

Inspiring Change, Education, and Awareness

March 22, 2019

University of Western Ontario

International and Graduate Affairs Building (IGAB)

Schedule				
Time	Room(s)	Session		
8:00 am - 8:40 am	IGAB Atrium	Registration		
8:40 am - 8:50 am	IGAB Atrium	Welcome Address		
9:00 am - 11:00 am	UC1105 UC1225 UC2105	Graduate Student Talks		
	UC3220	Undergraduate Student Talks		
11:00 am - 11:30 am	IGAB Atrium	Coffee Break		
11:30 am - 1:00 pm	IGAB Atrium	Panel Discussion: Plastics in the Anthropocene: Problems and Solutions		
1:00 pm - 2:00 pm	IGAB Atrium	Lunch		
2:00 pm - 3:00 pm	IGAB Atrium	Keynote Address: Lauren Smith and Nicole Balliston Polygone Technologies		
3:00 pm - 3:25 pm	IGAB Atrium	Graduate Student Speed Talks		
3:25 pm - 4:00 pm	IGAB Atrium	Graduate Student Poster Session		
4:00 pm - 4:15 pm	IGAB Atrium	Closing Remarks and Awards Ceremony		
4:30 pm - 6:00 pm	The Wave	Reception		

Graduate Student Talks	Grad	uate	Stud	ent	Talks
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9:00 am - 11:00 am

Communities and Diversity Room: UC1105	Agriculture and Nutrients Room: UC1225
Boreal peatlands: Characterized in terms of both aboveground and belowground components and the impacts of climate warming on the aboveground plant communities Caitlyn Lyons University of Western Ontario	Mercury methylation along a latitudinal sulphate deposition gradient in Ontario peatlands Jennifer Blythe University of Western Ontario
Intraspeciation Ashley Snook University of Western Ontario	Evaluating the potential for resource recovery from smouldering treatment of biosolids Taryn Fournie University of Western Ontario
Habitat-based drivers of arthropod abundance, richness and composition in agricultural landscapes Aleksandra Dolezal University of Guelph	Effect of hot phenomena on groundwater derived nutrients in the nearshore aquifer in the Great Lakes Sabina Rakhimbekova University of Western Ontario

Break: 9:55 am - 10:05 am

Plant structure as a driver of arthropod predator community Bernal Arce University of Guelph	Following the fate of nitrogen transfer between cover crop and main crop through ¹⁵ N tracing Spencer Heuchan University of Western Ontario
Diversity of arthropods in Boreal peatlands Grace Carscallen University of Western Ontario	Is grassland ecosystem stability impacted by simultaneous changes in the availabilities of multiple nutrients? Oliver Carroll University of Guelph

Graduate Student Talks 9:00 am - 11:00 am	Undergraduate Student Talks 9:00 am - 11:00 am	
Policy and Technology Room: UC2105	Honor's Thesis Talks Room: UC3220	
Green gasoline: Producing n-butanol via fermentation of waste crude glycerol from biodiesel production Colin Couper University of Western Ontario	Secondary invasion? Interacting effects of the emerald ash borer (Agrilus planipennis) and ecological integrity on invasive shrub establishment Jen Baron University of Western Ontario	
Mechanisms of bacterial aggregation at liquid-air interface Zahra Habibi University of Western Ontario	Reeling it all in: comparing data collected from anglers, naturalists and traditional fisheries management approaches Becca Cambridge University of Western Ontario	
Development of a compact, energy- positive food waste treatment process Swakshar Saha University of Waterloo	Assessing the performance of Credit Valley bioretention media as source or sink for phosphorus in cold climate storm-water runoff Julia Cantelon University of Western Ontario	
Break: 9:55 am - 10:05 am	A paleolimnological investigation of changes in primary production in subalpine lakes of the Uinta Mountains Holly Dunne University of Western Ontario	
The welfare impact of public climate change awareness Meghdad Rahimian University of Western Ontario	Living on the edge: Soil microedges provide an ecological niche for marginalized species Jessica Kowalski University of Western Ontario	
Smouldering (STAR) remediation of PFAS-contaminated soil Alexandra Duchesne University of Western Ontario	Patterns of cellulose decomposition are not concordant to groundwater inputs in an agricultural stream Shayla L. Kroeze University of Western Ontario	
Where can I get my food? Assessing Ontario municipal policy impacts on local food environments Alexander Wray University of Western Ontario	The influence of concentration and delivery of phosphorus on stream decomposition: A mesocosm experiment Meghan Sauro University of Western Ontario	

Panel Discussion:

Plastics in the Anthropocene:

Problems and Solutions

11:30 am - 1:00 pm Room: IGAB Atrium

Panelists:

Dr. Patricia Corcoran

Associate Professor and Department Chair of Earth Sciences at the University of Western Ontario

Dr. Amar Mohanty

Premier's Research Chair in Biomaterials & Transportation at the University of Guelph

Dr. Stephanie Borrelle

David H. Smith Postdoctoral Fellow at the University of Georgia, with Ocean Conservancy at the University of Toronto

Hasitha de Alwis Weerasekera
 Director of Biochemistry, Genecis Bioindustries

Keynote Address:

Lauren Smith and Nicole Balliston PolyGone Technologies



2:00 pm - 3:00 pm

Room: IGAB Atrium

Lauren Smith and Nicole Balliston are co-founders of PolyGone Technologies, a company dedicated to reducing microplastic release to the environment and into our diets. Microplastics are an emerging contaminant, being found in many food and beverage products, including 83% of all tap water and 93% of all bottled water. Despite efforts to reduce microplastic emissions, there is still no standardized, reliable method to detect these plastics quickly and affordably. PolyGone is developing rapid microplastic detection methods to not only detect the amount of plastics in products we consume, but also to determine the efficacy of products aiming to remove microplastics. The team is providing the first certification system for plastic content of products and certification ratings of microplastic removal. PolyGone makes it easy for consumers to know what is in the products they choose and how effective filtration products are at keeping microplastics out of our diets and waters. With diverse academic backgrounds in sustainability management, environmental engineering, water management, and behaviour change, these University of Waterloo graduates have applied their interdisciplinary knowledge outside the classroom to tackle a growing environmental and public health concern.

Graduate Student Speed Talks

3:00 pm - 3:25 pm

Room: IGAB Atrium

Exploring governance mechanism in conventional agriculture systems to reduce GHG emissions

Lisa Ashton, University of Guelph

Assessing the relationship between the size and number of wildland fires

Devan Becker, University of Western Ontario

The use of alternative measures to GDP at the provincial level

Jason Robinson, York University

Mega-dam fever in Latin America: The intersection of indigenous rights and environmental justice in Bolivia and Brazil

Giada Ferrucci, University of Western Ontario

Graduate Student Posters

3:25 pm - 4:00 pm

Room: IGAB Atrium

Incorporation of anthropogenic debris into double-crested cormorants' nests, Toronto, Ontario

Melina Damian, York University

Optimal resource allocation theory predicts canola production under drought and nutrient stress

Kristin Doherty, University of Guelph

Mega-dam fever in Latin America: The intersection of indigenous rights and environmental justice in Bolivia and Brazil

Giada Ferrucci, University of Western Ontario

Charcoal and common worlds: What tracks can we leave as educators?

Sarah Hennessy, University of Western Ontario

Irrigation scheduling of Spiraea japonica "Goldflame"

Katherine Keary, University of Guelph

Groundwater quality linked to ecosystem services on marginal lands of intensively managed farms

Daniel Noble, University of Guelph

A green mindset: A study of Nigeria's electricity legislative framework, with a specific focus on the viability of grid connection, transmission and offtake potential for small scale renewable generation purposes

Njokuji Ogechi Judith, University of Western Ontario

Ontario crop productivity: Variation in yield with varying land suitability for agriculture using NDVI

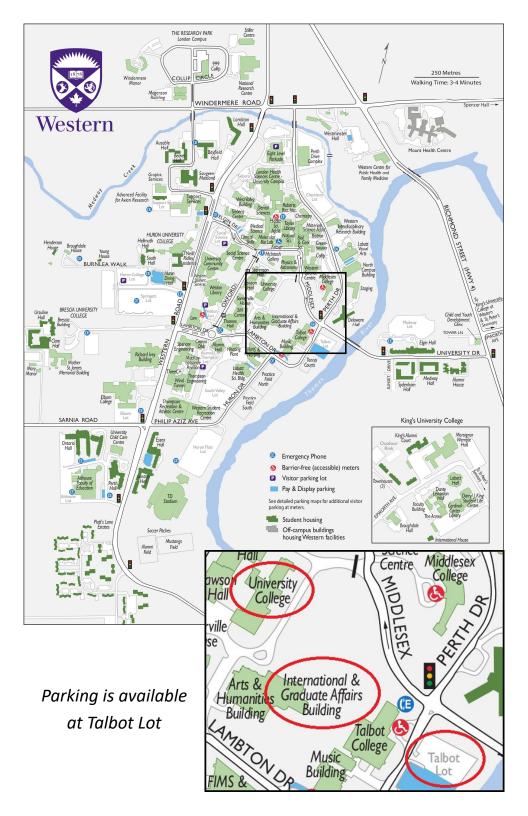
Samantha Ramirez, University of Guelph

Air pollutants and school development

Amritpal Rathore, University of Western Ontario

Assessing the relationship between political ideology and climate change attitudes: An analysis of 18 European countries

Vanessa Sinclair, University of Western Ontario



Sponsored By:

































March 23, 2019

10:00 am to 4:00 pm

University of Western Ontario

University Community Centre (UCC)

Featuring:

Free showing of the

HIT DOCUMENTARY

Anthropocene: The

Human Epoch

McKellar Theatre 12:40 pm - 2:15 pm Keynote address by former premier

DALTON McGUINTY

Climate Change: Can We Win This? Be Honest.

McKellar Theatre 3:00 pm - 4:00 pm

Environmental Booths and Workshops, Including:

- **★ HOW TO MAKE BEESWAX WRAPS ★**
 - **★** REIMAGINE CO. ★
- **★** SOGS SUSTAINABILITY COMMITTEE **★**
 - **★** THAMES TALBOT LAND TRUST ★

University Community Centre 10:00 am - 3:00 pm