection of candidates for research fellow, technologists, lecturer / teaching assistant, and collaborator positions in the SSD IEGE-01/A (ING-IND/35)

Organization of international courses:

- **Co-organizer** of the Blended Intensive Program (BIP) in “Digital Transformation in Manufacturing and Engineering Design”, offered from 1st March to 30th April 2023 in Blended format (including an intensive week in presence from 13th to 17th March 2023). 32 participants from 5 different universities (unibz, UPV, UdG, UAntwerp, KULeuven) participated to the BIP. Co-organizers: Prof. Yuri Borgianni, Prof. Guido Orzes.

Organization of national and international conferences and events:

- **Co-organizer of the session** “Secondary Data for Sustainable Supply Chain and Operations Management Research” within the 55th Annual Conference of the Decision Sciences Institute (DSI), Phoenix, US, 23–25 November 2024.
- **Member of the Scientific Committee** of the 3rd International Symposium on Industrial Engineering and Automation, “Latest Advancements In Mechanical Engineering”, Bolzano, Italy, 19-21 June 2024.
- **Co-organizer of the conference track** “Innovative Engineering Education” within the 3rd International Symposium on Industrial Engineering and Automation, Bolzano, Italy, 19-21 June 2024.
- **Member of the Organizing Committee** of the 14th Annual EDSI Conference, “The science of responsible decisions”, Venice, Italy, 3-6 June 2024. Chair: Prof. Guido Orzes, Co-chairs: Dr. Giovanna Culot, Prof. Guido Nassimbeni, Dr. Matteo Podrecca, Prof. Marco Sartor.
- **Co-chair** of the 2nd International Symposium on Industrial Engineering and Automation, “Towards a Smart, Resilient and Sustainable Industry”, Bolzano, Italy, 22-23 June 2023. Other chairs: Prof. Yuri Borgianni, Prof. Dominik Matt, Prof. Guido Orzes.
- **Co-organizer of the conference track** “Innovation and digital transition in supply chains to foster circular economy” within the XXXIII

AiIG Scientific Meeting (RSA AiIG 2022), Rome, 20-21 October 2022.

- **Co-organizer of the conference track** “(Operational and strategic) performance impacts of industry 4.0: current state and future trends” within the XXXII AiIG Scientific Meeting (RSA AiIG 2021), Naples and Online, 21-22 October 2021.

Reviewer for the following international journals:

(more details at <https://www.webofscience.com/wos/author/record/GYA-1498-2022>)

- Journal of Supply Chain Management (AiIG 2022¹: GOLD, ISI/WOS: Q1, Scopus: Q1), since December 2022 – 7 reviews
- International Journal of Operations and Production Management (AiIG 2022: GOLD, ISI/WOS: Q1, Scopus: Q1), since March 2022 – 6 reviews
- Resources, Conservation & Recycling (AiIG 2022: GOLD, ISI/WOS: Q1, Scopus: Q1), since December 2023 – 1 review
- Technological Forecasting & Social Change (AiIG 2022: GOLD, ISI/WOS: Q1, Scopus: Q1), since January 2024 – 1 review
- International Journal of Production Research (AiIG 2022: GOLD, ISI/WOS: Q1, Scopus: Q1), since December 2024 – 1 review
- Journal of Purchasing and Supply Management (AiIG 2022: SILVER, ISI/WOS: Q1, Scopus: Q1), since June 2023 – 3 reviews
- Production Planning and Control (AiIG 2022: SILVER, ISI/WOS: Q1, Scopus: Q1), since February 2023 – 6 reviews
- Computers and Industrial Engineering (AiIG 2022: SILVER, ISI/WOS: Q1, Scopus: Q1), since August 2024 – 3 reviews
- International Journal of Physical Distribution and Logistics Management (AiIG 2022: SILVER, ISI/WOS: Q1, Scopus: Q1), since July 2023 – 3 reviews
- IEEE Transactions on Engineering Management (AiIG 2022: SILVER, ISI/WOS: Q1, Scopus: Q1), since January 2023 – 1 review
- Journal of Manufacturing Technology Management (AiIG 2022: SILVER, ISI/WOS: Q1, Scopus: Q1), since October 2024 – 3 review
- Operations Management Research (AiIG 2020: SILVER, AiIG 2022: BRONZE, ISI/WOS: Q1, Scopus: Q1), since November 2020 – 15 reviews
- Cleaner Logistics and Supply Chain, since May 2022 (ISI/WOS: Q1, Scopus: Q1) – 1 review

¹ Ranking of the international journals developed by the Italian Association of Management Engineering: <https://www.ingegneriagestionale.it/ricerca/classificazione-delle-riviste-rilevanti-aiig/>. Five categories: GOLDSTAR, GOLD, SILVER, BRONZE, COPPER.

- International Journal of Design Creativity and Innovation (ISI/WOS: Q4, Scopus: Q1), since November 2023 – 3 reviews
- Technological sustainability journal, since December 2023 – 2 reviews

Participation in Editorial Boards

- Member of the Editorial Reviewers of Journal of Supply Chain Management (AiIG 2022: GOLD), since November 2023 (<https://onlinelibrary.wiley.com/page/journal/1745493x/homepage/editorialboard.html>)
- Member of the Editorial Review Board Developmental Program of Journal of Supply Chain Management (AiIG 2022: GOLD), Edition 2022-2023
- Guest editor of the following “book series”: Lecture Notes in Networks and Systems (Springer), with the book “Towards a Smart, Resilient and Sustainable Industry. Proceedings of the 2nd International Symposium on Industrial Engineering and Automation ISIEA 2023” – the book includes the best contributions (conference papers) presented at the 2nd International Symposium on Industrial Engineering and Automation (ISIEA2023) – The book can be accessed at the following link: <https://link.springer.com/book/10.1007/978-3-031-38274-1>

Reviewer of the following national and international conferences:

- ISIEA 2025 ON Manufacturing 2030: A Perspective to Future Challenges in Industrial Production, 2025
- XXXV AiIG Scientific Meeting (RSA AiIG 2024) on “How AI is changing Economic Systems, Organizations, and Society”, 2024
- ISIEA 2024 on “Latest Advancements In Mechanical Engineering”, 2024
- EurOMA 2024 on “Transforming people and processes for a better world”, 2024
- 33rd annual IPSERA Conference on “Emerging alternatives”, 2024
- XXXIII AiIG Scientific Meeting (RSA AiIG 2022) on “Redesigning networks and supply chains in times of transition”, 2022
- R&D 2022 Management Conference on “Innovation for people and territories”, 2022
- XXXII AiIG Scientific Meeting (RSA AiIG 2021) on “Rethinking Sustainability and Resilience after the Covid-19 pandemic”, 2021.
- 30th annual IPSERA Conference on “Purchasing Innovation and Crisis Management”, 2021.
- 15th International Forum on Knowledge Asset Dynamics (IFKAD) on “Knowledge in Digital Age”, 2020

Other third mission activities

- Participation, as team member, in the following research contract projects:
 - “I4.0 readiness: an international comparison (I4.0Readiness)”, 06.02.2025 – 31.03.2025, funded by Fraunhofer ISI, budget: 4.000€
 - “Precision spraying and canopy analysis (FOCUS SPRAYING)”, 13.12.2022 - 31.03.2025, funded by SPRAY LOGICS S.r.l., budget: 71.910€
 - “Sistema integrato per l'intralogistica collaborativa e di supporto alla supply network”, 10.08.2018 – 31.01.2020, funded by Overlog S.r.l., budget: 25.000€
- June 2025. Collaboration in organizing the course “Rappresentazione e re-design dei processi aziendali,” as part of the Continuing Education program for companies of the European Digital Innovation Hub (EDIH) in Bolzano. The 2-day course (10-11.06.2025) was intended for managers and employees of companies in the South Tyrol region (<https://www.unibz.it/it/faculties/engineering/edih-training-artificial-intelligence/>).
- 11th January 2025. Participation to the event “New Heights for Innovation: Discover Our New Faculty of Engineering!”, with the presentation of projects on the topic *Sustainability in Supply Chains*. The event, organized by the Faculty of Engineering of the Free University of Bozen-Bolzano, was open to all interested citizens (<https://www.unibz.it/en/home/third-mission/new-heights-innovation/#Organism-10426>)
- 26th November 2024 and 10th December 2024. Teaching of two lectures (3 hours each, language: Italian) within the course “Gestione sostenibile della supply chain nelle aree montane”. The course was organized within the framework of lifelong learning program *Studium Generale* of the Free University of Bozen-Bolzano and funded by the PNRR project *Interconnected Nord-Est Innovation Ecosystem (iNEST)*. The course was open to Bachelor and Master students of the Free University of Bozen-Bolzano, as well as to all citizens interested to a continuous learning programme.
- 12th November 2024. Teaching of the lecture “Circular transition of enterprises” (2 hours, language: English) as part of the Virtual Lecture Series organized within the following Erasmus Plus Project: *Smaller Universities for Sustainability in Engineering Education (SUSEE)*. The virtual lecture was open to Bachelor and Master students, as well as researchers and professors, of the four partner universities of the SUSEE project, namely: University of Information Technology and Management in Rzeszow (Poland), Ilmenau University of Technology (Germany), University of Technology of Compiègne (France), Free University of Bozen-Bolzano (Italy).
- 10th November 2023. Participation to the event: “LE MILLE E UNA SCIENZA – Il festival della scienza di Bolzano”, with the exhibition of the Mechanical Lab (Faculty of Engineering of the Free University of Bozen-Bolzano) and demonstration of simple experiments to

secondary school students.

- 5th December 2022. Invited presentation entitled “Sostenibilità di prodotti, delle aziende e delle catene di fornitura” at the NOI Techpark (Bozen) within the seminar “Funghi, catene di fornitura e nuove idee” organized by Ivhapa.

Invited presentations

- 29th April 2025. Invited speaker within the *PRICE Seminar: Progress in Innovation, Competition, Entrepreneurship* initiative of the ZEW – Leibniz Centre for European Economic Research. Title of the seminar: “Digitalization of manufacturing: sustainability benefits and issues”. The seminar was held in collaboration with prof. Guido Orzes at the ZEW center in Mannheim, Germany..

Memberships

Member of the following scientific associations:

- EurOMA - European Operations Management Association
- European Decision Sciences Institute (EDSI)
- AiIG – Associazione italiana di Ingegneria Gestionale
- IPSERA - International Purchasing & Supply Education & Research Association
- AOM – Academy of Management

Other roles in scientific associations

- Member of the board of the European Decision Sciences Institute (EDSI) since July 2024 - <https://edsi.decisionsciences.org/edsi-board/>
Main responsibilities: participation in the periodic board meetings, support in defining the strategic direction for EDSI's annual scientific conferences, support in supervising the organisation of EDSI's annual scientific conferences, support in managing member relations.

Research and scholarship

Research projects funded by Public Authorities or internal UNIBZ funds

[More details are provided below the table]

	<i>Dates</i>	<i>Researcher's role</i>	<i>Funding Body</i>	<i>Title</i>	<i>Amount received</i>
1	04.10.2024 – 03.10.2025	PI	Next Generation EU – PNRR – bando destinato a giovani ricercatrici/ricercatori della Libera Università di Bolzano	How mountain companies respond to disruptions: the role of supply chain structure (MoDiSC)	40.488€
2	28.09.2023 – 27.09.2025	Member of the team and responsible of	Progetti di Rilevante Interesse	Industry 4.0 and Sustainability: opportunities and	59.330€ (budget unibz) -

		the WP 2: Literature review PI: Prof. Guido Orzes	Nazionale – PRIN 2022	challenges for Italian firms (I4.0SUST)	206.737€ (budget for the whole consortium)
3	01.01.2023 – 31.12.2026	Member of the team and responsible of the WP 2.2: Scientific Dissemination PI: Prof. Dominik Matt	Horizon Europe MSCA: Staff Exchange 2021 European Commission (research)	A Strategic Roadmap Towards the Next Level of Intelligent, Sustainable and Human-Centred SMEs (SME5.0)	317.400€ (budget unibz), 1.2M€ (budget for the whole project)
4	01.10.2022 – 31.12.2023	Member of the team since 01.03.2023 PI: Prof. Renato Vidoni	ERASMUS-EDU- 2022-EMJM- DESIGN	Designing an Erasmus Mundus Master on Digital and Sustainable Manufacturing (Design4SusMan)	55.000€
5	01.09.2022 – 31.08.2025	Member of the team since 01.06.2023 PI: Prof. Fabrizio Mazzetto	Next Generation EU - PNRR Ecosistemi territoriali dell'innovazione	Interconnected Nord-Est Innovation Ecosystem (iNEST)	8.278.773€
6	01.09.2021 – 30.08.2024	PI since 01.12.2022	RTD Call 2021 - unibz	Machining and Production of Additive Manufactured Composites (Co.M.P.AM.)	13.090€
7	01.09.2020 – 31.08.2023	Member of the team since 01.07.2022 PI: Prof. Patrick Dallasega	RTD Call 2020 - unibz	Blockchain adoption in operations and supply chain management: An investigation for improved information sharing and performance (BT-OSCM)	9.250€
8	01.09.2020 – 31.08.2023	Member of the team since 01.07.2022 PI: Prof. Alfredo De Massis	ID Call 2020 unibz	Mastering the digital transformation in the family business: Getting ready for the Millennial generation (MASTERMIL)	173.000€
9	15.06.2020	Member of the	Associazione	Exploring the	5.000€

	– 15.06.2023	team PI: Dr. Elena Pessot	italiana di Ingegneria Gestionale through the initiative “Misure di sostegno ai giovani soci AilG”	complementarity of Industry 4.0 technologies	
10	01.02.2020 – 31.01.2023	Member of the team from 16.12.2020 to 15.06.2022 PI: Prof. Pietro Romano	POR FESR 2014-2020 (Friuli Venezia-Giulia)	Automated Laser Scanner Operations (ALSO 4.0)	734.106,46€, Amount financed: 475.926,79€

Note: PI = principal investigator

1. How mountain companies respond to disruptions: the role of supply chain structure (MoDiSC)

Researcher's role: PI

Funded by: Free University of Bozen-Bolzano (with PNRR funds) – bando destinato a giovani ricercatrici/ricercatori della Libera Università di Bolzano within the iNEST project

Budget: 40.488€

Partners: -

Topic: The goal of the project is to explore how the supply chain structure can affect the resilience of companies located in mountain regions. Two research questions are addressed in the project: (1) how do companies in mountain regions structure their supply chains compared to those in non-mountain regions? (2) how does the supply chain structure affect the resilience of companies in mountain regions?

Specific activities of the researcher: In the context of the project, the researcher is responsible for the achievement of the project objectives, the management of financial resources and the preparation of intermediate and final reports, besides developing the various project activities.

2. Industry 4.0 and Sustainability: opportunities and challenges for Italian firms (I4.0SUST)

Researcher's role: Member of the team and responsible of the WP2: Literature review

Funded by: MUR – Progetti di Rilevante Interesse Nazionale – PRIN 2022

Budget: 59.330€ (budget unibz) - 206.737€ (budget for the whole consortium)

Partners: Free University of Bozen-Bolzano, University of Udine, University of Palermo, University of Catania

Topic: The objective of the project is to investigate the relationship between Industry 4.0 and sustainability through (1) the empirical development of a framework on the impacts of Industry 4.0 technologies on a company's sustainability performance (Triple Bottom Line); (2) the identification of best practices based on Industry 4.0 and proposal of critical paths to improve the sustainability performance of Italian companies

Specific activities of the researcher: In the context of the project, the

researcher is responsible for the WP 2 “Literature review”, focused on the analysis of scientific and managerial literature on the relationship between Industry 4.0 and sustainability. Furthermore, she participates to the project meeting and supports the research group in the realization and analysis of case studies on the topic.

3. A Strategic Roadmap Towards the Next Level of Intelligent, Sustainable and Human-Centred SMEs (SME5.0)

Researcher's role: Member of the team and responsible of the WP 2.2: Scientific Dissemination

Funded by: EU – Horizon Europe MSCA: Staff Exchange 2021 European Commission (research)

Budget: 317.400€ (budget unibz), 1.2M€ (budget for the whole project)

Partners: 13 academic partners (7 European, 2 North American, 1 South American, 1 Asian, 1 Australian) and 3 industrial European partners

Topic: Project objectives include identifying SMEs' perceived drivers and barriers to the introduction of Industry 5.0, developing an Industry 5.0 assessment tool in SMEs, and making recommendations for policy makers and stakeholders to better support SMEs' transition to Industry 5.0.

Specific activities of the researcher: In the context of the project, the researcher is responsible for the WP2.2 “Scientific Dissemination”, Within this WP, she collaborates with the working team for achieving public visibility of the project and disseminating the project results to the industrial and scientific community; she was specifically responsible for drafting a Data Management Plan. Furthermore, the candidate participates in the activities of WP5.1 “Requirements and Barriers for Environmental Sustainability” - in particular, she served as a Visiting Researcher at Worcester Polytechnic Institute (USA) and developed a research project in collaboration with Prof. Joseph Sarkis.

4. Designing an Erasmus Mundus Master on Digital and Sustainable Manufacturing (Design4SusMan)

Researcher's role: Member of the team

Funded by: EU – Erasmus Mundus Design Measures

Budget: 55.000€ (lump sum)

Partners: -

Topic: The project aimed to develop a joint Master's degree program on the topic of Digital and Sustainable Manufacturing with the following partners: Technical University of Graz (Austria), Instituto Superior de Engenharia do Porto (Portugal), Polytechnic University of Bucharest (Romania). The ultimate goal of the joint master's program is to train students in the fields of mechanical, manufacturing, and management engineering, and, at the same time, prepare them to address the main challenges the EU is currently facing in the fields of digitalization and sustainability.

Specific activities of the researcher: In the context of the project, the researcher collaborated with the partners and provided support for the following activities: development of a possible educational program for the Joint Master's program (with identification of different curricula); definition of the educational, administrative and financial procedures

for the execution of the Master's program; and creation of a draft joint partnership agreement (JPA) and student agreement.

5. Interconnected Nord-Est Innovation Ecosystem (iNEST)

Researcher's role: Member of the team

Funded by: MUR (PNRR funds)

Budget: 8.278.773€

Partners: Italian Universities and Research Centers of the North East of Italy (11 iNEST Founders and 11 iNEST Affiliates - more information at <https://www.consorziointest.it/inest-nel-nord-est/>)

Topic: The project aims to define a new Northeast Innovation Ecosystem paradigm, based on: multi-vocationality; ability to generate added value through an integrated and interconnected approach, overcoming the risks of fragmentation; and networking, with a partnership-based approach.

Specific activities of the researcher: In the context of the project, the researcher is involved in the development of cross-cutting activities in education and life-long learning (Education, from ITS to Lifelong Learning). Exemplary initiatives managed by the candidate include the organization of a special track on "Innovative Engineering Education" in the 3rd International Symposium on Industrial Engineering and Automation (ISIEA) and the organization of a Life Long Learning course on "Sustainable supply chain management in mountain areas".

6. Machining and Production of Additive Manufactured Composites (Co.M.P.AM.)

Researcher's role: PI since 01.12.2022

Funded by: Free University of Bozen-Bolzano (RTD call)

Budget: 13.090€

Partners: -

Topic: The goal of the research was to obtain a solid understanding of the materials and characteristics of additive manufacturing. The project also planned to develop a framework representing the application areas, supply chain impacts and benefits of Additive Manufacturing.

Specific activities of the researcher: In the context of the project, the researcher was responsible for the achievement of the project objectives, the management of financial resources and the preparation of intermediate and final reports, besides developing the various project activities.

7. Blockchain adoption in operations and supply chain management: An investigation for improved information sharing and performance (BT-OSCM)

Researcher's role: Member of the team

Funded by: Free University of Bozen-Bolzano (RTD call)

Budget: 9.250€

Partners: -

Topic: The goal of the project was twofold. First, the identification of blockchain variants suitable to operations and supply chain management (OSCM) as well as contingencies for their applicability. Second, the investigation of the potential impacts on information flows

and performance of the individual blockchain variants as well as contingencies on these impacts.

Specific activities of the researcher: In the context of the project, the researcher supported the drafting of the project proposal and gave support for the development of its activities.

8. Mastering the digital transformation in the family business: Getting ready for the Millennial generation (MASTERMIL)

Researcher's role: Member of the team

Funded by: Free University of Bozen-Bolzano (ID call)

Budget: 173.000€

Partners: -

Topic: The project aimed at analyzing and understating the requirements for digital transformation in the specific context of family firms, and at developing the decision-making frameworks and tools needed to support and guide such complex process.

Specific activities of the researcher: In the context of the project, the researcher supported the drafting of the project proposal and gave support for the development of its activities.

9. Exploring the complementarity of Industry 4.0 technologies

Researcher's role: Member of the team

Funded by: Italian Association of Management Engineering

Budget: 5.000€

Partners: Dr. Daniele Battaglia (Polytechnic University of Turin – now ESCP Business School Torino), Dr. Francesco Galati (University of Parma), Dr. Elena Pessot (National Research Council – now University of Siena)

Topic: The goal of the project was to investigate the complementarity of Industry 4.0 technologies and their impact on business performance.

Specific activities of the researcher: In the context of the project, the researcher supported the drafting of the project proposal, collaborated with the research team in the execution of the various project activities, and participated to the project meetings.

10. Automated Laser Scanner Operations (ALSO4.0)

Researcher's role: Member of the team

Funded by: EU, national and regional funds – POR FESR 2014-2020 (Friuli Venezia-Giulia)

Budget: 734.106,46€, Amount financed: 475.926,79€

Partners: MARINELAB doo, STUDIO ZEROUNO srl, University of Udine, University of Trieste

Topic: The project aimed at developing a technological upgrade for the opto-electronic surveying tools used in cruise ship production activities. The objectives not only included the introduction of new measurement systems to enable more accurate controls compared to the current (primarily manual) methods but also the appropriate update of the related opto-electronic measurement processes and the redefinition of the organizational structure of the measurement function for post-processing and reporting.

Specific activities of the researcher: In the context of the project, the

researcher, who was hired as a research fellow for 18 months, supported the drafting of the project proposal, participated in the main periodic meetings of the project, and gave support for the development of its milestones (e.g., definition of the new opto-electronic measurement process, definition of the new company organizational chart, assignment of the new roles to personnel).

Commissioned research projects (funded by external public/private companies)

[More details are provided below the table]

	Dates	Researcher's role	Funding Body	Title	Amount received
1	06.02.2025 – 31.03.2025	Co-Investigator PI: Prof. Guido Orzes	Research contract with Fraunhofer ISI	I4.0 readiness: an international comparison (I4.0Readiness)	4.000€
2	13.12.2022 – 31.03.2025	Member of the team since 13.12.2022 PI: Prof. Guido Orzes	Research contract with SPRAY LOGICS S.r.l.	Precision spraying and canopy analysis (FOCUS SPRAYING)	71.910€
3	10.08.2018 – 31.01.2020	Member of the team PI: Prof. Pietro Romano	Research contract with Overlog S.r.l. (POR-FESR 2014-2020)	Sistema integrato per l'intralogistica collaborativa e di supporto alla supply network	25.000€

Note: PI = principal investigator

1. I4.0 readiness: an international comparison (I4.0Readiness)

Researcher's role: Co-Investigator

Funded by: Fraunhofer ISI

Budget: 4.000€

Topic: Within this contract research project financed by Fraunhofer ISI, the Free University of Bozen-Bolzano collects data about Industry 4.0 practices of 80-100 manufacturing companies located in Lombardia region. The dissemination of the (individual) I4.0 technologies and the I4.0 readiness level in four European motor regions (Baden-Württemberg, Germany; Auvergne-Rhône-Alpes, France; Catalonia, Spain; and Lombardy, Italy) will be compared. Differences in industry, company size, position in value chain, and production characteristics will also be analyzed.

Specific activities of the researcher: In the context of the project, the researcher is involved in the development of the questionnaire for the data collection, the management data collection through an external service provider and the analysis of data collected together with the Fraunhofer institute.

2. Precision spraying and canopy analysis (FOCUS SPRAYING)

Researcher's role: Member of the team

Funded by: SPRAY LOGICS S.r.l.

Budget: 71.910€

Topic: The project, commissioned by the Spray Logics Society, foresees the following research activities: (a) the testing of an optical sensor developed by the client in order to evaluate its potential use in a controlled environment (greenhouse/laboratories) (b) the evaluation of the impact of the use of the sensor on a full production scale (experimental fields) on the economic, environmental and social sustainability of agricultural activities (water, fertilizer and pesticide savings).

Specific activities of the researcher: In the context of the project, the researcher is involved in the execution of activity b. In particular, she collaborates with the research team for the analysis of economic and financial data and for the environmental and social analysis of different scenarios using life-cycle assessment (LCA) techniques, besides providing support for dissemination activities.

3. Sistema integrato per l'intralogistica collaborativa e di supporto alla supply network

Researcher's role: Member of the team

Funded by: Overlog S.r.l.

Budget: 25.000€

Topic: The research project commissioned by Overlog S.r.l. aimed to analyze, study, and develop a prototype software solution for the exchange of data, documents, and information among the actors of a supply chain. One of the research focuses was on Blockchain models and systems and their applicability in the logistics and supply chain domain.

Specific activities of the researcher: In the context of the project, the researcher supported the achievement of the objectives (through a review of scientific and managerial literature), participated in the initial coordination meetings, and contributed to the drafting of the final report.

Visiting research periods abroad

- **Short mobility period** at Porto Polytechnic - Instituto Superior de Engenharia do Porto (PT) through the Erasmus+ programme. Teaching and training activities within the Blended Intensive Programme "BIP digital and Sustainable Manufacturing – Quality Management (BASING)". Taught lecture: "Sustainability implementation in companies and supply chains" (4 hours), teaching language: English. Period: 11th March – 14th March 2024.
- **Visiting researcher** at Worcester Polytechnic Institute (USA) within the research project "A Strategic Roadmap Towards the Next Level of Intelligent, Sustainable and Human-Centred SMEs (SME5.0)". Collaboration with Prof. J. Sarkis in the fields of sustainability and circular economy. Period: September 2023 (1 month).
- **Visiting PhD student** at Texas Christian University (USA). Execution of research activities on Supply Chain Integration in collaboration with prof. Morgan Swink and participation to lectures and seminars

organized by Texas Christian University. Period: 15th January – 15th May 2019 (4 months).

Publications

Journal Papers in academic refereed journals:

- Garcia-Buendia, N., Moyano-Fuentes, J., Maqueira-Marín, J. M., Romano, P., and **Molinaro, M.** (2025). Strategic supplier performance in a competitive landscape: Enhancing organizational performance through lean supply chain management. *BRQ Business Research Quarterly*, 28(2), 474-490, doi: 10.1177/23409444231210. (AiIG 2022: SILVER)
- Hmouda, A.M.O., Orzes, G., Sauer, P.C., and **Molinaro, M.** (2024). Determinants of environmental, social and governance scores: Evidence from the electric power supply chains. *Journal of Cleaner Production*, 471, 143372, doi: 10.1016/j.jclepro.2024.143372. (AiIG 2022: GOLD)
- Podrecca, M., **Molinaro, M.**, Sartor, M., and Orzes, G. (2024). The impact of ISO 45001 on firms' performance: an empirical analysis. *Corporate Social Responsibility and Environmental Management*, 31(5), 4581-4595, doi: 10.1002/csr.2782. (AiIG 2022: GOLD)
- **Molinaro, M.**, Orzes, G., Sartor, M., and Nassimbeni, G. (2024). A sand cone model of sustainability performance: an empirical analysis. *International Journal of Production Research*, 62(10), 3781-3799, doi: 10.1080/00207543.2023.2249125. (AiIG 2022: GOLD)
- Battaglia, D., Galati, F., **Molinaro, M.**, and Pessot, E. (2023) Full, hybrid and platform complementarity: exploring the Industry 4.0 technology-performance link. *International Journal of Production Economics*, 263, 108949, doi: 10.1016/j.ijpe.2023.108949. (AiIG 2022: GOLD)
- **Molinaro, M.**, Romano, P., and Sperone, G. (2023). The organizational side of a disruption mitigation process: exploring a case study during the COVID-19 pandemic. *Operations Management Research*, 16(1), 1-17, doi: 10.1007/s12063-022-00264-w (AiIG 2020: SILVER)
- Concli, F., and **Molinaro, M.** (2023). Design for additive manufacturing: cost evaluations. *International Journal of Computational Methods and Experimental Measurements*, 11(1), 1-8, doi: 10.18280/ijcmem.110101.
- Romano, P., Grimaz, S., **Molinaro, M.**, and Suni, H. A. M. (2022). Facing the “During” phase in crisis management: An incremental adaptive launching process. *Safety science*, 155, 105890, doi: 10.1016/j.ssci.2022.105890. (AiIG 2022: SILVER)

- **Molinaro, M.**, Danese, P., Romano, P., and Swink, M. (2022). Implementing supplier integration practices to improve performance: the contingency effects of supply base concentration. *Journal of Business Logistics*, 43(4), 540-565, doi: 10.1111/jbl.12316: (AiIG 2022: GOLD)
- Concli, F., and **Molinaro, M.** (2022). Design for additive manufacturing: material characterization and geometrical optimization. *International Journal of Computational Methods and Experimental Measurements*, 10(2), 146-157, doi: 10.2495/CMEM-V10-N2-146-157.
- **Molinaro, M.**, and Orzes, G. (2022). From forest to finished products: the contribution of Industry 4.0 technologies to the wood sector. *Computers In Industry*, 138, 103637, doi: 10.1016/j.compind.2022.103637 (AiIG 2020: SILVER)
- Matt, D. T., **Molinaro, M.**, Orzes, G., and Pedrini, G. (2021). The role of innovation ecosystems in Industry 4.0 adoption, *Journal of Manufacturing Technology Management*, 32(9), 369–395, doi: 10.1108/JMTM-04-2021-0119 (AiIG 2020: SILVER)
- Danese, P., **Molinaro, M.**, and Romano, P. (2020). Investigating fit in supply chain integration: A systematic literature review on context, practices, performance links, *Journal of Purchasing and Supply Management*, 26(5), 100634, ISSN: 1478-4092, doi: 10.1016/j.pursup.2020.100634. (AiIG 2020: SILVER)
- Danese, P., **Molinaro, M.**, and Romano, P. (2018). Managing evolutionary paths in Sales and Operations Planning: key dimensions and sequences of implementation, *International Journal of Production Research*, 56(5), 2036-2053, ISSN: 0020-7543, doi: 10.1080/00207543.2017.1355119 (AiIG 2018: GOLD)

Conference papers in international (indexed and peer-reviewed) journals:

- Concli, F., **Molinaro, M.**, and Rampazzo, E. (2021). Design for Additive Manufacturing: is it an effective alternative? Part 1 – Material characterization and geometrical optimization. *Computational Methods and Experimental Measurements XX*, 130, 87-97, doi:10.2495/CMEM210081, ISSN 1743-3533 (available on Scopus).
- Concli, F., **Molinaro, M.**, and Rampazzo, E. (2021). Design for Additive Manufacturing: is it an effective alternative? Part 2 – Cost evaluation. *Computational Methods and Experimental Measurements XX*, 130, 99-110, doi:10.2495/CMEM210091, ISSN 1743-3533 (available on Scopus).
- **Molinaro, M.**, Romano, P., Battistutta, M., and Da Re, G. (2019). An interactive DSS to improve decision-making in the (r,Q) policy. *IFAC-*

Papers in international conference proceedings (peer-reviewed):

- Molinaro, M., Hmouda, A.M.O., Sartor, M., Orzes, G. (2025). Industry 4.0 impact on sustainability performance: Evidence from multiple case studies. *32nd EurOMA Conference*, held in Milan, Italy, 13-18 June 2025.
- Molinaro, M., Teshome, M.B., Podrecca, M. (2025). Mountain location choices and supply chain structure: A secondary data analysis. *15th Annual EDSI Conference*, held in Gothenburg, Sweden, 1-4 June 2025.
- Fussone, R., Di Mauro, C., Giammanco, M.D, Orzes, G., Molinaro, M. (2025). Linking Industry 4.0 and sustainability performance: A meta-analysis. *15th Annual EDSI Conference*, held in Gothenburg, Sweden, 1-4 June 2025.
- Molinaro, M., Hmouda, A.M.O., Sartor, M., Orzes, G. (2025). Industry 4.0 and sustainability performance: an empirical investigation in Italy. *15th Annual EDSI Conference*, held in Gothenburg, Sweden, 1-4 June 2025.
- Teshome, M.B., Molinaro, M., Podrecca, M. (2025). Mountain location choices and supply chain structure: A secondary data analysis. *15th Annual EDSI Conference*, held in Gothenburg, Sweden, 1-4 June 2025.
- Zecchillo, N., Molinaro, M., Hottenrott, H., Orzes, G. (2025). Designing industrial sustainability policies: the case of the Autonomous Province of Bozen-Bolzano. *15th Annual EDSI Conference*, held in Gothenburg, Sweden, 1-4 June 2025.
- Hmouda, A.M.O., Molinaro, M., Orzes, G. (2024). Industry 4.0 impact on sustainability performance: Evidence from the Italian mechanical and machinery sectors. *4th EurOMA CEE Research Network Workshop 2024 & 17th EPIEM Conference 2024*, held in Trento, Italy, 2-4 October 2024.
- Zecchillo, N., Molinaro, M., Orzes, G. (2024). Climate and energy policies at firm level: a secondary data analysis in EU countries. *31st EurOMA Conference*, held in Barcellona, Spain, 29 June – 3 July 2024.
- Molinaro, M., Orzes, G., Borgianni, Y. (2024). Blended Intensive Programmes as effective and innovative solutions to train the engineers of the future. *3rd International Symposium on Industrial Engineering and Automation (ISIEA2024)*, held in Bolzano, Italy, 19-21 June 2024.
- Rasool, F., Molinaro, M., Podrecca, M., Orzes, G. (2024). Summiting

Success: The Unexpected Advantages of Mountain Manufacturing. *14th Annual EDSI Conference*, held in Venezia, Italy, 3-6 June 2024.

- Zecchillo, N., Molinaro, M., Orzes, G. (2024) Analysis of firm-level EU climate and energy policies. *14th Annual EDSI Conference*, held in Venezia, Italy, 3-6 June 2024.
- Molinaro, M., Orzes, G. (2024). Additive Manufacturing: Typology of applications and contingent factors. *33rd IPSERA conference*, held in Rio de Janeiro, Brazil, 24-27 March 2024.
- Zecchillo, N., Molinaro, M., Orzes, G. (2023). Effectiveness of Firm-level Sustainability Policies: A Systematic Literature Review. *54th Annual DSI Conference*, held in Atlanta, USA, 18-20 November 2023.
- Molinaro, M., Orzes, G. (2023). Circular economy and climate change mitigation: do Reduce, Reuse and Recycle practices affect CO₂ emissions? *30th EurOMA Conference*, Berlin, Germany, 1-7 July 2023.
- Molinaro, M., Podrecca, M., Orzes, G. (2023). Operational and financial impacts of ISO 45001: an empirical analysis. *13th Annual EDSI Conference*, Nantes, France, 4-7 June 2023.
- Molinaro, M., Orzes, G. (2023). Circular economy and CO₂ emissions: an empirical analysis in the manufacturing sector. *13th Annual EDSI Conference*, Nantes, France, 4-7 June 2023.
- Zecchillo, N., Molinaro, M., Orzes, G. (2023). Firm-level sustainability policies: Classification and impacts. *13th Annual EDSI Conference*, held in Nantes, France, 4-7 June 2023.
- Hmouda, A. M. O, Orzes, G., Sauer, P. C., Molinaro, M. Sustainability forum Sustainability performance in energy industry: a contingency approach. *10th EurOMA Sustainability Forum 2023*, Hamburg, Germany but held Online, 20–23 March 2023.
- Molinaro, M., Romano, P., and Sperone, G. (2021). Organizational reactive response to face supply chain disruptions, *28th EurOMA Conference*, held Online, 5-7 July 2021.
- Molinaro, M., Nassimbeni, G., Orzes, G., and Sartor, M. (2021). A “sand cone” model of sustainability performance, *28th EurOMA Conference*, held Online, 5-7 July 2021.
- Molinaro, M., Romano, P., and Sperone, G. (2021). How to react to supply chain disruption. A successful case study during COVID-19 pandemic. *IPSERA Online Conference 2021 Abstracts*. ISSN 2772-4379, pp. 34-35.

Papers in national conference proceedings (peer-reviewed):

- Molinaro, M., Orzes, G., Podrecca M., Rasool, F. (2024). Firm

performance in mountain regions: A secondary data analysis. *XXXV AiIG Scientific Meeting Associazione italiana di Ingegneria Gestionale (RSA AiIG 2024)*, held in Palermo, Italy, 10-11 October 2024.

- Zecchillo, N., Molinaro, M., Orzes, G. (2024). How can governments foster the decarbonization of industry processes? A qualitative evaluation of EU energy and climate policies. *XXXV AiIG Scientific Meeting Associazione italiana di Ingegneria Gestionale (RSA AiIG 2024)*, held in Palermo, Italy, 10-11 October 2024.
- Molinaro, M., Orzes, G., Sarkis, J. (2023). Circular economy and climate change mitigation: how do the different R-practices affect CO2 emissions? *XXXIV AiIG Scientific Meeting Associazione italiana di Ingegneria Gestionale (RSA AiIG 2023)*, held in Lecco, Italy, 12-13 October 2023.
- Battaglia, D., Molinaro, M., Pessot, E. The value of Industry 4.0: smart products for performance improvement, *XXXIII AiIG Scientific Meeting Associazione italiana di Ingegneria Gestionale (RSA AiIG 2022)*, held in Rome, Italy, 20-21 October 2022.
- Molinaro, M., Orzes, G., Sartor M., and Nassimbeni, G. (2021). A “sand cone” model of sustainability performance, *XXXII AiIG Scientific Meeting Associazione italiana di Ingegneria Gestionale (RSA AiIG 2021)*, held in Naples and Online, 21-22 October 2021.
- Battaglia, D., Galati, F., Molinaro, M., and Pessot, E. An exploration of complementarity of Industry 4.0 technologies: smart applications and performance outcomes, *XXXII AiIG Scientific Meeting Associazione italiana di Ingegneria Gestionale (RSA AiIG 2021)*, held in Naples and Online, 21-22 October 2021.

Other publications:

- Molinaro, M., Danese, P., and Russo, F. A. (2020). Supply Chain Integration: is it always a competitive advantage? *White paper, Advance Operations Management School*.
- Molinaro, M., and Danese, P. (2018) How to successfully implement Sales and Operations Planning (S&OP). *White paper, Advance Operations Management School*.

Further data

Presentations at scientific conferences:

- Speaker at *32nd EurOMA Conference*, held in Milan, Italy, from 13 to 18 June 2025. Presented paper: “Mountain location choices and supply chain structure: A secondary data analysis” by Molinaro, M., Teshome, M.B., Podrecca, M.
- Speaker at *32nd EurOMA Conference*, held in Milan, Italy, from 13 to 18 June 2025. Presented paper: “Industry 4.0 impact on sustainability performance: Evidence from multiple case studies” by Molinaro, M.,

Hmouda, A.M.O., Sartor, M., Orzes, G.

- Speaker at *15th Annual EDSI Conference*, held in Gothenburg, Sweden, from 1 to 4 June 2025. Presented paper: "Mountain location choices and supply chain structure: A secondary data analysis" by Teshome, M.B., Molinaro, M., Podrecca, M.
- Speaker at *15th Annual EDSI Conference*, held in Gothenburg, Sweden, from 1 to 4 June 2025. Presented paper: "Industry 4.0 and sustainability performance: an empirical investigation in Italy" by Molinaro, M., Hmouda, A.M.O., Sartor, M., Orzes, G.
- Speaker at the *XXXV AiIG Scientific Meeting Associazione italiana di Ingegneria Gestionale (RSA AiIG 2024)*, held in Palermo, Italy, from 10 to 11 October 2024. Presented paper: "Firm performance in mountain regions: A secondary data analysis" by Molinaro, M., Orzes, G., Podrecca M., Rasool, F.
- Speaker at *3rd International Symposium on Industrial Engineering and Automation (ISIEA2024)*, held in Bolzano, Italy, from 19 to 21 June 2024. Presented paper: "Blended Intensive Programmes as effective and innovative solutions to train the engineers of the future" by Molinaro, M., Orzes, G., Borgianni, Y.
- Speaker at *14th Annual EDSI Conference*, held in Venezia, Italy, from 3 to 6 June 2024. Presented paper: "Summiting Success: The Unexpected Advantages of Mountain Manufacturing" by Rasool, F., Molinaro, M., Podrecca, M., Orzes, G.
- Speaker at *33rd IPSERA conference*, held in Rio de Janeiro, Brazil, from 24th to 27th March 2024. Presented paper: "Additive Manufacturing: Typology of applications and contingent factors" by Molinaro, M., Orzes, G.
- Speaker at *XXXIV AiIG Scientific Meeting Associazione italiana di Ingegneria Gestionale (RSA AiIG 2023)*, held in Lecco, Italy, from 12th to 13th October 2023. Presented paper: "Circular economy and climate change mitigation: how do the different R-practices affect CO₂ emissions?" by Molinaro, M., Orzes, G., Sarkis, J.
- Speaker at the *30th EurOMA Conference*, held in Berlin, Germany, from 1st to 6th July 2023. Presented paper: "Circular economy and climate change mitigation: do Reduce, Reuse and Recycle practices affect CO₂ emissions?" By Molinaro, M., Orzes, G.
- Speaker at the *13th Annual EDSI Conference*, held in Nantes, France, from 4th to 7th June 2023. Presented paper: "Circular economy and CO₂ emissions: an empirical analysis in the manufacturing sector" by Molinaro, M., Orzes, G.
- Speaker at the *13th Annual EDSI Conference*, held in Nantes, France, from 4th to 7th June 2023. Presented paper: "Operational and financial impacts of ISO 45001: an empirical analysis" by Molinaro, M.,

Podrecca, M., Orzes, G.

- Speaker at the *XXXIII AiIG Scientific Meeting Associazione italiana di Ingegneria Gestionale (RSA AiIG 2022)*, held in Rome, Italy, from 20th to 21st October 2022. Presented paper: “The value of Industry 4.0: smart products for performance improvement” by Battaglia, D., Molinaro, M., Pessot, E.
- Speaker at the *12th Annual EDSI Conference*, held in Dublin, Ireland, from 29th May to 1st June 2022. Presented abstract: “The value of Industry 4.0: mechanisms and dynamics for performance improvement” by Molinaro, M., Battaglia, D., Pessot, E.
- Speaker at the *XXXII AiIG Scientific Meeting Associazione italiana di Ingegneria Gestionale (RSA AiIG 2021)*, held in Naples, Italy, and Online from 21st to 22nd October 2021. Presented paper: “A “sand cone” model of sustainability performance” by Molinaro, M., Orzes, G., Sartor, M., Nassimbeni, G.
- Speaker at the *28th EurOMA Conference*, held Online from 5th to 7th July 2021. Presented paper: “Organizational reactive response to face supply chain disruptions” by Molinaro, M., Romano, P., Sperone, G.
- Speaker at the *28th EurOMA Conference*, held Online from 5th to 7th July 2021. Presented paper: “A “sand cone” model of sustainability performance” by Molinaro, M., Nassimbeni, G., Orzes, G., Sartor, M.
- Speaker at the *30th annual IPSERA Conference*, held Online from 29th March to 1st April 2021. Presented paper: “How to react to supply chain disruptions. A successful case study during COVID-19 pandemic” by Molinaro, M., Romano, P., Sperone, G.
- Speaker at the *9th IFAC Conference – MIM*, held in Berlin, Germany from 28th to 30th August 2019. Presented paper: “An interactive DSS to improve decision-making in the (r,Q) policy” by Molinaro, M., Romano, P., Battistutta, M., Da Re, G.
- Speaker at the *9th Annual EDSI Conference*, held in Udine, Italy, from 3rd to 6th June 2018. Presented abstract: “An interactive and business-oriented DSS for ROP-based inventory management in supply chains” by Molinaro, M., Romano, P., Battistutta, M., Da Re, G.
- Speaker at the *doctoral workshop of the 9th Annual EDSI Conference*, held in Udine from 3rd to 6th June 2018. Presented research proposal: “Supply chain integration and performance: finding optimal configurations in different supply network structures” by Molinaro, M., Romano, P.

Awards

Top Downloaded Article for the paper “Implementing supplier integration practices to improve performance: The contingency effects of supply base concentration” by Molinaro, M., Danese, P., Romano, P., Swink, M. The paper was one of the most downloaded among work published in an issue between 1 January 2022 and 31 December 2022 in *Journal of Business Logistics*. Award assigned in March 2024.

Finalist of the “DSI Chapter Best Paper Presentation Award” with the paper “Effectiveness of Firm-level Sustainability Policies: A Systematic Literature Review” (authors: Zecchillo, N., Molinaro, M., Orzes, G.) within the Decision Sciences Institute 2023 Annual Conference, Atlanta, 18-20 November 2023.

Master’s degree award “DANIELI & C. OFFICINE MECCANICHE SpA, Terza Edizione” for the master’s degree course in Management Engineering.

Participation in 2015 (during master’s degree) to the international competition “The Fresh Connection Student Global Challenge”, organized by APICS, with the following results:

- 1st place in Italy
- 1st place in Europe and qualification to the Global Student Final
- 3rd place in the Global Student Final, made in Las Vegas (October 3rd – 4th 2015).

This competition involved teams with 4 students each and consisted of managing a virtual company producing different types of fruit juice. The decisions to be taken by the team members were related to suppliers, customers, inventory and production.

**Language
competence**

Mother language: Italian

Other languages:

- English C1, Certified by Unibz Language Center on 03.10.2022
- German B2, Certified by Unibz Language Center on 11.03.2024

Driving license B

July 1st, 2025

Margherita Molinaro

