



# Bioprocessing and Environmental Technology

## Community of Practice: Our People

<b>Professor Frederic Coulon</b> <b>Professor of Environmental Chemistry and Microbiology</b>  <p><b>Contact:</b>  Tel: +44 (0) 1234 754981  E: <a href="mailto:f.coulon@cranfield.ac.uk">f.coulon@cranfield.ac.uk</a>  <a href="http://www.linkedin.com/in/frederic-coulon">www.linkedin.com/in/frederic-coulon</a>  <a href="#">@FredericCoulon1</a></p> <p>Professor Coulon's professional interests include: soil and water chemistry; fate and transport of chemicals in surface and subsurface waters; water and wastewater treatment; soil and sediment treatment; hazardous waste site remediation; energy and environment; population and environment; and public communication of environmental science and engineering. His work is premised on the understanding that environmental resources are inextricably intertwined and therefore there is a need of advancing a nexus approach to enable integrated and sustainable management of water, soil and waste systems.</p>	<b>Professor Sean Tyrrel</b> <b>Director of Education for SEEA</b>  <p><b>Contact:</b>  Tel: +44 (0) 1234 758320  E: <a href="mailto:s.tyrrel@cranfield.ac.uk">s.tyrrel@cranfield.ac.uk</a></p> <p>Sean focuses on the application of environmental microbiology to the management of organic solid wastes and wastewater. His work on bioaerosol emission and dispersion from composting facilities and the implications of exposure to bioaerosols on human health is recognised through his appointment to the BSI Air Quality Committee and as UK principal delegate to the CEN committee on bioaerosol measurement. Professor Tyrrel is a Chartered Environmentalist (Cenv) and Water and Environmental Manager (C WEM), a Fellow of the Chartered Institution of Water and Environmental Management (CIWEM), a Fellow of the Higher Education Academy (FHEA) and a Member of both the Society of Applied Microbiologists the International Water Association.</p>	<b>Doctor Raffaella Villa</b> <b>Senior Lecturer in Biopress Technology</b>  <p><b>Contact:</b>  Tel: +44 (0) 1234 758363  E: <a href="mailto:r.villa@cranfield.ac.uk">r.villa@cranfield.ac.uk</a>  <a href="http://www.linkedin.com/pub/rafaella-villa/4/86/923">www.linkedin.com/pub/rafaella-villa/4/86/923</a>  <a href="#">@raffavilla12</a></p> <p>Raffaella is an applied microbiologist with particular expertise in microbial and enzymatic processes, which she has adapted to the waste and environmental sectors. She has established herself as an international authority in anaerobic science and she is widely recognised nationally in this capacity. She currently leads a group of seven PhD students and coordinates the virtual Centre for Anaerobic Science, which includes a pilot Anaerobic Digestion facility. She has published over 40 research papers, books and conference proceedings.</p>	<b>Doctor Pablo Campo Moreno</b> <b>Lecturer in Applied Chemistry</b>  <p><b>Contact:</b>  Tel: +44 (0) 1234 754332  E: <a href="mailto:p.campo-moreno@cranfield.ac.uk">p.campo-moreno@cranfield.ac.uk</a></p> <p>With emphasis in aquatic chemistry, biological processes involving engineered and natural systems have captured my attention as a researcher. In this fashion, I study the fate and transport of pollutants during wastewater treatments and bioremediation processes with special attention paid to the solid-solution interface (e.g., water, oil, biosolids, and sediments). Concurrent with these topics is my interest in implementing analytical methods to detect target contaminants along with their transformation products.</p>
<b>Doctor Zaheer Ahmad Nasar</b> <b>Research Fellow</b>  <p><b>Contact:</b>  E: <a href="mailto:z.a.nasar@cranfield.ac.uk">z.a.nasar@cranfield.ac.uk</a>  <a href="http://www.linkedin.com/in/zaheer-nasar-83620971">www.linkedin.com/in/zaheer-nasar-83620971</a></p> <p>Zaheer's research focus is on developing and advancing diagnostic tools and solutions to tackle environmental health challenges. Currently he is working on characterizing bioaerosols emissions using a novel real time sensor. His work includes investigating environmental hazards, including biological threats in diverse environments and various existing and emerging engineering/environmental interventions under different scenarios in both the developed and developing world. He has published over 20 papers in peer reviewed journals, has co-edited a book and has 4 book chapters.</p>	<b>Doctor Luca Alibardi</b> <b>Research Fellow</b>  <p><b>Contact:</b>  E: <a href="mailto:l.alibardi@cranfield.ac.uk">l.alibardi@cranfield.ac.uk</a>  <a href="http://www.linkedin.com/in/lucaalibardi">www.linkedin.com/in/lucaalibardi</a></p> <p>Luca Alibardi is Research Fellow and he is seconded within the Innovation Team of Severn Trent Water to deliver research and development projects for the UK Water Sector. His main fields of interest are biological treatments and final disposal of solid waste and sludge, anaerobic digestion and biological hydrogen production, organic waste biorefinery and dynamic membrane bio-reactors. For Severn Trent, Luca is Technical Lead in projects related to phosphorus removal, fat, oil and grease management and control, metals removal and coagulant recovery. He is Co-Leader of the Task Group on Waste Biorefinery of the International Waste Working Group (IWWG).</p>	<b>Sonia Garcia Alcega</b> <b>Research Fellow in Environmental Chemistry</b>  <p><b>Contact:</b>  E: <a href="mailto:S.GarciaAlcega@cranfield.ac.uk">S.GarciaAlcega@cranfield.ac.uk</a>  <a href="http://www.linkedin.com/in/sgarciaalcega">www.linkedin.com/in/sgarciaalcega</a></p> <p>Sonia Garcia Alcega is a Doctor in Environmental Toxicology. During her PhD at the University of Reading she studied the bioaccessibility of persistent organic pollutants (with special interest in flame retardants) from indoor dusts using an in vitro digestion model (CE-PBET). Sonia's work as a research fellow in Environmental Chemistry in Cranfield focuses on the chemical characterisation of bioaerosol emissions from urban, rural and industrial environments such as waste water treatment plants, farms, compost facilities or parks. Sonia's experience and research interests are in vitro toxicology, human exposure to contaminants, environmental microbiology and analytical chemistry.</p>	<b>Zoe Griffiths</b> <b>Science and Technology Impact Officer</b>  <p><b>Contact:</b>  Tel: +44 (0) 1234 758310  E: <a href="mailto:Zoe.A.Griffiths@cranfield.ac.uk">Zoe.A.Griffiths@cranfield.ac.uk</a>  <a href="http://www.linkedin.com/in/zoe-griffiths/">www.linkedin.com/in/zoe-griffiths/</a>  <a href="#">@zoe_322</a></p> <p>Having gained a 1st Class BA (Hons) in Biological Sciences from the University of Oxford, Zoe's work now focuses on generating impact for scientific and environmental research. Zoe is a keen science communicator and her work focuses on increasing stakeholder, public and political engagement with scientific and environmental research. Her main activities include writing layman articles, producing visual and written content for different audiences, hosting workshop and training events at major conferences, stakeholder analysis, marketing activities and social media engagement.</p>
<b>Sabrina Cipullo</b> <b>Marie Curie Early Stage Researcher</b>  <p><b>Contact:</b>  E: <a href="mailto:s.cipullo@cranfield.ac.uk">s.cipullo@cranfield.ac.uk</a>  <a href="http://www.linkedin.com/in/sabrina-cipullo">www.linkedin.com/in/sabrina-cipullo</a>  <a href="#">@cipullo_s</a></p> <p>Sabrina's work on environmental chemistry and toxicological approaches to site assessments is focussed on better understanding the sources of pollution, environmental fate transport of complex chemical mixtures, bioavailability, bioaccessibility and toxicity of contaminants. She is a member of the Cranfield University Environmental Analytical Facility Committee, the Royal Society of Cmistry, East Anglia Region of the Analytical Division (RSC), the Society of Brownfield Risk Assessment (SoBRA), RemSoc, the Chartered Institution of Water and Environmental Management (CIWEM) a volunteer of the RSC benevolent fund. She recently became a STEM ambassador and organised her first conference in June 2017.</p>	<b>Collins Gameli Hodoli</b> <b>PhD Student</b>  <p><b>Contact:</b>  E: <a href="mailto:collins-gameli.hodoli@cranfield.ac.uk">collins-gameli.hodoli@cranfield.ac.uk</a>  <a href="http://www.linkedin.com/in/collins-gameli-hodoli-371a9528">www.linkedin.com/in/collins-gameli-hodoli-371a9528</a>  <a href="#">@collinsc</a></p> <p>With passion for public health protection and environmental sustainability, Collins currently works with the Centre for Atmospheric Informatics and Emissions Technology (CAIET) at the Cranfield University as a PhD researcher. The focal point of his work is using emerging cutting edge low-cost, high-density networks to develop specific protocols for air quality monitoring in developing economies. These protocols will help to improve air quality monitoring in logistically difficult environments for better quality of life. Collins will also be speaking at the International Youth Peace Conference (IYPC) 2017 in Norway.</p>	<b>Joah Bramhall</b> <b>PhD Student</b>  <p><b>Contact:</b>  E: <a href="mailto:O.Bramhall@cranfield.ac.uk">O.Bramhall@cranfield.ac.uk</a></p> <p>Joah is currently studying for a PhD which aims to determine the impact and fate of cleaning chemicals in on-site sanitation facilities. Specifically the project will look at the impact of the products on the microbiological communities, the physical and chemical characteristics of the faecal matter and the potential environmental impacts. Joah has a primarily microbiological background having studied biomedical science as an undergraduate at Royal Holloway and attaining a Masters in Medical Microbiology at the London School of Hygiene and Tropical Medicine.</p>	<b>Coren Pulleyblank</b> <b>Visiting PhD Student</b>  <p><b>Contact:</b>  E: <a href="mailto:coren.pulleyblank@dcu.ie">coren.pulleyblank@dcu.ie</a></p> <p>Coren is a visiting student from Dublin City University. She is working to develop HPLC methodology for detecting key degradation products of PAHs in aqueous solution and the setup of ongoing microcosm and mesocosm experiments. Previously, Coren completed a B.Sc. in Geography at York University in Toronto. In 2014, she spent ten weeks in the Canadian sub-arctic studying atmospheric deposition of nutrients onto tundra ponds. Other work has included analysis of quaternary glacial deposits in southern Ontario to reconstruct regional glacial dynamics, and collection and interpretation of Alpine soil samples to understand soil development processes and changing land use in the area.</p>