

Postdoctoral Scholar in Operations, Circular Supply Chain Management, and Life Cycle Assessment

Dr. Jury Gualandris at the Ivey Business School (Western University, London, Canada) is seeking to fill a postdoctoral scholar position in Operations and Supply Chain Management, with a strong interest and experience in circular economy studies, to support [Ivey's Circular Economy](#) research initiatives at the Building Sustainable Value Research Centre.

The postdoctoral researcher will support a multidisciplinary project “Omics to close the loop: optimized amendment from local agrifood waste for carbon footprint reduction”. The project is based in Montreal and is a joint effort of several international teams of researchers.

The project involves identifying optimal ways of transforming urban food waste collected from local companies (e.g., bakeries, breweries, juice producers etc.) into productive uses such cookies, insect protein, mushrooms, fertilizing byproducts, and green bio-mass based energy. One among several supply chain pathways analyzed in this project involves collecting food waste from producers to insect farms, where food waste is transformed into insect protein. The insect manure is then composted and used as soil amendment, potentially affecting soil properties such as fertility and carbon sequestration. One of the project goals is to improve the understanding of, from a life cycle perspective, whether diverting food waste from landfills to such productive uses generate economic and environmental value, and if so, how much.

The Omics to close the loop project will bring together biologists and Montreal urban agrifood entrepreneurs so that they can optimize composting, mushroom production and edible insect farming, and their integration with other supply chain pathways that valorize food waste toward human consumption. This component of the project is led by Prof. Jury Gualandris' research team. The postdoctoral candidate is expected to perform the following tasks:

- Reach out to project partners collecting or utilizing food waste in Montreal to gather information necessary for environmental and economic LCA
- Update [valorization network map](#) to account for evolving material flow structures
- Examine the net environmental and economic benefits of diverse supply chain pathways in the network (upcycling to human consumption; Feeding Insects; Growing Mushrooms; Composting; Anaerobic digestion) via both environmental LCA and economic LCA. The environmental component will use and extend published work such as papers published in [Journal of Industrial Ecology](#) and [Journal of Cleaner Production](#).
- Analyze co-opetition tensions and governance among network players.

The ideal candidate will exhibit the following:

- Candidates must have demonstrated excellence in the application of life cycle assessment (LCA) tools, both economic and ecological, to real life situations. Priority will be given to candidates with experience in LCA using popular tools such as SimaPro, GaBi, openLCA and familiarity with databases such as the *ecoinvent* database.
- Demonstrated ability to conduct high-quality qualitative and quantitative research – prior experiences with case-based research and or scraping and coding Big Data in Python or R are particularly valuable.
- Comfort and credibility writing for and communicating with corporate executives.
- Outstanding organizational and communication skills.
- A defended dissertation within six months of commencing employment. If the Ph.D. dissertation is completed, but not yet defended, it is possible that an interim research contract for on-site or remote work can be arranged.

Please note that six months is for candidates not requiring immigration processing. An international candidate may require Canadian immigration approval (e.g., a work permit), which may not be processed without an awarded Ph.D. degree. The immigration processing may also require additional a few weeks to months. Therefore, it is desirable that such a successful candidate must defend their Ph.D. within a few weeks of the hiring to minimize delays.

The position will remain open until it is filled with a suitable candidate. The start date is flexible, but ideally the candidate would start as soon as possible. The position is based at the Ivey Business School in London, Ontario (Canada). However, it will require frequent short-term travel and stay in Montreal, Quebec.

The position is for 1 year with a 4-month probationary period. The position could be extended year-on-year basis, pending availability of additional funding and satisfactory performance. Compensation will be CAD 70,000-75,000 per year along with an additional research/travel stipend, and reimbursement of research related travel expenses.

Candidates interested in the position should submit the following to Jury Gualandris at jgualandris@ivey.ca.

- A copy of your CV and contact information for two academic references.
- A cover letter that describes how your education, training and experience meet the four bullet points above – please elaborate on how your methodological skills can support our research on waste synergies.
- Your research interests.

Applications will be accepted until the position has been filled.

About Ivey Business School

The Ivey Business School is a part of University of Western Ontario. The Ivey Business School is Canada's premier business school and is recognized worldwide for the quality of its management education and research. The school's major activities include: a highly regarded MBA program and a unique undergraduate program; an established doctoral program active in most major areas of management; and an expanding portfolio of programs for executives, including an Executive MBA delivered in Canada and Hong Kong. The School is international oriented in terms of curricula, research, faculty, and student exchanges.

The candidate will join a vibrant operations and business sustainability community within the Centre for Building Sustainable Value at the Ivey Business School. The Centre for Building Sustainable Value is also the home of the Network for Business Sustainability (NBS), which aims to bridge research and practice to advance sustainability.

We invite applications from all qualified individuals. Western is committed to employment equity and diversity in the workplace and welcomes applications from women, members of racialized groups/visible minorities, Aboriginal persons, persons with disabilities, persons of any sexual orientation, and persons of any gender identity or gender expression. Accommodations are available for applicants with disabilities throughout the recruitment process.