

Curriculum Vitae

Contact Information

Piyal Sarkar,
Assistant Professor of Supply Chain Management,
School of Business Administration,
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The Pennsylvania State University

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Current job	Assistant Professor of Supply Chain Management School of Business Administration, Penn State- Harrisburg <i>Responsibilities include teaching, research, and services</i>	Green Bay, Wisconsin August 22, 2022- Present
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Research interests	Supply chain contracts, Supply chain finance, Inventory management, Supply chain risk, OR Techniques, Data-driven optimization
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Education	Toronto Metropolitan University (Formerly Ryerson University) PhD in Mechanical and Industrial Engineering Area of research: Supply Chain Management Supervisors: Dr. M.I.M Wahab, and Dr. L. Fang GPA: 4.17/4.33 <i>Received nomination for the Governor General of Canada Gold Medal by the PhD exam committee</i>	Toronto, Canada July 2018 – Oct 2022
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Indian Institute of Technology (ISM) Dhanbad MBA in Operations Management GPA: 8.87/10, First class	Dhanbad, India July 2016 – May 2018
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Maulana Abul Kalam university of Technology B.Tech in Civil Engineering GPA: 7.86/10, First class	Kolkata, India July 2010 – June 2014
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Honors and scholarships	Ryerson university PHD funding MIE Graduate Excellence award Ryerson International scholarship Ryerson Faculty of Engineering Dean's funding Global Learning award (Ryerson International) Ryerson university graduate travel award	2018-2022 2022 2019 2018-2020 2019 2020
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CUPE (unit 3) Ryerson university funding	2018-2021
Canadian Operational Research Society (CORS) student funding	2021
MCM scholarship (Full tuition fees waiver)– IIT(ISM) Dhanbad	2016–2018
Graduate Aptitude Test for Engineers Exam (Top 5 percentile)	2014

Publications

Bridging the supply chain resilience research and practice gaps: pre and post COVID-19 perspectives

Sarkar, P., Wahab, M.I.M., and Tkachev, T.

Journal of Global Operations and Strategic Sourcing, Emerald (Accepted, 2022.)

A real options approach to value manufacturing flexibilities with regime-switching product demand

Wahab, M.I.M., Lee, C.G, and **Sarkar, P.**

Flexible Services and Manufacturing Journal, Springer (Accepted, 2022)

Weather rebate contracts for different risk attitudes of supply chain members

Sarkar, P., Wahab, M.I.M., and Fang, L.

European Journal of Operational Research (EJOR-D-22-00422), Elsevier (Accepted, 2023)

An approach to improve supply chain performance under weather risk using buyback contract with weather rebate

Sarkar, P., Wahab, M.I.M., and Fang, L.

working paper, 2023

Weather rebate sharing contract for enhancing supply chain performance

Sarkar, P., Wahab, M.I.M., and Fang, L.

working paper, 2023

Trade credit contracts under weather risk

Sarkar, P., Wahab, M.I.M., and Fang, L.

working paper, 2023

Work in progress

Impact of energy consumption parameters on supply chain decisions of a two-party supply chain

Wahab, M.I.M., **Sarkar, P.**, and Bookbinder, J.H.

Modeling completed

Thesis and projects

PhD Thesis

Sept 2018 – Oct 2022

Title: Design of supply chain contracts under weather risk

Supervisors: Dr. M.I.M Wahab and Dr. L.Fang,

Toronto Metropolitan University

MBA capstone project July 2016 – May 2018

Title: Selection of retailers in India: An application of AHP and fuzzy TOPSIS

Mentor: Dr. Bibhas Chandra, IIT(ISM) Dhanbad

Research Intern, IIM Lucknow May 2017– July 2017

Title: Applications of Benders Decomposition Algorithm to solve supply chain network problems

Mentor: Dr. Suresh Jakhar, IIM Lucknow

B.Tech Project July 2010 – June 2014

Title: Analysis of steel truss bridges

Mentor: Professor Shyamalendu Chakraborty,
Haldia Institute of Technology

Teaching experience

Assistant Professor, University of Wisconsin-Green Bay Fall 2022

SCM 380: Project Management

Topics covered broadly:

Modern project management, Defining project, Estimating Project times and costs, Risk management, Reducing project duration, Performance management, Project closure

Responsibilities:

Delivering lectures in both online and face to face formats, evaluating projects, assignments, and exams

Assistant Professor, University of Wisconsin-Green Bay Fall 2022

MBA 704: The Exponential Enterprise and Abundance

Topics covered broadly:

Supply Chain Management, Supply Chain Strategies, Global Supply Chain Perspectives

Responsibilities:

Delivering lectures in both online and face to face formats, evaluating projects, assignments, and exams

Teaching assistant, Toronto Metropolitan University Winter 2020, 2021

IND 816: Service operations management

Topics covered broadly:

Service Economy, Service quality, Managing capacity and demand, Process improvement, Globalization of services, Waiting lines, New service development

Responsibilities:

Explaining case-studies in the classes, marking the quizzes and mid terms, evaluating the term projects, grading the students

Rating: Excellent

Teaching assistant, Toronto Metropolitan University Fall 2019, 2020
IND 710: Inventory and Production systems
 Topics covered broadly
 Forecasting, Inventory planning, MRP, JIT, Scheduling
 Responsibilities:
 Explaining tutorials in the classes, marking the quizzes and mid terms, evaluating the term projects, grading the students
Rating: Excellent

Teaching assistant, Toronto Metropolitan University winter 2019, 2020, 2021
IND 833: Financial Engineering
 Topics covered broadly
 Discounted cash flow analysis, Capital budgeting, Risk and return, Derivatives, Futures and forward contracts, options, Black Scholes model
 Responsibilities:
 Explained tutorials in the classes, marked the quizzes and mid terms, evaluated the term projects, grading the students
Rating: Excellent

Industry experience

JMC Projects India Ltd, Karnal, India
 Project planning Engineer July 2014– January 2016
 Job Description:
 Project Management through IPMS, Planning and scheduling of various activities, Study and Preparation of Tender documents, Planning of Manpower and Machineries, Preparation of Bar Bending Schedule (BBS) as per drawing and as per site, Checking of shuttering as per drawing, Supervision of work maintaining quality, Quality check of Steel and Concrete, Estimating quantities of Brick work, Plaster work, Flooring, Shuttering, Steel and Concrete from drawings, Billing of contractors.

Talks in conferences

Design of weather rebate sharing contract October 2022
 INFORMS Annual conference 2022,
 Indiannapolis, USA

Improving supply chain performance under weather risk June 2022
 MSOM conference 2022, Munich, Germany

Design of weather rebate sharing contract June 2022
 CORS/INFORMS International conference 2022, Vancouver, Canada

Weather rebate contracts with buyback policy October 2021
 INFORMS Annual Meeting 2021

Weather rebate contracts for different risk attitudes of supply chain members July 2021
Canadian Operations Research Society Annual Conference 2021

Weather rebate contracts for risk averse supply chain members May 2021
Production and Operations Management Society Annual Conference 2021

Design of a weather rebate contract considering risk attitudes of supply chain members November 2020
INFORMS Annual Meeting 2020

Supply chain contracts under weather risk November 2020
Decision Science Institute Annual Meeting 2020

Improving supply chain performance under weather risk August 2020
Operations and Supply Chain Management Doctoral Consortium (OSCM), 2020, Academy of Management

Selection of etailers for private label brands: An application of AHP and Fuzzy TOPSIS. December, 2017
International Conference on Decision Science 2017, India

Invited talk

Trade credit contracts under weather risk May, 2023
Invited in POM Annual Conference, May 22-25, Florida, USA

Improving supply chain performance under weather risk July, 2021
Invited as keynote speech on The 6th IEEE Symposium on Analytics and Risk, Beijing, International Forum on Management Science and Engineering, presented by my supervisor Dr. M.I.M Wahab

At the crossroads of supplier risk management: How AI can help organizations to find a balance July, 2021
Invited as a panelist by a multinational company named Zycus
Link of the talk: <https://video.zycus.com/watch/vpkYTkBvbKetc1UyfoNaMH>

Skills

Programming
Proficient in: MATLAB, GAMS, Excel
Familiar with: Python, CPLEX

Manuscript editing
Proficient in: Latex, MS word, Lyx

Languages

English (fluent), Hindi (fluent), Bengali (fluent)

Service and outreach

INFORMS October 2022
Session Chair, INFORMS Annual Conference 2022, Indiannapolis, USA
Session: Emerging risks in supply chain management under the cluster "Supply chain risk and disruptions"

INFORMS March 2020 – August 2022
Staff Editor, INFORMS ORMS Tomorrow Magazine
Impact: Acting as the voice of the OR/MS/Analytics student community
Responsibilities: Research, develop, and write articles relevant to students in OR/MS/Analytics. May also conduct interviews with INFORMS members and luminaries in the field.
Work Location: Virtual, via email and conference calls, in person at the INFORMS Annual Meeting

FEAS Graduate Ambassador, TMU September 2021 – August 2022
Served as Faculty of Engineering and Architectural Science Ambassador.
Worked with FEAS graduate office to organize various educational and cultural events. Participated in activities to help and mentor prospective students excel in their graduate studies.

Council member, TMU September 2019– August 2020
Attended all the department council meetings for Department of Mechanical and Industrial Engineering, Ryerson University. As a council member, I used to vote for different motions, related to undergraduate and graduate curriculum

Deputy speaker, TMU May 2020– August 2020
Cohost all the departmental meetings of Mechanical and Industrial Engineering. In absence of the regular speaker, the deputy speaker hosts the departmental meetings.

Active volunteer, IIT Alumni Canada November 2018- Present
IITAC is a registered society of all (Indian Institute of Technology) IIT alumni in Canada. The Society has a multi prolonged strategy to work and connect with Canadian and Indian research institutes, industries, and government at the municipal, provincial, and Federal level to create a collaborative environment for Canada and India. Details can be found in www.iitalumnicanada.com/.

Professional development

Diploma in Operations Research
Issued by: Canadian Society of Operational Research

MISI PhD Winter Academy (MIT Global Scale Network)

Attended PhD winter academy from January 18 to January 2021 conducted at Malaysia Institute for Supply Chain Innovation

Python programming certification from Datacamp

Introduction to python programming, Intermediate python online certification

Professional memberships

Institute for Operations Research and Management Science
Production and Operations Management Society
Canadian Operational Research Society
Decision Sciences Institute

Other interests

Playing chess, Listening to music, and traveling

References

Dr. Mohamad Wahab Mohamad Ismail,
Professor, Mechanical and Industrial Engineering,
Toronto Metropolitan university
Email: wahab@ryerson.ca

Dr. Liping Fang,
Professor, Mechanical and Industrial Engineering,
Toronto Metropolitan university
Email: lfang@ryerson.ca

Dr. Saeed Zolfaghari,
Professor, Department of Mechanical and Industrial Engineering,
Toronto Metropolitan university
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