

## ACADEMIC CV – Denny Coffetti

### Current position

Researcher (RTT) at University of Bergamo (Italy), Department of Engineering and Applied Sciences

### Academic affiliation

Department of Engineering and Applied Sciences (DISA) – University of Bergamo  
Via Galvani, 2 – 24044 Dalmine (BG) – Italy  
denny.coffetti@unibg.it

### Academic career

National Academic Qualification as Associate Professor, IMAT-01 (previously ING/IND-22) “Materials Science and Technology”, 2023

PhD in “Engineering and Applied Sciences” at University of Bergamo, 2019

- Thesis “Alternative binders as a milestone of 3R strategy for sustainable construction materials”.  
Research in collaboration with University of Calabria (Italy) and University of Basilicata (Italy)

### Main research topics

- Sustainability of cementitious materials
- Alternative binders to Portland cement (CSA cements and alkali activated materials)
- Durability, repairing and corrosion of reinforced concrete structures in aggressive environments
- Use of industrial by-products as aggregate replacement for environmentally friendly cementitious materials

### Main teaching activity

Full courses:

- “Polymeric, ceramic and composite materials”, MD and BD course at University of Bergamo, Italy, from 2024 to present
- “Diagnostic techniques for reinforced concrete structures”, MD course at University of Bergamo, Italy, from 2023 to present

Main tutorships:

- “Buildings materials”, BD course at University of Bergamo, Italy, from 2016 to present
- “Repairing materials for existing structures”, MD course at University of Bergamo, Italy, from 2016 to present
- “Biomaterials”, BD course at University of Bergamo, Italy, from 2016 to present
- “Metallic materials”, BD course at University of Bergamo, Italy, from 2016 to present

PhD Schools:

- “Circular economy and low-carbon actions for building materials industry” at the PhD course “Engineering and Applied Science”, University of Bergamo, Italy, July 2022
- “Self-healing techniques for durable concretes” at “Luca Bertolini” PhD School on “Durability, corrosion, diagnostic and restoration techniques for reinforced concrete structures”, Milan, Italy, September 2019

### Awards and recognitions

- 2024 Best Oral presentation at 7<sup>th</sup> International Workshop on “The new boundaries of structural concrete”, Rome, September 2024
- 2021 ACI (American Concrete Institute) Italy Chapter – FEDERBETON for the best PhD Thesis in the field of Concrete Technology
- 2021 “Luca Bertolini” memorial Award organized by ACI (American Concrete Institute) Italy Chapter for the best scientific paper in the field of cementitious materials, corrosion in concrete
- 2019 AIMAT National Award for the best PhD Thesis in the field of Material Engineering

### Research projects and collaborations

Main academic collaborations:

- Visiting Researcher at the Faculty of Chemistry, Technical University of Munich, Germany, February-March 2023 (prof. J. Plank, prof. L. Lei)
- Visiting PhD student at the Department of Mechanical, Energy and Management Engineering of the University of Calabria, Italy, in June 2018 (prof. F. Crea)
- Visiting PhD student at the School of Engineering of the University of Basilicata in July 2018 (prof. A. Telesca)
- Research activities in the DYMAT laboratory at the SUPSI University, Switzerland, since 2012 (prof. E. Cadoni)

Scientific responsibility for the following projects:

- "Durability assessment of concretes for the Genoa breakwaters", PerGenova Breakwaters
- "Migrant corrosion inhibitors for the improvement of chloride resistance of concretes and mortars", Sika Italia Spa
- "CO<sub>2</sub> injection in fresh concrete in the field of precast concretes", Manini Prefabbricati Spa
- "Concrete manufactured with very high slag content for precast applications", Mapei Spa
- "Low environmental footprint materials for sustainable precast concretes", Manini Prefabbricati Spa
- "Use of EAF slags for cementitious materials", Danieli & C Officine Meccaniche Spa
- "Study on the roller-compacted concrete RCC for the Nemo Trojena dams project in Saudi Arabia", Studio Pietrangeli Srl
- "Use of steel slags as aggregates in concretes for slabs on ground", Calcestruzzi Fiorentini Srl
- "Innovative crystalline admixtures for watertight concretes", Chryso Italia Spa
- "Study on low environmental footprint concretes for precast prestressed elements", MG Building Spa
- "Structural hybrid fibers for concretes", Chryso Italia Spa
- "Study on the use of waterproofing admixture for frost-resistance concretes", Tridentum consortium
- "Steam-cured concretes for precast tunnel lining segments", Chryso Italia Spa

Main industrial collaborations:

- "LCA analysis of concrete and artificial aggregate industry in Italy", ENEA
- "Study on repair materials for reinforced concrete structures in accordance with EN 1504", Chryso Italia Spa
- "Study on special concretes for restoration of bridge decks", TECNE Spa
- "Study on materials for the conservation and restoration of mosaic of Battistero di San Giovanni in Florence", Opera di Santa Maria del Fiore di Firenze
- "Study of damage mechanisms of airport concrete slabs on ground", CSIA
- "Study on the carbonation rate of concretes protected by migrant corrosion inhibitors", Master Builders Solutions Italia Spa
- "Experimental study on shrinkage reducing admixtures for concrete", Mapei Spa
- "Study on the behavior of aerated concretes for tunnelling", ISARCO Scarl
- "Experimental study on fillers for concrete and mortars", CNR
- "Study on durability of expansive concretes in cold environments", Calcestruzzi Spa
- "Experimental study on durability of reinforced concrete railway sleepers", Astaldi Spa
- "Study of migrating corrosion inhibitors for concretes", BASF CC Spa
- "Research on ground granulated blast-furnace slag cements for Portland-free plasters compliant with EN 998-2 GM15 class", Cugini Spa
- "Experimental study on ultrafine fly ash – limestone blends for concrete production", Cementerie Barbetti Spa
- "Experimental study on concretes manufactured with electric arc furnace slag-based recycled aggregates as natural aggregates replacement". Ageco 2 Spa
- "Research on calcium sulphoaluminate cement-based blends containing supplementary cementitious materials for low environmental impact cementitious materials", Italcementi Spa

### Supervision of thesis

Supervisor or co-supervisor of more than 40 bachelor and master degree thesis at Department of Engineering and Applied Sciences at University of Bergamo

### Divuligation activity

- Author of 46 Scopus indexed documents (24 articles, 15 conference papers, 4 reviews, 2 editorials and 1 data paper) with 1309 citations and H-index equal to 20
- Author of more than 30 no-indexed conference proceedings and papers
- Editor of journals "Discover Concrete and Cement – Springer", "Buildings – MDPI" and "Frontiers in Sustainability"
- Editor of American Concrete Institute Special Publications SP-354 and SP-355, July 2022.
- From 2017 revisor for the several international journals among which: Cement and Concrete Composites, Waste Management, Construction and Building Materials, Journal of Environmental Management, Journal of Building Engineering, Structural Concrete
- Speaker at 14 international (Canada, China, Russia, Italy, online) and 14 national conferences

Bergamo, 24/11/2025

Denny Coffetti