Curriculum Vitae

SURNAME AND NAME	Simone Elena
E-mail address	elena.simone@polito.it
Nationality	Dual: Italian & British

Education

2016: PhD Chemical Engineering, Department of Chemical Engineering, Loughborough University, Loughborough, UK

2011: MSc (Laurea Magistrale) Chemical Engineering (110/110 cum laude, Università di Pisa, Pisa, Italy **2009**: BSc (Laurea Triennale) Chemical Engineering (110/110 cum laude), Università di Pisa, Pisa, Italy

Working Experience

April 2024 – **to date**: Full Professor in Chemical Engineering, Department of Applied Science and Technology (DISAT), Group leader of the Crystallization & Crystal Engineering Group at Politecnico di Torino, Torino, Italy **2021- April 2024**: Associate Professor in Chemical Engineering, Department of Applied Science and Technology (DISAT), Group leader of the Crystallization & Crystal Engineering Group at Politecnico di Torino, Torino, Italy Technology (DISAT), Group leader of the Crystallization & Crystal Engineering Group at Politecnico di Torino, Torino, Italy

2016 – August 2021: Lecturer & Leader of the Food Crystal Engineering Group at Leeds, Group leader of the Food Crystal Engineering Group at the School of Food Science and Nutrition (SFSN), University of Leeds, UK
2015 – 2016: Research Associate, School of Chemical Engineering, Loughborough University, UK

Visiting Academic Positions

2022 – to date: Visiting Researcher, School of Food Science and Nutrition, University of Leeds, UK **2015 & 2014**: Visiting Scholar, Department of Chemical Engineering, Purdue University (US)

Other work experiences

2020-2021: Panel member and reviewer for grant proposals for the Engineering and Physical Sciences Research Council (EPSRC) in the UK

2019: Expert reviewer, Leading Fellows Postdoc Programme, H2020-Marie Skłodowska Curie COFUND Programme

2018: Expert reviewer, Post-Doctoral Fellowships in Advanced Manufacturing & Process Engineering, PROCESS FELLOWSHIP PROGRAMME co-funded by H2020-Marie Curie Sklodowska Scientific

Supervision of PhD students and postdoctoral fellows

Current team at Politecnico: 1 Postdocs, 1 senior research fellow, 5 PhD students

2016 – **to date**: Main supervisor for 4 PhD students (UoL). Co-supervisor of 1 postdoc and 5 PhD student With Prof Megan Povey (SFSN)

Awards

2021: Emerging Investigator in Crystal Growth & Design (ACS journal) with the paper "Effect of crystallization conditions on the structural properties of oleofoams made of cocoa butter crystals and high oleic sunflower oil"

2018: Public Engagement with Research Award, University of Leeds, UK

2017: Excellence Award in Crystallization 2017, best PhD thesis for scientific impact, industrial relevance and innovation potential, European Federation of Chemical Engineering (EFCE).

2014: Poster award, International School of Crystallization, Granada, Spain

2014: Poster prize, EuroPACT conference, Barcelona, Spain

2014: John Guest Phillips Travelling Scholarship, Loughborough University, UK (2 months research visit to Purdue University, US)

2013: Poster award, BIWIC 2013, Odense, Denmark

2013: Poster prize, ChemEngDay 2013, London, United Kingdom

Scientific Responsibility (PI) of projects awarded through peer-review process

2021 – 2026: European Research Council Starting Grant CryForm (GA H2020 949229), PI.

2021 – 2023: Starting Grant Compagnia San Paolo (Attrazione e retenzione di docenti di qualità).

2022 – 2025: Centro Nazionale Agritech (PNRR), budget holder.

July 2021: British Council Researcher Links Workshop Grants to organize a workshop on global food safety in partnership with Jiangsu University in China.

2020 – 2021: Royal Society Industrial Fellowship (INF\R2\192018), PI, in collaboration with Nestlé PTC York (UK).

2019 – **2021**: Royal Academy of Engineering Industrial Fellowship (IF\192031), PI, in collaboration with Syngenta R&D (UK).

Scientific Responsibility (PI) of small projects awarded through peer-review process

2024: Beamtimes at TU Graz SAXS beamline at Elettra Sincrotrone Trieste (Italy) under proposal 20237090.2023: Beamtime at beamline ID02 of ESRF (France) under proposal SC 5464.

2022: Beamtime at beamline ID02 of ESRF (France) under proposal SC 5324.

2021-2022: Beamtimes at TU Graz SAXS beamline at Elettra Sincrotrone Trieste (Italy) under proposals 20217007, 20217066 and 20222033.

2021: Beamtime at beamline I22 at Diamond Light Source (UK) under proposal SM26769.

2019-2020: Beamtime at beamline I13 at Diamond Light Source (UK) under proposals MT21081-1, MT21081-2, MT21081-3, MG25341-3 and MG23324-1.

2016: Royal Society International Exchanges grant IE160962 to visit the South China Technology University.

Scientific Responsibility (PI) of projects ruled through partnership agreements with companies

2024 – 2025: Industrial research contract with Lavazza.

2023 – 2026: PNRR DM 117 PhD scholarship agreement with Nestlé R&D Lausanne.

2022 – 2025: PhD scholarship agreement with the Cambridge Crystallographic Data Centre (CCDC).

2019 – 2023: PhD scholarship agreement with Syngenta R&D (UK).

2019 – 2021: research project with Arla Food R&D (Denmark). Co-I with Professor Megan Povey.

2018 – 2021: PhD scholarship agreement with Nestlé PTC York (UK).

<u>Outcomes obtained in the application and in the enhancement of research by Public Engagement activity</u> September 2023: laboratory demonstration at the 2023 Researcher Night in Torino in the Soil & Food Cluster. Experimental activity related to food crystal Engineering. Testimonial for Politecnico di Torino during opening press release of the event.

October 2022 – to date: organization and running of the series of group seminars to promote team building, presentation and research skills among early career researchers.

September 2022: laboratory demonstration at the 2022 Researcher Night in Torino. Experimental activity related to food crystal Engineering.

October 2020: virtual demonstration for the Be Curious initiative organized by the University of Leeds. Food science videos about chocolate and ice cream.

October 2019: laboratory demonstration at the New Scientist Live 2019 event (London, UK). Experiments related to propagation of sound.

July 2019: Laboratory demonstration at the Bradford Science Festival 2019 event (Bradford, UK). Experiments related to food science and perception.

March 2019: Laboratory demonstration at Be Curious event 2019 (Leeds, UK). Experiments related to sound and food.

September 2018: laboratory demonstration at the New Scientist Live 2018 event (London, UK). Experiments related to propagation of sound.

July 2019: Laboratory demonstration at the Bradford Science Festival 2018 event (Bradford, UK). Experiments related to sound propagation.

Date	Title	Location	International
			/national
September 2024	Crystallization Technology Larson Workshop	Boston (US)	International
June 2024	Gordon Research Conference Crystal Engineering (panel discussion leader)	Newry (US)	International
April 2024	Max Planck Colloquium "Chemical and/or Physical	Magdeburg	International
	Fundamentals of Process Engineering"	(Germany)	
September 2023	Crystal Form Conference 2023	Bologna (Italy)	International
September 2023	International Symposium of Industrial Crystallization 2023 (tutorial organizer)	Glasgow (UK)	International
August 2023	International Union of Crystallography 2023 congress	Melbourne	International
		(Australia)	
September 2022	9 th World Conference of Particle Technology	Madrid (Spain)	International
July 2022	2 nd Edible Soft Matter Workshop	Wageningen (the Netherlands)	International
June 2022	Gordon Research Conference Crystal Engineering	Newry (US)	International
February 2022	Physics in Food Manufacturing Conference	Online	International
December 2020	McBain symposium	Online	International
January 2020	Physics in Food Manufacturing Conference	Leeds (UK)	International
January 2020	Crystallisation Science and Engineering course	Leeds (UK)	National
September 2019	Crystallization Process Development with PAT tools	Basel	International
	symposium	(Switzerland)	
March 2019	Royal Society of Chemistry Formative Formulation Early Career Meeting	Cambridge (UK)	National
November 2018	Young Scientist Forum in Food Science and Nutrition	Hangzhou (China)	International

Keynote and plenary presentations

May 2018	International Forum on Crystal Engineering & Smart manufacturing (CESM2018)	Tianjin (China)	International
November 2017	Food Industry Forum.	Hangzhou (China)	International
September 2017	International Symposium of Industrial Crystallization (ISIC20).	Dublin (Ireland)	International

Invited talks

Date	Title	Location	International
			/national
July 2024	8th European Conference on Crystal Growth	Warsaw (Poland)	International
September 2023	Invited talk at the European Conference of Chemical Engineering 2023	Berlin (Germany)	International
November 2021	Invited talk at the EuroPACT conference 2021	Online	International
September 2021	Invited workshop speaker at the International Symposium of Industrial Crystallization ISIC21	Online	International
October 2020	Invited seminar	Manchester University (UK)	n.a.
September 2020	Invited seminar	Strathclyde University in Glasgow (UK)	n.a.
November 2018	Invited seminar.	Palmerston North (New Zealand)	International
June 2018	Invited seminar	A*STAR research institute, Singapore	n.a.
April 2018	Invited lectures at the Summer School of Process Analytical Technology	Manchester University (UK)	International
November 2017	Invited seminar	Tianjin University (China)	n.a.
April 2017	Invited seminar	South China University of Technology (China)	n.a.

Teaching activity

2022 – to date: Module leader of the MSc level course of Green Plants Design for the Corso Di Laurea Magistrale In Industrial Chemistry For Circular And Bio Economy - Torino/Napoli (10 credits)

2022 – to date: Support teaching for Corso di orientamento - Il ruolo dei processi chimici e dei materiali nella vita quotidiana. Corsi Vari Progetto Di Orientamento Formativo - Torino

2022 – to date: Support teaching for PhD student module X-ray diffraction by materials for the PhD school in Scienza E Tecnologia Dei Materiali - Torino

2022 – to date: Support teaching for MSc module Fondamenti di impianti biochimici for the Corso Di Laurea Magistrale In Ingegneria Chimica E Dei Processi Sostenibili – Torino (6 credits)

2021 – to date: Support teaching for the BSc module Impianti per l'industria chimica e alimentare for Corso Di Laurea In Ingegneria Chimica E Alimentare – Torino (10 credits)

2021 – 2022: Support teaching for the BSc module Laboratorio di processi dell'industria alimentare I for Corso Di Laurea In Tecnologie Per L'Industria Manifatturiera (Corso Professionalizzante) – Torino (4 credits)

2019 – **2021**: Lecturer for doctoral students within the EPSRC CDTs in Molecules to Products and Soft Matter and Interfaces, Universities of Leeds, Durham and Edinburgh, UK

2018 – **2021**: MSc Research project supervisor, School of Chemical and Process Engineering (SCAPE), University of Leeds, UK

2017 – 2021: Module leader for the BSc module in Food Processing, University of Leeds, UK (10 credits)

2016 – 2021: MSc and BSc research project supervisor, SFSN, University of Leeds, UK

2016 - 2021: Academic tutor - SFSN, University of Leeds, UK

2015 – **2016**: Lecturer for doctoral students within the EPSRC CDT for Continuous Manufacturing and Crystallisation (CMAC), Universities of Loughborough, Strathclyde, Bath and Cambridge, UK

2013 – 2016: Laboratory Demonstrator –First Year BSc Chemical Engineering laboratory, Loughborough University, UK

Teaching certifications: Teaching Fellowship, Higher Education Academy, UK (2018)

Institutional offices and roles in Universities and/or public and private institutions

2023 – to date: Componente effettivo di Collegio di Ingegneria Chimica e dei Materiali, Politecnico di Torino

2022 – to date: Componente Centro Interdipartimentale PolitoBIOMed Lab, Politecnico di Torino

2022- to date: Member of the Collegio di Dottorato in Ingegneria Chimica, Politecnico di Torino

2020 – 2021: Member of the EPSRC early career forum in manufacturing

2019 – 2021: Member of management board for the Bragg Centre for Materials Characterization, University of Leeds, UK

2019: Organizer of the Internal Seminar (Prof Paulo Cesar Díaz Calderón, Universidad de Los Andes), University of Leeds, UK

2018 – **2021:** Panel member, PhD student interviews, EPSRC CDT in Complex Particulate Products and Processes, University of Leeds, UK

2017 – 2020: Health & Safety Coordinator, School of Food Science and Nutrition, University of Leeds, UK

2017 – 2021: Member of the management board for the EPSRC CDT in Complex Particulate Products and Processes, University of Leeds, UK

Editorial activity

2023 - to date: Editor of Food and Bioproducts Processing (ELSEVIER)

2022 – to date: Member of the Editorial Board of Crystal Growth and Design (ACS publications)

2020 - 2022: Topic Editor for Crystal Growth and Design (ACS publications)

2020: Editor of the volume "Physics in Food Manufacturing" edited by the Institute of Physics (UK)

Organization of Scientific meetings

2024: Workshop in Small Molecule Crystallization (Torino, Italy)

2022, 2023, 2024: British Association of Crystal Growth Annual Conference

2021: Online Newton Fund Researcher Links Workshop in Global Food Safety and Security organised in partnership with Jiangsu University (China)

2018: Scientific committee member (abstract review), Food Colloids 2018, UK

2017 –2018: Scientific committee member (abstract review), ESCAPE 27 and 28 conferences

Membership of scientific societies

2023 - to date: Secretary of British Association of Crystal Growth (UK)

2022 - to date: elected member of the working party of crystallization in the European federation of Chemical Engineering (EFCE)

2021 - to date: Committee member, British Association of Crystal Growth (BACG), United Kingdom

2020 – 2021: Member of the EPSRC early career forum in manufacturing

Torino (Italy), 11th June 2024

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