

Academic Personnel Short Profile / Short CV

University:	Frederick University
Surname:	Nicolaides
Name:	Demetris
Rank/Position:	Associate Professor
School:	Engineering
Department:	Civil Engineering
Scientific Domain:	Structural Materials- Specialization :UHPFRCCs

Academic qualifications

Qualification	Year	Awarding Institution	Department	Thesis title (Optional Entry)
PhD in Civil Engineering	2004	Cardiff University	Civil Engineering	PhD in Civil Engineering
MSc in Structural Engineering	2001	Cardiff University	Civil Engineering	MSc in Structural Engineering
Diploma in Civil Engineering	1999	National Technical University of Athens	Civil Engineering	Diploma in Civil Engineering

Employment history in Academic Institutions/Research Centers

Period of employment		Employer	Location	Position
From	To			
2007	-	Frederick University	Nicosia, Cyprus	Lecturer, Assistant Professor, Associate Professor

Key refereed journal papers, monographs, books, conference publications etc.

Ref. Number	Year	Title	Other authors	Journal and Publisher / Conference	Vol.	Pages
1	2024	Mechanical behaviour of construction and demolition waste-based alkali activated materials exposed to fire conditions	Giannopoulou, I., Robert, P., Petrou, M.	Construction and Building Materials	415	
2	2024	CODD: An Extended Benchmark Dataset for the Automated Sorting of Construction and Demolition Waste	Demetriou, D., Mavromatidis, P., Petrou, M.F.	Waste Management	178	
3	2024	Geopolymerization of Recycled Glass Waste: A Sustainable Solution for a Lightweight and Fire-Resistant Material	Valanides, M., Aivaliotis, K., Oikonomopoulou, K., Fikardos, A., Savva, P., Sakkas, K.M.	Recycling	9, 16	
4	2024	A Clustering Machine Learning Approach for Improving Concrete Compressive Strength Prediction	Polydorou, T., Demetriou, D., Petrou, M.	Engineering Reports		
5	2023	Real-time Construction Demolition Waste Detection Using State-of-the-art Deep Learning Methods; Single-stage vs Two-stage detectors	Demetriou, D., Mavromatides, P., Robert, P., Papadopoulos, H., Petrou, M.F.	Waste Management	167	
6	2023	High temperature performance of geopolymers based on construction and demolition waste	Giannopoulou, I., Robert, P., Sakkas, K., Petrou, M.	Journal of Building Engineering	72	
7	2023	Punching shear and flexural performance of Ultra High-Performance Fibre Reinforced Concrete slabs	Lampropoulos, A., Tsioulou, O., Mina, A., Petrou, M.F.	Engineering Structures	281	
8	2022	Development of a high strength geopolymer incorporating quarry waste Diabase Mud (DM) and Ground Granulated Blast-furnace Slag (GGBS)	Polydorou, T., Spanou, M., Savva, P., Oikonomopoulou, K., Sakkas, K., Petrou, M.	Materials	15, 5946	
9	2022	Investigation of the geopolymerization potential of a waste silica-rich diabase mud	Spanou, M., Ioannou, S., Savva, P., Sakkas, K., Petrou, M.	Materials	15, 3189	

10	2022	Effect of mechanically treated recycled aggregates on the long-term mechanical properties and durability of concrete	Oikonomopoulou, K., Ioannou, S., Savva, P., Spanou, M., Petrou, M.	Materials	15, 2871	
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Research Projects				
Ref. Number	Date	Title	Funded by	Project Role
1	2024-2026	Development of an innovative low-cost and highly efficient energy storage system	Cyprus Research & Innovation Foundation	Scientific Coordinator
2	2024-2025	CSRC: Construction Sustainability Research Centre	Cyprus Ministry of Energy, Commerce, and Industry	Partner
3	2023-2025	UAV Detection and Neutralisation towards infrastructure protection	Cyprus Research & Innovation Foundation	Partner
4	2022-2024	Blast and Fire-Resistant Material	Cyprus Research & Innovation Foundation	Project Coordinator
5	2020-2024	Development of an Innovative Insulation Fire Resistant Façade from the CDW	Cyprus Research & Innovation Foundation	Project Coordinator
6	2020-2024	Center of Innovative Solutions for Building Safety - ISTOS Center of Excellence	H2020 WIDESPREAD 2018-2020	Partner
7	2023-2025	ClimEmpower	Horizon Europe R&I Programme	Partner
8	2022-2025	ERA4CH	HORIZON-MSCA 2021-SE-01	Partner

Academic Consulting Services and/or Participation in Councils / Boards/ Editorial Committees				
Ref. Number	Period	Organization	Title of Position or Service	Key Activities
1	2020 -	European Commission - European Research Executive Agency	Reviewer	
2	2020 -	Magazine of Concrete Research	Board Member	
3	2013 -	National Technical Sub-Committee for Eurocode 2 (Concrete Structures)	Chair	

Awards / International Recognition			
Ref. Number	Date	Title	Awarded by:
1	2022	Michael Frederickou Research Excellence Award	Frederick University
2	2014 -	Examiner of PhD and MSc Theses	
3	2012 -	Scientific Committee of national and international conferences	