

8. Project Offerings

(This list will be updated as additional project offerings become known/available)

BEFORE beginning work in the lab and during the two terms of the project, all students **MUST** complete the following tasks:

- Attend all orientation sessions and workshops.
- Complete WHMIS training.
- Complete and submit to the Department Safety Officer, Kelly Sedore, the three required safety forms.
- Submit a literature review and research proposal.
- Receive training on the use of equipment and laboratory protocols.
- Meet with the research supervisor every two weeks to discuss progress and to evaluate the next step. It is the responsibility of the student to arrange this meeting.
- Discuss with the supervisor their experimental approach before work is done.
- Keep an up-to-date record in a hard cover notebook of all research activities including lab work, literature search, research meetings, etc..

Projects

Supervisor/s	Project Titles	Positions Available/ Remaining *	Student/s Confirmed
Dr. Brian Amsden Chemical Engineering Dupuis 201A & Biosciences 4632 613-533-3093 amsden@queensu.ca	1) Differentiating adipose-derived stem cells (ASCs) towards a nucleus pulposus cell phenotype using a dynamically loaded bioreactor 2) TBD	0	1) Sarah McManus 2) Jessica Shearer
Dr. Pascale Champagne Civil/Chemical Engineering Ellis 206 613-533-3053 pascale.champagne@queensu.ca	TBD	?	
Dr. Cao Thang Dinh Chemical Engineering Dupuis 305 613-533-6618 caothang.dinh@queensu.ca	TBD	?	Mahad Asif

Dr. Aris Docoslis Chemical Engineering Dupuis 208 613-533-6949 docoslis@queensu.ca	TBD	?	
Dr. Carlos Escobedo Chemical Engineering Dupuis 209 613-533-3095 carlos.escobedo@queensu.ca	NA	?	
Dr. Lindsay Fitzpatrick Chemical Engineering BioSci 4630 613-533-6000 x78936 lindsay.fitzpatrick@queensu.ca	Not available - on leave 2020-21	NA	
Dr. Ahmad Ghahreman Robert M. Buchan Department of Mining Goodwin 340 613-533-3294 ahmad.g@queensu.ca	Evaluation of Bacteria for Oxidization of Solid Sulfide Minerals at Near Neutral pH	?	Brendan Hubert
Dr. Ehssan Koupaie Chemical Engineering Dupuis 303 613-533-6000 x77931 ehssan.koupaie@queensu.ca	Organic Waste to Energy: Comparison of Anaerobic Digestion, Gasification, Pyrolysis, and Hydrothermal Carbonization	1	Yi Yuan
Dr. Louise Meunier Chemical Engineering Dupuis 211 613-533-6000 x78048 louise.meunier@queensu.ca	1) Computational Fluid Dynamics modelling of nanoparticle transport in the human body 2) Bioaccessibility method development of physiologically representative gastro-intestinal fluid movements (includes lab work and computational fluid dynamics modelling) 3) Bioaccessibility of hexavalent chromium from contaminated soils and tailings 4) Bioaccessibility of rare earth elements from mine waste 5) Environmental Fate of oil sands tailings adsorbed onto	0 remaining	1) Danielle Clasky 4) Natalie Niro 9) Andrea Vervoort

	biodegradable polymers 6) Human exposure investigation of graphene nanoplatelets (includes lab work and computational fluid dynamics modelling) 7) Microplastics removal from freshwater systems 8) Bioaccessibility of microplastics and additives 9) Computational Fluid Dynamics modelling of T cell growth in a static culture system		
Dr. Bruce Ramsay Chemical Engineering BioSci 1420A 613-533-6000 x75293 ramsayb@queensu.ca	TBD	?	Shengjing Huang
Dr. Juliana Ramsay Chemical Engineering Dupuis 425 613-533-2770 juliana.ramsay@queensu.ca	TBD	?	Stephanie Pfiffer
Dr. Laura Wells Chemical Engineering BioSci 4628 613-533-6000 x75836 laura.wells@queensu.ca	TBD	?	Danielle Clasky
Dr. Kim Woodhouse Chemical Engineering 613-533-6933 kim.woodhouse@queensu.ca	Not Available	NA	
Dr. Laurence Yang Chemical Engineering Dupuis 304 613-533-6000 x75292 laurence.yang@queensu.ca	1) Modeling for Biofilm-forming Pathogens 2) Algal Protein Expression 3) Machine Learning for Drug Repurposing	0	1) Herbert Yao 2) Ej Jun Lung 3) Xinran Li

* N.B. If the number of positions available is listed as:

- "NA", means that the prospective supervisor is not available to supervise a 4th year research project
 - "?", means that the prospective supervisor has not provided any information regarding the availability of research projects for the coming year
 - "0", means that the supervisor and a CHEE 408 student have already agreed to work together on the proposed project
 - "1" or more: means there may be 1 or more positions available - however, it is also possible that a supervisor and a student have already agreed to work together on a project, but have not yet notified the lab coordinator to update the project availability
 - This table will be updated whenever the lab coordinator receives updates on project availability from supervisors and students.
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Last updated Aug. 29, 2020