#### Dr. Ali Diabat الدكتور على الذيابات

Professor of Logistics and Supply Chain Management, Division of Engineering, New York University Abu Dhabi, Abu Dhabi, United Arab Emirates Global Network Professor of Civil and Urban Engineering, Tandon School of Engineering, New York University, Brooklyn, United States of America E-mail: <u>diabat@nyu.edu</u>

#### BIOGRAPHY

Dr. Ali Diabat received his B.Sc. degree in Mechanical Engineering from Jordan University of Science and Technology, Jordan in 1999, his M.Sc. degree in Operations Research from North Carolina State University, USA in 2003, and his Ph.D. in Industrial Engineering from Purdue University, USA in 2008. In June 2008, he joined Masdar Institute of Science and Technology<sup>1</sup> in Abu Dhabi as an Assistant Professor of Engineering Systems and Management, and due to his exceptional performance he was promoted to Associate Professor in June 2012, and to Full Professor in June 2016. Right after completing nine years at Masdar Institute, he joined New York University Abu Dhabi as a Global Network Professor of Civil and Urban Engineering. Dr. Diabat's research focuses on different applications of optimization and operations research: in particular, logistics and supply chain management, healthcare logistics optimization, and production planning. Dr. Diabat has published over 160 research journal papers (over 80 of them since he joined NYUAD in June 2017) and over 30 conference papers in leading journals and international conference proceedings. Many of his publications are co-authored with his own graduate students and, in many cases, with national and international collaborators. Dr. Diabat's research has received about 5 million dollars of grant funding from different industries and collaborative proposals with academic institutions. His industry experience includes working in the oil shipping industry in the Hashemite Kingdom of Jordan. After that, he held a position as business analyst at United Airlines, and two positions as an operations research analyst in the banking and beverages industries, all in the United States. Dr. Diabat has received several excellence in teaching awards, including an Outstanding Graduate Instructor Award and an Excellence in Teaching Award from Purdue University, in 2004 and 2006, respectively. Dr. Diabat was the recipient of the 2012 Excellence in Teaching Award from Masdar Institute, an achievement of special significance as it was the first award of its kind offered at the Institute. In 2014, he also received the Best Faculty Research Award from the Department of Engineering Systems and Management at Masdar Institute. Most recent award was The Best Engineering Teaching Award in 2022. Dr. Diabat currently serves as an Associate Editor of the SME Journal of Manufacturing Systems (JMS) and as an Area Editor of the Journal of Computers and Industrial Engineering, two of the leading journals in the field of Industrial Engineering published by Elsevier. He is a member of Mohammed Bin Rashid Academy of Scientists (MBRAS), a platform for the science community within the UAE that includes a selection of scientists and experts foreseeing the future of developments in the field of science and technology.

1 Masdar Institute of Science and Technology (MI) was established in 2007 in Abu Dhabi, in collaboration with the Massachusetts Institute of Technology (MIT), as an independent non-profit graduate level research university focused on advanced energy and sustainable technology. The Institute has served to develop the intellectual and human capital of relevance to the UAE's knowledge economy transformation through its high quality academics and research of relevance to local, regional, and global needs.

## EDUCATIONAL BACKGROUND

May 2008	Ph.D. in Industrial Engineering, GPA: 4.0/4.0		
	Purdue University, USA		
	Dissertation title: Integrated Supply Chain Networks Design: Models and		
	Algorithms		
	Advisor: Jean-Philippe P. Richard		
Aug 2003	M.Sc. in Operations Research, GPA: 4.0/4.0		
	North Carolina State University, USA		
June 1999	B.Sc. in Mechanical Engineering		
	Jordan University of Sci. & Tech., Jordan		

## ACADEMIC AND INDUSTRIAL POSITIONS

Jan 2024 – Current	Honorary Professor
	School of Engineering, The University of Jordan, Amman, Jordan
Jun 17 - Current	Full Professor
	New York University Abu Dhabi, Abu Dhabi, United Arab Emirates
Jun 16 - May 17	Full Professor
	Masdar Institute of Sci. & Tech., Abu Dhabi, United Arab Emirates
Jun 12- May 16	Associate Professor
	Masdar Institute of Sci. & Tech., Abu Dhabi, United Arab Emirates
Jun 08 - Jun 12	Assistant Professor
	Masdar Institute of Sci. & Tech., Abu Dhabi, United Arab Emirates
Jan 11 - Jul 11	Visiting Scholar
	Massachusetts Institute of Technology, Cambridge, MA, USA
May 07 - May 08	Senior Operations Research Analyst
	E. & J. Gallo, Modesto, California, USA
Aug 03 - May 07	Instructor: Calculus I, II, and III
	Math Department, Purdue University, West Lafayette, Indiana, USA
May 06 - Aug 06	Course Coordinator: Linear Algebra
	Math Department, Purdue University, West Lafayette, Indiana, USA
May 05 - Aug 05	Optimization Consultant
	United Airlines, Chicago, Illinois, USA
May 04 - Aug 04	Operations Research Analyst
	Bank of America, Charlotte, North Carolina, USA
May 03 - Aug 03	Operations Research Analyst
	Bank of America, Charlotte, North Carolina, USA
Aug 02 - Aug 03	Teaching Assistant
	School of Industrial Engineering, NCSU Raleigh, North Carolina, USA
Jun 99 - Aug 01	Business Analyst
	Ramtha Crude Oil Transportation, Amman, Jordan

### **RESEARCH INTERESTS**

Applications	Logistics and Supply Chain Management
	Healthcare Logistics Management
	Production Planning
Methodology	Applied Optimization and Operations Research

#### PUBLICATIONS

#### Peer-Reviewed Papers in Refereed Journals

### (i) <u>With NYU affiliation:</u>

- 1. Mulumba, Timothy; **Diabat, Ali**. "Optimization of the drone-assisted pickup and delivery problem." Transportation Research Part E: Logistics and Transportation Review. Volume 181, 103377. Elsevier, 2024.
- 2. **Diabat, Ali**; Bianchessi, Nicola; Archetti, Claudia. "On the zero-inventory-ordering policy in the inventory routing problem." European Journal of Operational Research. Volume 312, Issue 3, Pages 1024-1038. Elsevier, 2024.
- 3. Mulumba, Timothy; Najy, Waleed; **Diabat, Ali**. "The drone-assisted pickup and delivery problem: An adaptive large neighborhood search metaheuristic." Computers & Operations Research. Volume 161, 106435. Elsevier, 2024.
- Al Theeb, Nader; Diabat, Ali; Abu-Aleqa, Mohammed. "Multi-objective optimization of two-echelon vehicle routing problem: Vaccines distribution as a case study." Computers & Industrial Engineering. Volume 187, 109590. Elsevier, 2024.
- 5. Mohamed, Ahmed; **Diabat, Ali**; Abualigah, Laith. "Optimizing energy-efficient data replication for IoT applications in fog computing." International Journal of Communication Systems. Volume 37, Issue 14, e5864. Wiley, 2024.
- Sadeghi, Saleh; Ahmadian, Ali; Diabat, Ali; Elkamel, Ali. "Modeling energy management of an energy hub with hybrid energy storage systems for a smart island considering water– electricity nexus." International Journal of Hydrogen Energy. Volume 71, Pages 600-616. Elsevier, 2024.
- Alkaabneh, Faisal, Karmel S. Shehadeh, and Ali Diabat. "Routing and resource allocation in non-profit settings with equity and efficiency measures under demand uncertainty." Transportation Research Part C: Emerging Technologies. Volume 149, 104023. Elsevier, 2023.
- 8. Abou Kasm, Omar, **Ali Diabat**, and Joseph YJ Chow. "Simultaneous operation of nextgeneration and traditional quay cranes at container terminals." European Journal of Operational Research. Volume 308, Issue 3, Pages 1110-1125. Elsevier, 2023.
- 9. Nujoom, Reda; Mohammed, Ahmed; **Diabat, Ali**. "Manufacturing system reconfiguration towards sustainable production: a novel hybrid optimization methodology."

Environmental Science and Pollution Research. Volume 30, Pages 110687–110714. Springer, 2023.

- Alkaabneh, Faisal, and Ali Diabat. "A multi-objective home healthcare delivery model and its solution using a branch-and-price algorithm and a two-stage meta-heuristic algorithm." Transportation Research Part C: Emerging Technologies. Volume 147, 103838. Elsevier, 2023.
- Mohammed, Ahmed; Zubairu, Nasiru; Yazdani, Morteza; Diabat, Ali; Li, Xiaodong. "Resilient supply chain network design without lagging sustainability responsibilities." Applied Soft Computing. Volume 140, 110225. Elsevier, 2023.
- 12. Abualigah, Laith; **Diabat, Ali**; Thanh, Cuong-Le; Khatir, Samir. "Opposition-based Laplacian distribution with Prairie Dog Optimization method for industrial engineering design problems." Computer Methods in Applied Mechanics and Engineering. Volume 414, 116097. Elsevier, 2023.
- 13. Zheng, Jing, Chaher Alzaman, and **Ali Diabat**. "Big data analytics in flexible supply chain networks." Computers & Industrial Engineering. Volume 178, 109098. Elsevier, 2023.
- Najy, Waleed, Claudia Archetti, and Ali Diabat. "Collaborative truck-and-drone delivery for inventory-routing problems." Transportation Research Part C: Emerging Technologies. Volume 146, 103791. Elsevier, 2023.
- Abou Kasm, Omar, Ali Diabat, and Kaan Ozbay. "Vessel scheduling under different tugboat allocation policies." Computers & Industrial Engineering. Volume 177, 108902. Elsevier, 2023.
- Abualigah, Laith, and Ali Diabat. "Chaotic binary reptile search algorithm and its feature selection applications." Journal of Ambient Intelligence and Humanized Computing. Volume 14, Pages13931–13947. Springer, 2023.
- Abualigah, Laith, Ali Diabat, Davor Svetinovic, and Mohamed Abd Elaziz. "Boosted Harris Hawks gravitational force algorithm for global optimization and industrial engineering problems." Journal of Intelligent Manufacturing. Volume 34, Pages 2693–2728. Springer, 2023.
- Abualigah, Laith; Diabat, Ali; Altalhi, Maryam; Abd Elaziz, Mohamed; "Improved gradual change-based Harris Hawks optimization for real-world engineering design problems." Engineering with Computers. Volume 39, Pages 1843–1883. Springer, 2023.
- 19. Abualigah, Laith; **Diabat, Ali**; "Improved multi-core arithmetic optimization algorithmbased ensemble mutation for multidisciplinary applications." Journal of Intelligent Manufacturing. Volume 34, Pages 1833–1874. Springer, 2023.
- 20. Abualigah, Laith; **Diabat, Ali**; Abd Elaziz, Mohamed; "Improved slime mould algorithm by opposition-based learning and Levy flight distribution for global optimization and advances in real-world engineering problems." Journal of Ambient Intelligence and Humanized Computing. Volume 14, Pages 1163–1202. Springer, 2023.
- 21. Mohammed, Ahmed; Jabbour, Ana; **Diabat, Ali**; "COVID-19 pandemic disruption: a matter of building companies' internal and external resilience." International Journal of Production Research. Volume 61, Issue 8, Pages 2716-2737. Taylor & Francis, 2023.

- 22. Yu, Bin; Shan, Wenxuan; Sheu, Jiuh-Biing; **Diabat, Ali**; "Branch-and-price for a combined order selection and distribution problem in online community group-buying of perishable products." Transportation Research Part B: Methodological. Volume 158, Pages 341-373. Elsevier, 2022.
- 23. Kenan, Nabil; Jebali, Aidal; **Diabat, Ali**; "The Integrated Quay Crane Assignment and Scheduling Problems with Carbon Emissions Considerations." Computers & Industrial Engineering. Volume 165, 107734. Elsevier, 2022.
- Bai, Danyu; Diabat, Ali; Wang, Xinyue; Yang, Dandan; Fu, Yao; Zhang, Zhi-Hai; Wu, Chin-Chia; "Competitive bi-agent flowshop scheduling to minimise the weighted combination of makespans." International Journal of Production Research. Volume 60, Issue 22, Pages 6750-6771. Taylor & Francis, 2022.
- 25. Daneshzand, Farzaneh, Mehdi Asali, Saad A. Al-Sobhi, **Ali Diabat**, and Ali Elkamel. "A simulation-based optimization scheme for phase-out of natural gas subsidies considering welfare and economic measures." Energy. Volume 259, 124879. Elsevier, 2022.
- 26. Abualigah, Laith, **Ali Diabat**, and Raed Abu Zitar. "Orthogonal Learning Rosenbrock's Direct Rotation with the Gazelle Optimization Algorithm for Global Optimization." Mathematics. Volume 10, Issue 23, 4509. MDPI, 2022.
- 27. Abualigah, Laith; **Diabat, Ali**; "Chaotic binary Group Search Optimizer for feature selection." Expert Systems with Applications. Volume 192, 116368. Elsevier, 2022.
- Kenan, Nabil; Diabat, Ali; "The supply chain of blood products in the wake of the COVID-19 pandemic: Appointment scheduling and other restrictions." Transportation Research Part E: Logistics and Transportation Review. Volume 159, 102576. Elsevier, 2022.
- 29. Lu, Chung-Cheng; **Diabat, Ali**; Li, Yi-Ting; Yang, Yu-Min; "Combined passenger and parcel transportation using mixed fleet of electric and gasoline vehicles." Transportation Research Part E: Logistics and Transportation Review. Volume 157, 102546. Elsevier, 2022.
- 30. Lu, Chung-Cheng; Yan, Shangyao; Li, Hui-Chieh; **Diabat, Ali**; Wang, Hsiao-Tung; "Optimal fleet deployment for electric vehicle sharing systems with the consideration of demand uncertainty." Computers & Operations Research, Volume 135, 105437. Elsevier, 2021.
- Abualigah, Laith; Diabat, Ali; Sumari, Putra; Gandomi, Amir H; "Applications, deployments, and integration of internet of drones (iod): A review." IEEE Sensors Journals, Volume 21, Issue 22, Pages 25532-25546. IEEE, 2021.
- 32. Abualigah, Laith; **Diabat, Ali**; Sumari, Putra; Gandomi, Amir H; "A novel evolutionary arithmetic optimization algorithm for multilevel thresholding segmentation of covid-19 ct images." Processes, Volume 9, Issue 7, 1155. MDPI, 2021.
- 33. Abualigah, Laith; **Diabat, Ali**; Abd Elaziz, Mohamed; "Intelligent workflow scheduling for Big Data applications in IoT cloud computing environments." Cluster Computing, Volume 24, Pages 2957–2976. Springer, 2021.
- 34. Abou Kasm, Omar; **Diabat, Ali**; Bierlaire, Michel; "Vessel scheduling with pilotage and tugging considerations." Transportation Research Part E: Logistics and Transportation Review. Volume 148, 102231. Elsevier, 2021.

- 35. Zhang, Yanzi; **Diabat, Ali**; Zhang, Zhi-Hai; "Reliable closed-loop supply chain design problem under facility-type-dependent probabilistic disruptions." Transportation Research Part B: Methodological. Volume 146, Pages 180-209. Elsevier, 2021.
- 36. Fathi, Mahdi; Khakifirooz, Marzieh; **Diabat, Ali**; Chen, Huangen; "An integrated queuingstochastic optimization hybrid genetic algorithm for a location-inventory supply chain network." International Journal of Production Economics. Volume 237, 108139. Elsevier, 2021.
- 37. **Diabat, Ali**; Archetti, Claudia; Najy, Waleed; "The fixed-partition policy inventory routing problem." Transportation Science. Volume 55, Issue 2, Pages 353-370. INFORMS, 2021.
- 38. Wang, Feng; **Diabat, Ali**; Wu, Lunwen; "Supply chain coordination with competing suppliers under price-sensitive stochastic demand." International Journal of Production Economics. Volume 234, 108020. Elsevier, 2021.
- 39. Alkaabneh, Faisal; **Diabat, Ali**; Gao, Huaizhu; "A unified framework for efficient, effective, and fair resource allocation by food banks using an Approximate Dynamic Programming approach." Omega: The International Journal of Management Science. Volume 100, 102300. Elsevier, 2021.
- 40. Elkamel, Marwen; Ahmadian, Ali; **Diabat, Ali**; Zheng, Qipeng; "Stochastic optimization for price-based unit commitment in renewable energy-based personal rapid transit systems in sustainable smart cities." Sustainable Cities and Society. Volume 65, 102618. Elsevier, 2021.
- 41. Zahedi, Ali; Salehi-Amiri, Amirhossein; Hajiaghaei-Keshteli, Mostafa; **Diabat, Ali**; "Designing a closed-loop supply chain network considering multi-task sales agencies and multi-mode transportation." Soft Computing. Volume 25, Pages 6203–6235. Springer, 2021.
- 42. Abualigah, Laith; Shehab, Mohammad; **Diabat, Ali**; Abraham, Ajith; "Selection scheme sensitivity for a hybrid Salp Swarm Algorithm: Analysis and applications." Engineering with Computers. Volume 38, Pages 1149–1175. Springer, 2022.
- 43. Abualigah, Laith; **Diabat, Ali**; "Advances in Sine Cosine Algorithm: A comprehensive survey." Artificial Intelligence Review: An International Science and Engineering Journal. Volume 54, Pages 2567–2608. Springer, 2021.
- 44. **Diabat, Ali**; Jebali, Aida; "Multi-product and multi-period closed loop supply chain network design under take-back legislation." International Journal of Production Economics. Volume 231, 107879. Elsevier, 2021.
- 45. Abualigah, Laith; **Diabat, Ali**; irjalili, Seyedali; Abd Elaziz, Mohamed; Gandomi, Amir; "The arithmetic optimization algorithm." Computer Methods in Applied Mechanics and Engineering. Volume 376, 113609. Elsevier, 2021.
- 46. Abualigah, Laith; **Diabat, Ali**; "A novel hybrid antlion optimization algorithm for multiobjective task scheduling problems in cloud computing environments." Cluster Computing. Volume 24, Pages 205–223. Springer, 2021.
- 47. Abou Kasm, Omar; **Diabat, Ali**; "Next-Generation Quay Crane Scheduling." Transportation Research Part C: Emerging Technologies. Volume 114, Pages 694-715. Elsevier, 2020.
- 48. Najy, Waleed; Diabat, Ali; "Benders decomposition for multiple-allocation hub-and-spoke network design with economies of scale and node congestion." Transportation Research Part B: Methodological. Volume 133, Pages 62-84. Elsevier, 2020.

- 49. Abualigah, Laith; **Diabat, Ali**; "A comprehensive survey of the Grasshopper optimization algorithm: results, variants, and applications." Neural Computing & Applications. Volume 32, Pages 15533–15556. Springer, 2020.
- 50. Liao, Yi; Kaviyani-Charati, Mohammad; Hajiaghaei-Keshteli, Mostafa; **Diabat, Ali**; "Designing a closed-loop supply chain network for citrus fruits crates considering environmental and economic issues." Journal of Manufacturing Systems. Volume 55, Pages 199-220. Elsevier, 2020.
- 51. Abou Kasm, Omar; **Diabat, Ali**; Cheng, TCE; "The integrated berth allocation, quay crane assignment and scheduling problem: mathematical formulations and a case study." Annals of Operations Research, Volume 291, Pages 435–461. Springer, 2020.
- 52. Liao, Yi; **Diabat, Ali**; Alzaman, Chaher; Zhang, Yiqiang; "Modeling and heuristics for production time crashing in supply chain network design." Annals of Operations Research, Volume 288, Pages 331–361. Springer, 2020.
- 53. Liu, Yunhua; Dehghani, Ehsan; Jabalameli, Mohammad; **Diabat, Ali**; Lu, Chung-Cheng; "A coordinated location-inventory problem with supply disruptions: A two-phase queuing theory-optimization model approach." Computers & Industrial Engineering. Volume 142, 106326. Elsevier, 2020.
- 54. **Diabat, Ali**; Dolgui, Alexandre; Janiak, Wladyslaw; Kovalyov, Mikhail; "Three parallel task assignment problems with shared resources." IISE Transactions. Volume 52, Issue 4, Pages 478-485. Taylor & Francis, 2020.
- 55. Hamdan, Bayan; **Diabat, Ali**; "Robust design of blood supply chains under risk of disruptions using Lagrangian relaxation." Transportation Research Part E: Logistics and Transportation Review. Volume 134, 101764. Elsevier, 2020.
- 56. Alkaabneh, Faisal; **Diabat, Ali**; Gao, Huaizhu; "Benders decomposition for inventory vehicle routing problem with perishable products and environmental costs." Computers & Operations Research. Volume 113, 104751. Elsevier, 2020.
- 57. Li, Yongbo; **Diabat, Ali**; Lu, Chung-Cheng; "Leagile supplier selection in Chinese textile industries: A DEMATEL approach." Annals of Operations Research, Volume 287, Issue 1, Pages 303–322. Springer, 2020.
- 58. Bao, Xing; **Diabat, Ali**; Zheng, Zhongliang; "An ambiguous manager's disruption decisions with insufficient data in recovery phase." International Journal of Production Economics, Volume 221, 107465. Elsevier, 2020.
- 59. Li, Yongbo; Pinto, Mark; **Diabat, Ali**; "Analyzing the critical success factor of CSR for the Chinese textile industry." Journal of Cleaner Production. Volume 260, 120878. Elsevier, 2020.r4t
- 60. Elkamel, Marwen; Schleider, Lily; Pasiliao, Eduardo; **Diabat, Ali**; Zheng, Qipeng; "Long-term electricity demand prediction via socioeconomic factors—a machine learning approach with a case study of Florida." Applied Sciences. Volume 13, Issue 15, 3996. MDPI, 2020.
- Abualigah, Laith; Diabat, Ali; Geem, Zong Woo; "A comprehensive survey of the Harmony Search Algorithm in clustering applications." Applied Sciences. Volume 10, Issue 11, 3827. MDPI, 2020.

- 62. Li, Yongbo; Sankaran, Bathrinath; Kumar, Thresh; **Diabat, Ali**; "Risks assessment in thermal power plants using ISM methodology." Annals of Operations Research. Volume 279, Issue 2, Pages 89–113. Springer, 2019.
- 63. Abou Kasm, Omar; **Diabat, Ali**; "The quay crane scheduling problem with non-crossing and safety clearance constraints: An exact solution approach." Computers & Operations Research. Volume 107, Pages 189-199. Elsevier, 2019.
- 64. Alkaabneh, Faisal; **Diabat, Ali**; Elhedhli, Samir; "A Lagrangian heuristic and GRASP for the huband-spoke network system with economies-of-scale and congestion." Transportation Research Part C: Emerging Technologies. Volume 102, Pages 249-273. Elsevier, 2019.
- 65. Wang, Shuaian; Zhang, Wei; Bie, Yiming; Wang, Kai; **Diabat, Ali**; "Mixed-integer second-order cone programming model for bus route clustering problem." Transportation Research Part C: Emerging Technologies. Volume 102, Pages 351-369. Elsevier, 2019.
- Shuang, Yan; Diabat, Ali; Liao, Yi; "A stochastic reverse logistics production routing model with emissions control policy selection." International Journal of Production Economics. Volume 213, Pages 201-216. Elsevier, 2019.
- 67. Ahmed, Farah Ejaz; Hashaikeh, Raed; **Diabat, Ali**; Hilal, Nidal; "Mathematical and optimization modelling in desalination: State-of-the-art and future direction." Desalination. Volume 469, Page 114092. Elsevier, 2019.
- Hong, Jiangtao; Alzaman, Chaher; Diabat, Ali; Bulgak, Akif; "Sustainability dimensions and PM<sub>2.5</sub> in supply chain logistics." Annals of Operations Research. Volume 275 (2), Pages 339-366. Springer, 2019.
- 69. **Diabat, Ali**; Jabbarzadeh, Armin; Khosrojerdi, Amir; "A perishable product supply chain network problem with reliability and disruption considerations." International Journal of Production Economics. Volume 212, Pages 125-138. Elsevier, 2019.
- 70. Shamayleh, Abdulrahim; Hariga, Moncer; As'ad, Rami; **Diabat, Ali**; "Economic and environmental models for cold products with time varying demand." Journal of Cleaner Production. Volume 212, Pages 847-863. Elsevier, 2019.
- 71. Hamdan, Bayan; **Diabat, Ali**; "A two-stage multi-echelon stochastic blood supply chain problem." Computers & Operations Research. Volume 101, Pages 130-143. Elsevier, 2019.
- 72. Abou Kasm, Omar; Mohandes, Baraa; **Diabat, Ali**; El Khatib, Sameh; "Exam timetabling with allowable conflicts within a time window." Computers & Industrial Engineering. Volume 127, Pages 263-273. Elsevier, 2019.
- Zhang, Yiqiang; Alshraideh, Hussam; Diabat, Ali; "A stochastic reverse logistics production routing model with environmental considerations." Annals of Operations Research. Volume 271, Issue 2, Pages 1023-1044. Springer, 2018.
- Kenan, Nabil; Diabat, Ali; Jebali, Aida; "Codeshare agreements in the integrated aircraft routing problem." Transportation Research Part B: Methodological. Volume 117, Pages 272-295. Elsevier, 2018.
- 75. Janssen, Larissa; **Diabat, Ali**; Sauer, Jürgen; Herrmann, Frank; "A stochastic micro-periodic age-based inventory replenishment policy for perishable goods." Transportation Research Part E: Logistics and Transportation Review. Volume 118, Pages 445-465. Elsevier, 2018.

- 76. Kenan, Nabil; Jebali, Aida; Diabat, Ali; "The integrated aircraft routing problem with optional flights and delay considerations." Transportation Research Part E: Logistics and Transportation Review. Volume 118, Pages 355-375. Elsevier, 2018.
- 77. Kenan, Nabil; Jebali, Aida; **Diabat, Ali**; "An integrated flight scheduling and fleet assignment problem under uncertainty." Computers & Operations Research. Volume 100, Pages 333-342. Elsevier, 2018.
- Msakni, Mohamed Kais; Diabat, Ali; Rabadi, Ghaith; Al-Salem, Mohamed; Kotachi, Mariam; "Exact methods for the quay crane scheduling problem when tasks are modeled at the single container level." Computers & Operations Research. Volume 99, Pages 218-233. Elsevier, 2018.
- 79. Hong, Jiangtao; **Diabat, Ali**; Panicker, Vinay; Rajagopalan, Sridharan; "A two-stage supply chain problem with fixed costs: An ant colony optimization approach." International Journal of Production Economics. Volume 204, Pages 214-226. Elsevier, 2018.
- 80. Alshamsi, Ahmed; **Diabat, Ali**; "Large-scale reverse supply chain network design: An accelerated Benders decomposition algorithm." Computers & Industrial Engineering. Volume 124, Pages 545-559. Elsevier, 2018.
- 81. Alzaman, Chaher; Zhang, Zhi-Hai; **Diabat, Ali**; "Supply chain network design with direct and indirect production costs: Hybrid gradient and local search-based heuristics." International Journal of Production Economics. Volume 203, Pages 203-215. Elsevier, 2018.
- 82. Zhang, Xu; Bai, Hao; Zhao, Xiancong; Diabat, Ali; Zhang, Jian; Yuan, Huanmei; Zhang, Zefei; "Multi-objective optimisation and fast decision-making method for working fluid selection in organic Rankine cycle with low-temperature waste heat source in industry." Energy Conversion and Management. Volume 172, Pages 200-211. Elsevier, 2018.
- 83. Jebali, Aida; **Diabat, Ali**; "A Chance-constrained operating room planning with elective and emergency cases under downstream capacity constraints." Computers & Industrial Engineering. Volume 114, Pages 329-344. Elsevier, 2017.
- 84. **Diabat, Ali**; Taleizadeh, Ata Allah; Lashgari, Mohsen; "A lot sizing model with partial downstream delayed payment, partial upstream advance payment, and partial backordering for deteriorating items." Journal of Manufacturing Systems. Volume 45, Pages 322-342. Elsevier, 2017.

### (ii) <u>With Masdar Institute affiliation:</u>

- 85. Kannan, Devika; Garg, Kiran; Jha, P. C.; **Diabat, Ali**; "Integrating disassembly line balancing in the planning of a reverse logistics network from the perspective of a third-party provider." Annals of Operations Research. Volume 253, Issue 1, Pages 353-376. Springer, 2017.
- 86. Alshamsi, Ahmed; **Diabat, Ali**; "A genetic algorithm for reverse logistics network design: A case study from the GCC." Journal of Cleaner Production. Volume 151, Pages 652-669. Elsevier, 2017.

- 87. **Diabat, Ali**; Dehghani, Ehsan; Jabbarzadeh, Armin; "Incorporating location and inventory decisions into a supply chain design problem with uncertain demands and lead times." Journal of Manufacturing Systems. Volume 43, Pages 139-149, Elsevier, 2017.
- 88. Hiassat, Abdelhalim; **Diabat, Ali**; Rahwan, Iyad; "A genetic algorithm approach for locationinventory-routing problem with perishable products." Journal of Manufacturing Systems. Volume 42, Pages 93-103, Elsevier, 2017.
- 89. Al-Dhaheri, Noura; **Diabat, Ali**; "A Lagrangian relaxation-based heuristic for the multiship quay crane scheduling problem with ship stability constraints." Annals of Operations Research. Volume 248, Issue 1, Pages 1-24. Springer, 2017.
- 90. Al-Refaie, Abbas; Al-Alaween, Wafa'a; **Diabat, Ali**; Li, Ming-Hsien; "Solving dynamic systems with multi-responses by integrating desirability function and data envelopment analysis." Journal of Intelligent Manufacturing. Volume 28, Issue 2, Pages 387–403. Springer, 2017.
- 91. Al-Salem, Mohammed; Almomani; Alrefaei, Mahmoud; **Diabat, Ali**; "On the optimal computing budget allocation problem for large scale simulation optimization." Simulation Modelling Practice and Theory. Volume 71, Pages 149–159. Elsevier, 2017.
- 92. Al-Hammadi, Jasem; Diabat, Ali; "An integrated berth allocation and yard assignment problem for bulk ports: Formulation and case study." RAIRO Operations Research. Volume 51, Issue 1, Pages 267 284. EDP Sciences, 2017.
- 93. Woldeamlak, Selamawit; **Diabat, Ali**; Svetinovic, Davor; "Goal-oriented requirements engineering for research-intensive complex systems: A case study." Systems Engineering. Volume 19, No. 4, Pages 322-333, Wiley, 2016.
- 94. Diabat, Ali; Abdallah, Tarek; Le, Tung; "A hybrid tabu search based heuristic for the periodic distribution inventory problem with perishable goods." Annals of Operations Research. Volume 242, Issue 2, Pages 373–398. Springer, 2016.
- 95. Al-Dhaheri, Noura; Jebali, Aida; **Diabat, Ali**; "A simulation-based genetic algorithm approach for the quay crane scheduling under uncertainty." Simulation Modelling Practice and Theory. Elsevier. Volume 66, Pages 122-138. Elsevier, 2016.
- 96. Luthra, Sunil; Mangla, Sachin Kumar; Xu, Lei; **Diabat, Ali**; "Using AHP to evaluate barriers in adopting sustainable consumption and production initiatives in a supply chain." Intentional Journal of Production Economics. Volume 181, Part B, Pages 342–349. Elsevier, 2016.
- 97. Al-Salem, Mohammed; **Diabat, Ali**; Dalalah, Doraid; Alrefaei, Mahmoud; "A closed-loop supply chain management problem: Reformulation and piecewise linearization." Journal of Manufacturing Systems. Volume 40, No. 1, Pages 1-8, Elsevier, 2016.
- 98. Al-Dhaheri, Noura; Jebali, Aida; **Diabat, Ali**; "The quay crane scheduling problem with nonzero crane repositioning time and vessel stability constraints." Computers & Industrial Engineering. Volume 94, Pages 230-244. Elsevier, 2016.
- 99. **Diabat, Ali**; "A capacitated facility location and inventory management problem with single sourcing." Optimization Letters. Volume 10, Issue 7, Pages 1577-1592. Springer, 2016.
- 100. Wang, Yanxiang; Almazrooei, Shaikha; Kapsalyamova, Zhanna; Diabat, Ali; Tsai, I-Tsung; "Utility subsidy reform in Abu Dhabi: A review and a computable general equilibrium analysis." Renewable and Sustainable Energy Reviews. Volume 55, Pages 1352-1362. Elsevier, 2016.
- 101. Wang, Zhigang; Mathiyazhagan, K.; Xu, Lei; **Diabat, Ali**; "A decision making trial and evaluation laboratory approach for analyzing the barriers to green supply chain management

adoption in the food packaging company." Journal of Cleaner Production. Volume 117, Pages 19–28. Elsevier, 2016.

- 102. Santibanez-Gonzalez, Ernesto DR; **Diabat, Ali**; "Modeling logistics service providers in a non-cooperative supply chain." Applied Mathematical Modelling. Volume 40, Pages 6340-6358. Elsevier, 2016.
- 103. Abu Alhaj, Malek; Svetinovic, Davor; **Diabat, Ali**; "A carbon-sensitive two-echeloninventory supply chain model with stochastic demand." Resources, Conservation & Recycling. Volume 108, Pages 82-87. Elsevier, 2016.
- 104. Jebali, Aida; **Diabat, Ali**; "A stochastic model for operating room planning under capacity constraints." International Journal of Production Research. Volume 53, Issue 24, Pages 7252-7270. Taylor & Francis, 2015.
- 105. **Diabat, Ali**; Theodorou, Effrosyni; "A location-inventory supply chain problem: Reformulation and piecewise linearization." Computers & Industrial Engineering. Volume 90, Pages 381–389. Elsevier, 2015.
- 106. Khreishah, Abdallah; Chakareski, Jacob; Gharaibeh, Ammar; Khalil, Issa; Diabat, Ali; "Towards efficient operation of internet data center networks: Joint data placement and flow control for cost optimization." Simulation Modelling Practice and Theory. Volume 64, Pages 83-98. Elsevier, 2016.
- 107. Al Zaabi, Shaikha; **Diabat, Ali**; "On the berth allocation problem." RAIRO Operations Research. Volume 50, Issue 3, Pages 491-501. EDP Sciences, 2016.
- 108. Alshamsi, Ahmed; **Diabat, Ali**; "A reverse logistics network design." Journal of Manufacturing Systems. Volume 37, No. 3, Pages 589-598. Elsevier, 2015.
- 109. Hong, Xianpei; Chunyuan, Wang; Xu, Lei; **Diabat, Ali**; "Multiple-vendor, multiple-retailer based vendor-managed inventory." Annals of Operations Research. Volume 238, Issue 1, Pages 277-297. Springer, 2016.
- 110. Dalalah, Doraid; **Diabat, Ali**; "Repeatability and reproducibility in med labs: a procedure to measurement system analysis." IET Science, Measurement & Technology. Volume 9, Issue 7, Pages 826-835. IET, 2015.
- 111. **Diabat, Ali**; Deskoores, Rany; "A hybrid genetic algorithm-based heuristic for an integrated supply chain problem." Journal of Manufacturing Systems. Volume 38, No. 1, Pages 172-180. Elsevier, 2016.
- 112. Tan, Youchao; Shetty, Udaya; **Diabat, Ali**; Pakkala, TPM; "Aggregate directional distance formulation of DEA with integer variables." Annals of Operations Research. Volume 235, Issue 1, Pages 741-756. Springer, 2015.
- 113. Jia, Peng; **Diabat, Ali**; Mathiyazhagan, K; "Analyzing the SSCM practices in the mining and mineral industry by ism approach." Resources Policy. Volume 46, No. 1, Pages 76-85. Elsevier, 2015.
- 114. Zeng, Qingcheng; **Diabat, Ali**; Zhang, Qian; "A simulation optimization approach for solving the dual-cycling problem in container terminals." Maritime Policy & Management. Volume 42, Issue 8, Pages 806-826. Taylor & Francis, 2015.
- 115. Al Dhaheri, Noura; **Diabat, Ali**; "The quay crane scheduling problem." Journal of Manufacturing Systems. Volume 36, Pages 87-94. Elsevier, 2015.

- 116. Garg, Kiran; Kannan, Devika; **Diabat, Ali**; Jha, PC; "A multi-criteria optimization approach to manage environmental issues in closed loop supply chain network design." Journal of Cleaner Production. Volume 100, Pages 297-314. Elsevier, 2015.
- 117. Suleiman, Husam; Alqassem, Israa; **Diabat, Ali**; Arnautovic, Edin; Svetinovic, Davor; "Integrated smart grid systems security threat model." Information Systems. Volume 53, Pages 147–160. Elsevier, 2015.
- 118. **Diabat, Ali**; Abdallah, Tarek; Henschel, Andreas; "A closed-loop location-inventory problem with spare parts consideration." Computers & Operations Research. Volume 54, Pages 245-256. Elsevier, 2015.
- 119. **Diabat, Ali**; Battaïa, Olga; Nazzal, Dima; "An improved Lagrangian relaxation-based heuristic for a joint location-inventory problem." Computers & Operations Research. Volume 61, Pages 170-178. Elsevier, 2015.
- Govindan, Kannan; Diabat, Ali; Shankar, K Madan; "Analyzing the drivers of green manufacturing with fuzzy approach." Journal of Cleaner Production. Volume 96, Pages 182-193. Elsevier, 2015.
- 121. Fu, Yi-Min; **Diabat, Ali**; "A Lagrangian relaxation approach for solving the integrated quay crane assignment and scheduling problem." Applied Mathematical Modelling. Volume 39, Issue 3, Pages 1194-1201. Elsevier, 2015.
- 122. Theodorou, Effrosyni; **Diabat, Ali**; "A joint quay crane assignment and scheduling problem: formulation, solution algorithm and computational results." Optimization Letters. Volume 9, Issue 4, Pages 799-817. Springer, 2015.
- 123. Alrefaei, Mahmoud; **Diabat, Ali**; "Modelling and optimization of outpatient appointment scheduling." RAIRO Operations Research. Volume 49, Issue 3, Pages 435-450. EDP Sciences, 2015.
- 124. Simrin, Ahmed; **Diabat, Ali**; "The dynamic berth allocation problem: A linearized formulation." RAIRO Operations Research. Volume 49, Issue 3, Pages 473-494. EDP Sciences, 2015.
- 125. **Diabat, Ali**; Richard, Jean-Philippe P; "An integrated supply chain problem: A nested Lagrangian relaxation approach." Annals of Operations Research. Volume 229, Issue 1, Pages 303-323. Springer, 2015.
- 126. Zafar, Nauman; Arnautovic, Edin; **Diabat, Ali**; Svetinovic, Davor; "System security requirements analysis: A smart grid case study." Systems Engineering. Volume 17, Issue 1, Pages 77-88. Wiley, 2014.
- 127. Al-Refaie, Abbas; **Diabat, Ali**; Li, Ming-Hsien; "Optimizing tablets' quality with multiple responses using fuzzy goal programming." Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering. Volume 228, Issue 2, Pages 115-126. SAGE, 2014.
- 128. **Diabat, Ali**; "Hybrid algorithm for a vendor managed inventory system in a two-echelon supply chain." European Journal of Operational Research. Volume 238, Issue 1, Pages 114-121. Elsevier, 2014.
- 129. **Diabat, Ali**; Theodorou, Effrosyni; "An integrated quay crane assignment and scheduling problem." Computers & Industrial Engineering. Volume 73, Pages 115-123. Elsevier, 2014.

- 130. Kannan, Devika; **Diabat, Ali**; Shankar, K Madan; "Analyzing the drivers of end-of-life tire management using interpretive structural modeling (ism)." The International Journal of Advanced Manufacturing Technology. Volume 72, Issue 9-12, Pages 1603-1614. Springer, 2014.
- 131. Fu, Yi-Min; **Diabat, Ali**; Tsai, I-Tsung; "A multi-vessel quay crane assignment and scheduling problem: Formulation and heuristic solution approach." Expert Systems with Applications. Volume 41, Issue 15, Pages 6959-6965. Elsevier, 2014.
- 132. **Diabat, Ali**; Kannan, Devika; Mathiyazhagan, K; "Analysis of enablers for implementation of sustainable supply chain management–a textile case." Journal of Cleaner Production. Volume 83, Pages 391-403. Elsevier, 2014.
- 133. **Diabat, Ali**; Richard, Jean-Philippe; Codrington, Craig W; "A Lagrangian relaxation approach to simultaneous strategic and tactical planning in supply chain design." Annals of Operations Research. Volume 203, Issue 1, Pages 55-80. Springer, 2013.
- 134. Le, Tung; **Diabat, Ali**; Richard, Jean-Philippe; Yih, Yuehwern; "A column generation-based heuristic algorithm for an inventory routing problem with perishable goods." Optimization Letters. Volume 7, Issue 7, Pages 1481-1502. Springer, 2013.
- 135. Diabat, Ali; Abdallah, Tarek; Al-Refaie, Abbas; Svetinovic, Davor; Govindan, Kannan; "Strategic closed-loop facility location problem with carbon market trading." Engineering Management, IEEE Transactions on. Volume 60, Issue 2, Pages 398-408. IEEE, 2013.
- 136. Shen, Lixin; Olfat, Laya; Govindan, Kannan; Khodaverdi, Roohollah; **Diabat, Ali**; "A fuzzy multi criteria approach for evaluating green supplier's performance in green supply chain with linguistic preferences." Resources, Conservation and Recycling. Volume 74, Pages 170-179. Elsevier, 2013.
- 137. Kannan, Devika; Khodaverdi, Roohollah; Olfat, Laya; Jafarian, Ahmad; **Diabat, Ali**; "Integrated fuzzy multi criteria decision making method and multi-objective programming approach for supplier selection and order allocation in a green supply chain." Journal of Cleaner Production. Volume 47, Pages 355-367. Elsevier, 2013.
- 138. Abdallah, Tarek; **Diabat, Ali**; Rigter, Jasper; "Investigating the option of installing small scale PVs on facility rooftops in a green supply chain." International Journal of Production Economics. Volume 146, Issue 2, Pages 465-477. Elsevier, 2013.
- 139. Govindan, Kannan; Popiuc, Maria Nicoleta; **Diabat, Ali**; "Overview of coordination contracts within forward and reverse supply chains." Journal of Cleaner Production. Volume 47, Pages 319-334. Elsevier, 2013.
- 140. Al-Refaie, Abbas; **Diabat, Ali**; "Optimizing convexity defect in a tile industry using fuzzy goal programming." Measurement. Volume 46, Issue 8, Pages 2807-2815. Elsevier, 2013.
- 141. Al Zaabi, Shaikha; Al Dhaheri, Noura; **Diabat, Ali**; "Analysis of interaction between the barriers for the implementation of sustainable supply chain management." International Journal of Advanced Manufacturing Technology. Volume 68, Issue 1-4, Pages 895-905. Springer, 2013.
- 142. **Diabat, Ali**; Khodaverdi, Roohollah; Olfat, Laya; "An exploration of green supply chain practices and performances in an automotive industry." International Journal of Advanced Manufacturing Technology. Volume 68, Issue 1-4, Pages 949-961. Springer, 2013.

- 143. Mousa, Karim; **Diabat, Ali**; Fath, Hassan; "Optimal design of a hybrid solar-wind power to drive a small-size reverse osmosis desalination plant." Desalination and Water Treatment. Volume 51, Issue 16-18, Pages 3417-3427. Taylor & Francis, 2013.
- 144. Diabat, Ali; Khreishah, Abdallah; Govindan, Kannan,; Panikar, Vinay; Gunasekaran, Angappa;
  "Benchmarking the interactions among barriers in third-party logistics implementation: An ISM approach." Benchmarking: An International Journal. Volume 20, Issue 6, Pages 805-824. Emerald Group Publishing Limited, 2013.
- 145. Santibanez-Gonzalez, Ernesto DR; **Diabat, Ali**; "Solving a reverse supply chain design problem by improved benders decomposition schemes." Computers & Industrial Engineering. Volume 66, Issue 4, Pages 889-898. Elsevier, 2013.
- 146. **Diabat**, Ali; Kannan, Devika; Kaliyan, Mathiyazhagan; Svetinovic, Davor; "An optimization model for product returns using genetic algorithms and artificial immune system." Resources, Conservation and Recycling. Volume 74, Pages 156–169. Elsevier, 2013.
- 147. **Diabat, Ali**; Shetty, Udaya; Pakkala, TPM; "Improved efficiency measures through directional distance formulation of data envelopment analysis." Annals of Operations Research. Volume 229, Issue 1, Pages 325-346. Springer, 2013.
- 148. Shen, Lixin; Govindan, Kannan; Borade, Atul B; **Diabat, Ali**; Kannan, Devika; "An evaluation of vendor managed inventory practices from small and medium Indian enterprises." Journal of Business Economics and Management. Volume 14, Issue sup1, Pages S76-S95. Taylor & Francis, 2013.
- 149. Alrefaei, Mahmoud; **Diabat, Ali**; Alawneh, Ameen; Al-Aomar, Raid; Faisal, Mohd Nishat; "Simulated annealing for multi objective stochastic optimization." International Journal of Science and Applied Information Technology. Volume 2, Pages 18-21. Inderscience, 2013.
- 150. Abdallah, Tarek; Farhat, Ali; **Diabat, Ali**; Kennedy, Scott; "Green supply chains with carbon trading and environmental sourcing: Formulation and life cycle assessment." Applied Mathematical Modelling. Volume 36, Issue 9, Pages 4271-4285. Elsevier, 2012.
- 151. Govindan, Kannan; **Diabat, Ali**; Popiuc, Maria Nicoleta; "Contract analysis: A performance measures and profit evaluation within two-echelon supply chains." Computers & Industrial Engineering. Volume 63, Issue 1, Pages 58-74. Elsevier, 2012.
- 152. Al-Araidah, Omar; Abu Shgair, Khaleel; Batayneh, Wafa; **Diabat, Ali**; "Efficient approximation of melting temperature in simulated annealing algorithms applied to Chebyshev travelling salesman problem." International Journal of Business Performance and Supply Chain Modelling. Volume 4, Issue 2, Pages 145-163. Inderscience, 2012.
- 153. Abdallah, Tarek; **Diabat, Ali**; Simchi-Levi, David; "Sustainable supply chain design: A closedloop formulation and sensitivity analysis." Production Planning & Control. Volume 23, Issue 2-3, Pages 120-133. Taylor & Francis, 2012.
- 154. **Diabat, Ali**; Govindan, Kannan; Panicker, Vinay V; "Supply chain risk management and its mitigation in a food industry." International Journal of Production Research. Volume 50, Issue 11, Pages 3039-3050. Taylor & Francis, 2012.
- 155. Kannan, Devika; **Diabat, Ali**; Alrefaei, Mahmoud; Govindan, Kannan; Yong, Geng; "A carbon footprint based reverse logistics network design model." Resources, Conservation and Recycling. Volume 67, Pages 75-79. Elsevier, 2012.

- 156. Diabat, Ali; Govindan, Kannan; "An analysis of the drivers affecting the implementation of green supply chain management." Resources, Conservation and Recycling. Volume 55, Issue 6, Pages 659-667. Elsevier, 2011.
- 157. **Diabat, Ali**; Al-Araidah, Omar; Alsyouf, Imad; Duh, Camilla; "A heuristic approach to scheduling jobs in machining centres equipped with automated pallet changers." International Journal of Advanced Operations Management. Volume 3, Issue 3-4, Pages 326-336. Inderscience, 2011.
- 158. Aouam, Tarik; Lamrani, Hafsa; Aguenaou, Samir; **Diabat, Ali**; "A benchmark based AHP model for credit evaluation." International Journal of Applied Decision Sciences. Volume 2, Issue 2, Pages 151-166. Inderscience, 2009.
- 159. Aouam, Tarik; **Diabat, Ali**; Boulmalf, Mohammed; Soufyane, Abdelaziz; "Linear incentive contracts for natural gas LDC regulation." International Journal of Applied Decision Sciences. Volume 2, Issue 1, Pages 57-73. Inderscience, 2009.
- 160. **Diabat, Ali**; Aouam, Tarik; Ozsen, Leyla; "An evolutionary programming approach for solving the capacitated facility location problem with risk pooling." International Journal of Applied Decision Sciences. Volume 2, Issue 4, Pages 389-405. Inderscience, 2009.
- 161. Alrefaei, Mahmoud; **Diabat, Ali**; "A simulated annealing technique for multi-objective simulation optimization." Applied mathematics and computation. Volume 215, Issue 8, Pages 3029-3035. Elsevier, 2009.

#### Peer-Reviewed Papers in Refereed Conference Proceedings

- 1. Abou Kasm, Omar, Jiayun Sun, and Ali Diabat. Estimating Demands and Minimum Required Investment for a Bike-Share System with Limited Data. No. TRBAM-22-00069, 2022.
- 2. Kayyali, Dima; Zeineldin, Hatem; Diabat, Ali; Michalska, Hannah; "An Optimal Integrated Approach Considering Distribution System Reconfiguration and Protection Coordination." In 2020 IEEE Power & Energy Society General Meeting (PESGM), pp. 1-5. IEEE, 2020.
- 3. Abou Kasm, Omar; Ma, Ziyi; Chow, Joseph; Diabat, Ali; "Quantifying the effect of cyclist behavior on bicycle crashes and fatalities." No. 19-00054. Proceedings of the 98th Annual Meeting of the Transportation Research Board, 35 Washington, D.C., 2019.
- Kotachi, Mariam; Rabadi, Ghaith; Seck, Mamadou; Msakni, Mohamed Kais; Al-Salem, Mohammed; Diabat, Ali; "Sequence-based simulation optimization: An application to container terminals." In 2018 IEEE Technology and Engineering Management Conference (TEMSCON), pp. 1-7. IEEE, 2018.
- Msakni, Mohamed Kais; Al-Salem, Mohammed; Rabadi, Ghaith; Kotachi, Mariam; Diabat, Ali; "Quay crane scheduling with vessel stability." EURO Mini Conference on Advances in Freight Transportation and Logistics. Transportation Research Procedia, vol. 30, pp. 60-69. Padova, Italy, 2018.
- Abou Kasm, Omar; Kenan, Nabil; Diabat, Ali; Svetinovic, Davor; "Bridging optimization and antifragility in goal-oriented requirements engineering." Twenty First Pacific Asia Conference on Information Systems. PACIS Proceedings, AIS Electronic Library (AISeL) pp. 1-13. Langkawi, Malaysia, 2017.
- 7. Kotachi, Mariam; Rabadi, Ghaith; Msakni, Kais; Al-Salem, Mohammad; Diabat, Ali; "A discrete event simulation for the logistics of Hamad's container terminal of Qatar." In Winter Simulation Conference (WSC), IEEE pp. 2262-2271. Arlington, Virginia, USA, 2017.
- Msakni, Kais; Al-Salem, Mohammad; Diabat, Ali; Rabadi, Ghaith; Kotachi, Mariam; "An integrated quay crane assignment and scheduling problem using branch-and-price." International Conference on Computational Science and Computational Intelligence (CSCI), IEEE pp. 1286-1291. Las Vegas, Nevada, USA, 2017.
- 9. Melkonyan, Manana; Sahakyan, Maria; Diabat, Ali; "The dynamic-hybrid berth allocation problem with fixed quay cranes." Proceedings of the Industrial and Systems Engineering Research Conference, May 2016.
- 10. Kenan, Nabil; Diabat, Ali; "A branch-and-price algorithm to solve a quay crane scheduling problem." Procedia Computer Science, vol. 61, pp. 527-532. San Jose, California, USA, 2016.
- 11. Schoonenberg, Wester; Hols, Jesse; Diabat, Ali; "A cost-based approach for a crane assignment and scheduling problem." The 6th International Conference on Industrial Engineering and Systems Management. Seville, Spain, 2015.
- 12. Attiya, Marwa; Saadat, Irfan; Diabat, Ali; "Screening scenario-based analysis of modifications in planning of semiconductor manufacturing." The 25th IEEE Annual SEMI Advanced Semiconductor Manufacturing Conference, pp. 225-229. New York, USA, 2014.
- Al-Aomar, Raid; Alrefaei, Mahmoud; Diabat, Ali; Faisal, Mohamed; Alawneh, Ameen; "Using simulation to assess the performance of a large-scale supply chain for a steel producer." The 2014 International Conference on Mathematical Models and Simulation in Science and Engineering, pp. 156-160. Switzerland, 2014.

- 14. Al Dhaheri, Noura; Diabat, Ali; "The quay crane scheduling problem: A novel approach." The 18th International Working Seminar on Production Economics, pp. 1211-1224. Innsbruck, Austria, 2014.
- Attiya, Marwa; Diabat, Ali; Saadat, Irfan; "Mid-term master planning in semiconductor manufacturing." The 18th International Working Seminar on Production Economics, pp. 2018-2030. Innsbruck, Austria, 2014.
- 16. Diabat, Ali; Theodorou, Effrosyni; "A location-inventory supply chain problem: Reformulation and piecewise linearization." The 18th International Working Seminar on Production Economics, pp. 2222-2235. Innsbruck, Austria, 2014.
- 17. Alawneh, Ameen; Alrefaei, Mahmoud; Diabat, Ali; Al-Aomar, Raid; Faisal, Mohamed; "An LP model for optimizing a supply chain management system for steel company." Proceedings of the International MultiConference of Engineers and Computer Scientists, pp. 617-621. Hong Kong, 2014.
- Wallin, Ghita; Gilbert, Lindsey; Zhukau, Yauheni; Diabat, Ali; "A mathematical programming approach to maximizing profit in residual catalytic cracking through altering the use of the catalyst." Industrial Engineering and Systems Management (IESM), IEEE International Conference on, pp. 1-5. Rabat, Morocco, 2013.
- 19. Saleh, Khaled; Ibrahim, Hebatallah; Jayyousi, Majd; Diabat, Ali; "A novel optimization formulation of fluid catalytic cracking unit." Industrial Engineering and Systems Management (IESM), IEEE International Conference on, pp. 1-5. Rabat, Morocco, 2013.
- 20. Jayyousi, Majd; Diabat, Ali; Ghedira, Hosni; "Optimization of the deployment of utility scale solar plants." Applications of Information Technology to Renewable Energy Processes and Systems (IT-DREPS), IEEE International Conference & Exhibition on the, pp. 73-76. Amman, Jordan, 2013.
- 21. Simrin, Ahmed; Alkawaleet, Nasir; Diabat, Ali; "A Lagrangian relaxation-based heuristic for the static berth allocation problem using the cutting plane method." 16th International Conference on Enterprise Information Systems, pp. 569-573. Angers, France, 2013.
- 22. Diabat, Ali; Al-Aomar, Raid; Alrefaei, Mahmoud; Alawneh, Ameen; Faisal, Mohd Nishat; "A framework for optimizing the supply chain performance of a steel producer." 15th International Conference on Enterprise Information Systems, pp. 383-388. Angers, France, 2013.
- 23. Arnautovic, Edin; Svetinovic, Davor; Diabat, Ali; "Business interactions modeling for systems of systems engineering: Smart grid example." System of Systems Engineering (SoSE), IEEE International Conference on, pages: 107-112. Genova, Italy, 2012.
- 24. Hiassat, AbdelHalim; Diabat, Ali; "A location-inventory-routing-problem with perishable products." The 41st International Conference on Computers and Industrial Engineering (CIE41), pages: 293-298. Los Angeles, USA, 2011.
- 25. Deskoores, Rany; Diabat, Ali; "A capacitated multi-echelon joint location-inventory model for supply chain management." The 41st International Conference on Computers and Industrial Engineering (CIE41), pages: 1-6. Los Angeles, USA, 2011.
- 26. Abu Alhaj, Malek; Diabat, Ali; "Joint location-two-echelon-inventory supply chain model with stochastic demand." The 41st International Conference on Computers and Industrial Engineering (CIE41), pages: 1159-1164. Los Angeles, USA, 2011.
- 27. Diabat, Ali; Aouam, Tarik; Al-Araidah, Omar; "The uncapacitated fixed-charge facility location problem with a multi-echelon inventory system." Computers & Industrial Engineering, IEEE International Conference on, pages: 25-30. Troyes, France, 2010.

- 28. Al Dhaheri, Noura; Diabat, Ali; "A multi-product capacitated inventory-location model with risk pooling." Industrial Engineering and Engineering Management (IEEM), IEEE International Conference on, pages: 523-527. Macao, 2010.
- 29. Al Dhaheri, Noura; Diabat, Ali; "An integrated supply chain problem with environmental considerations." Advances in Sustainable Manufacturing, pages: 518-522. Abu Dhabi, United Arab Emirates, 2011.
- 30. Mousa, Karim; Diabat, Ali; "Optimizing the design of a hybrid solar-wind power plant to meet variable power demand." Advances in Sustainable Manufacturing, pages: 73-76. Abu Dhabi, United Arab Emirates, 2011.
- 31. Mousa, Karim; AlZu'bi, Hamzah; Diabat, Ali; "Design of a hybrid solar-wind power plant using optimization." Engineering Systems Management and Its Applications (ICESMA), IEEE International Conference on, pages: 558-566. Sharjah, United Arab Emirates, 2010.
- 32. Al Dhaheri, Noura; Diabat, Ali; "A mathematical programming approach to reducing carbon dioxide emissions in the petroleum refining industry." Engineering Systems Management and Its Applications (ICESMA), IEEE International Conference on, pages: 1-6. Sharjah, United Arab Emirates, 2010.
- 33. Abdallah, Tarek; Diabat, Ali; Simchi-Levi, David; "A carbon sensitive supply chain network problem with green procurement." Computers and Industrial Engineering (CIE), IEEE International Conference on, pp. 803-807. Awaji Island, Japan, 2010.
- Diabat, Ali; Simchi-Levi, David; "A carbon-capped supply chain network problem." Industrial Engineering and Engineering Management, IEEE International Conference on, pp. 386-391. Hong Kong, 2009.
- 35. Diabat, Ali; Richard, Jean Philippe; "Optimization modeling of an integrated supply chain network." Industrial Engineering and Engineering Management, IEEE International Conference on, pp. 181-186. Hong Kong, 2009.
- 36. Diabat, Ali; Aouam, Tarik; Al-Araidah, Omar; "The uncapacitated fixed-charge facility location problem with a multi-echelon inventory system" IEEE Computers & Industrial Engineering, IEEE International Conference on, pp. 803-807. Troy, France, 2009.

## **RESEARCH GRANTS**

Date and title	Budget
1/1/2009 - 12/31/2011	500,000 USD
Greening the Supply Chains: Optimization Models and Solution Algorithms	
7/1/2010 – 6/30/2011	10,000 AUD
Australia – UAE Food Supply Chains: Sustainability through Optimization and Ris	k Mitigation
7/1/2010 – 6/30/2011	10,000 AUD
A Mathematical Programming Approach to Dynamic Vehicle Routing and Schedu	uling
1/1/2011 – 12/31/2011	100,000 USD
Optimal Protection Coordination for Smart Grids with Multiple Configurations	
1/1/2011 – 12/31/2011	100,000 USD
Incentive Mechanism Design to Align Carbon Capture & Storage with Enhanced	Oil Recovery
5/1/2012 – 4/30/2014	712,000 USD
Simulation-Based Optimization of Supply Chain Performance using Simulated An	inealing
7/1/2014 – 12/31/2017	480,000 USD
A Mathematical Programming Approach for Optimizing Propylene Yield in R2R R	FCC Process
10/1/2014 – 9/30/2017	859,898 USD
Analytics via Operational and Logistical Simulation and Animation Models for Do	ha's New Port
7/1/2015 - 6/30/2018	L,132,836 USD
A Mathematical Programming Approach for Optimizing Operations at ADPC Min	a Zayed Port
6/1/2019 – 5/31/2022	342,635 USD
Abu Dhabi Ports' Berths, Cranes, and Tugboats Scheduling: Optimization Modeli	ng and Solution
Methodologies	
9/1/2019 – 8/31/2021	249,926 USD
On the Costs and Benefits of Consistency in Inventory Routing: Healthcare and B	eyond

#### UNIVERSITY TEACHING EXPERIENCE

#### **Courses Taught**

- At NYU Abu Dhabi
  - Applied Optimization
  - Sustainable Supply Chains
  - Probability and Statistics for Engineers
  - Production and Logistics Management
- At Masdar Institute of Science and Technology
  - Engineering Mathematics and Methods
  - Fundamental Methods in Engineering Systems and Management
  - Production Planning & Inventory Management
  - Systems Optimization
  - Advanced Systems Optimization
  - Advanced Linear Programming
  - Advanced Production & Operations Management
- At Purdue University
  - Algebra and Trigonometry I & II
  - Plane Analytic Geometry and Calculus I & II (for engineers and scientists)
  - Introductory Analysis I & II (for business)
  - Multivariate Calculus (for engineers and scientists)
  - Linear Algebra (for engineers and scientists)

### **Teaching Assistant**

- o At North Carolina State University
  - Deterministic Models in Industrial Engineering
  - Stochastic Models in Industrial Engineering

### **TEACHING AWARDS**

- Engineering Teaching Award, NYU Abu Dhabi, 2022. This award is granted based on the students' recognition for the awardee's innovation, outstanding teaching, and his many contributions to Student Learning.
- **Excellence in Teaching Award**, Masdar Institute of Science and Technology, 2012. This achievement is of special significance since it was the first award of its kind offered at the Institute.
- **Outstanding Graduate Instructor,** Math Department, Purdue University, October 2005. The award is granted every year by the Purdue University Math Department to the best 5% of graduate instructors.
- **Excellence in Teaching**, Math Department, Purdue University, November 2006. The award aims to honor the best of Purdue's math teachers for their influence on the development of their students and their part in maintaining the University's longstanding reputation for educational excellence.

#### **RESEARCH AWARDS**

- **UAE Scientist Golden Visa**, 2020. One of three NYUAD Professors awarded the UAE's 10-year scientists golden residency visa for their distinguished research and contributions.
- Best 30 Papers in 30 Years Award, 2018. Two papers titled "An analysis of the drivers affecting the implementation of green supply chain management" published in 2011 and "A fuzzy multi criteria approach for evaluating green supplier's performance in green supply chain with linguistic preferences" published in 2013 received Best 30 Papers in 30 Years Awards in celebration of the 30th anniversary of Resources, Conservation and Recycling Journal (2019 Impact Factor 8.086) published by Elsevier.
- **Best Faculty Research Award**, 2014. Department of Engineering Systems and Management, Masdar Institute of Science and Technology, Abu Dhabi, UAE
- **Best PhD Dissertation Award**, 2016. PhD student **Noura Al Dhaheri's** thesis titled "The Quay Crane Scheduling Problem with Ship Stability Consideration: Formulations and Solution Approaches" received the best thesis award. Noura is currently the CEO of Maqta Gateway.
- **Best MSc Thesis Award**, 2017. MSc student **Bayan Hamdan's** thesis titled "A Two-Stage Multi-Echelon Stochastic Blood Supply Chain Problem" received the best thesis award. Bayan is currently pursuing her PhD at University of Illinois at Urbana-Champaign.
- **Best MSc Thesis Award**, 2015. MSc student **Faisal Al Kaabneh's** thesis titled "A Lagrangian Heuristic and GRASP for the Hub-and-Spoke Network System with Economies of Scale and Congestion" received the best thesis award. Faisal is currently pursuing his PhD at Cornell University.
- Best MSc Thesis Award, 2013. MSc student Effrosyni Theodorou's thesis titled "An Integrated Quay Crane Assignment and Scheduling Problem: A Novel Formulation and Heuristic Approaches" received the best thesis award. Effie is currently a Risk Modeling & Analytics Specialist at UBS Zurich in Switzerland.
- Best MSc Thesis Award, 2012. MSc student AbdelHalim Hiassat's thesis titled "An Integrated Location-Inventory-Routing Problem: Metaheuristics and Environmental Extensions" received the best thesis award. Halim is currently an Artificial Intelligence Senior Consultant at Deloitte Canada.
- Best MSc Thesis Award, 2011. MSc student Tarek Abdallah's thesis titled "Network Design and Algorithms for Green Supply Chain Management" received the best thesis award. Tarek is currently an Assistant Professor of Operations at the Kellogg School of Management in Northwestern University.

## GRADUATE STUDENTS AND POSTDOCS SUPERVISION

**Postdocs** (as main advisor)

- 1. Aida Jebali (August 2013-July 2015)
  - Operating room scheduling
  - Quay crane scheduling
- 2. Waleed Najy (September 2017 present)
  - Hub-and-spoke network
- 3. Nabil Kenan (September 2018 August 2022)
  - Blood supply chains

**Postdocs** (as **co**-advisor)

- 4. Kais Msakni (August 2015 July 2017)
  - Quay crane scheduling

## Ph.D. Students (as main advisor)

- 5. Noura Al Dhaheri (Graduated June 2016)
  - The Quay Crane Scheduling Problem with Ship Stability Consideration: Formulations and Solution Approaches
- 6. Ahmed Alshamsi (Graduated June 2017)
  - Reverse Logistics Network Design: Modeling and Solution Techniques
- 7. Nabil Kenan (Graduated June 2017)
  - Optimization Modeling for Airlines Operations Under Uncertainty
- 8. Omar Abou Kasm (Graduated June 2020)
  - Mathematical Programming for Port Quayside Operations Management
- 9. Timothy Mulumba (To Graduate June 2024)
  - Unmanned Aerial Vehicles (exact title to be determined later)

## Ph.D. Students (as co-advisor):

## 10. Abdullah Kaya (Graduated June 2017)

- Economic Diversification in The Gulf Countries Towards a Post-Carbon Era
- 11. Omar Asad (Graduated June 2017)
  - Optimization Framework for Integrated Water and Power Sector Planning: A Techno-Economic Nexus Approach

### 12. Faisal Alkaabneh (Graduated June 2020)

• Large-Scale Optimization for Green Logistics and Stochastic Resource Allocation for Food Security

### MSc Students (as main advisor)

- 1. Noura Al Dhaheri (Graduated June 2011)
  - Optimization of Industrial Operations with Environmental Considerations
- 2. Tarek Abdallah (Graduated June 2011)
  - Network Design and Algorithms for Green Supply Chain Management

## 3. Karim Mousa (Graduated June 2011)

• The Design and Techno-economic Analysis of Hybrid Power Plants Using Operations Research

# 4. Rany Deskoores (Graduated June 2012)

• Facility Location and Two-Echelon Inventory Supply Chain Models with Capacity and Carbon Constraints

# 5. Malek Abu Alhaj (Graduated June 2012)

• Joint Location-Two-Echelon Inventory Supply Chain Problems with Stochastic Demand and Environmental Considerations

## 6. AbdelHalim Hiassat (Graduated June 2012)

• An Integrated Location-Inventory-Routing Problem: Metaheuristics and Environmental Extensions

# 7. Abdulla Alshamsi (Graduated June 2013)

• An Integrated Supply Chain Management Optimization Model: Quadratically Constrained: Reformulation and Linear Piecewise Approximation

# 8. Walid Shakari (Graduated June 2013)

• A Lagrangian Relaxation Approach to the Pooling Problem with Quality Enhancing Additives

# 9. Ahmed Simrin (Graduated June 2013)

• Genetic Algorithm Heuristics for the Static and Dynamic Berth Allocation Problems in Container Terminals

# 10. Yi-Min Fu (Graduated June 2013)

• An Integrated Quay Crane Assignment and Scheduling Problem

# 11. Shaikha Al Zaabi (Graduated June 2013)

• Extended Models for the Berth Allocation Problem: A Case Study of Mina Zayed Free Port

## 12. Effrosyni Theodorou (Graduated June 2013)

• An Integrated Quay Crane Assignment and Scheduling Problem: A Novel Formulation and Heuristic Approaches

# 13. Jasem Al Hammadi (Graduated June 2014)

• An Integrated Berth Allocation and Yard Management Problem: A Case Study of Mina Zayed Free Port

# 14. Nasir Alkawaleet (Graduated June 2014)

• The Joint Berth Allocation and Crane Assignment Problem: Lagrangian Relaxation Approach

# 15. Safa Yousef (Graduated June 2014)

• An Integrated Berth Allocation and Resources Planning Problem in Bulk Ports

# 16. Islam Hamadeh (Graduated June 2014)

Green Supply Chain Network Design

# 17. Faisal Al Kaabneh (Graduated June 2015)

• A Lagrangian Heuristic and GRASP for the Hub-and-Spoke Network System with Economies of Scale and Congestion

## 18. Yi-Fang Hsieh (Graduated June 2015)

• A Closed Loop Multi-echelon Joint Inventory-location Problem: Formulation, Heuristic Solution: Approach, and Computational Results

## 19. Ilia Papakonstantinou (Graduated December 2015)

• An Integrated Inventory-Distribution- Production Optimization model in the food industry

## 20. Bayan Hamdan (Graduated June 2017)

• A Two-Stage Multi-Echelon Stochastic Blood Supply Chain Problem

## MSc Students (as co-advisor)

## 21. Marwa Attiya (Graduated June 2014)

• Modeling the Impact of Supply Contract Modifications in Mid-term Master Planning of Semiconductor Manufacturing

## 22. Majd Jayyousi (Graduated June 2014)

• Optimization of the Deployment of Utility Scale Solar Plants

## 23. Dima Kayyali (Graduated June 2014)

• An Optimal Integrated Approach Considering Distribution System Reconfiguration and Protection Coordination

## 24. Vahan Poghosyan (Graduated June 2014)

• Two Tank Indirect Molten Salt Thermal Energy Storage System Design for Parabolic Through Concentrated Solar Power Plant

## 25. Rashid Al Kindi (Graduated June 2014)

• Towards Optimal Energy Utilization of Reverberatory Furnace by Continuous Casting: A Case Study of a Local Aluminum Industry

### Post-graduation Practical Training Program (PPTP)

- 1. Prajna Soni Summer 2020
  - A perishable products supply chain problem during COVID-19 lockdown restrictions
- 2. Meredith Raymer Summer 2020
  - The flying sidekick traveling salesman problem for prioritization of essentials and contactless deliveries during COVID-19

## 3. Alexander Fleming Summer 2020

• The mobile depot problem with drone deliveries and COVID-19 restrictions

#### SERVICE AND PROFESSIONAL ACTIVITIES

#### NYU-Abu Dhabi

- Graduate Governance and Curriculum Committee (GGCC).
- HPC Steering Committee.

### University Committee at Masdar Institute

- Student Affairs Committee.
- Academic Affairs Committee.
- Library Committee.
- ESM Faculty Search Committee.
- ME Faculty Search Committee.
- ESM Student Admission Committee.
- PhD Program Committee.
- Student Life Committee.
- Disciplinary Committee.

### Student Services and Recruitment at Masdar Institute

- Served on the Student Affairs Committee for three years.
- Student recruitment trip to Jordan, visited six universities.
- Three student recruitment trips to UAE University, Al-Ain, UAE.
- Student recruitment trip to ALHOSN University, Abu Dhabi, UAE.
- Student recruitment trip to American University of Sharjah, Sharjah, UAE.
- Student recruitment trip to Sharjah University, Sharjah, UAE.
- Attended the Najah Fair Exhibition three times: 2008, 2009, and 2011.

### **Refereeing Activities**

- Computers and Industrial Engineering.
- Industrial Engineering Research Conference (IERC).
- Reviewer, MIT Energy Initiative seed fund.
- Global Conference on Sustainable Manufacturing.
- Annals of Operations Research.
- Computers and Operations Research.
- European Journal of Operational Research.
- International Journal of Production Research.
- Optimization Letters.
- Expert Systems with Applications.
- RAIRO Operations Research.
- Maritime Economics and Logistics.
- Resources, Conservation and Recycling.
- Desalination.
- International Journal of Production Economics.
- Journal of Manufacturing Systems.
- International Journal of Advanced Manufacturing Technology.

- Journal of Cleaner Production.
- Production Planning and Control.
- IEEE Transaction on Engineering Management.
- IIE Transactions.
- Transportation Research Part B: Methodological.
- Transportation Research Part C: Emerging Technologies.
- Transportation Research Part E: Logistics and Transportation Review.
- Transportation Science.
- Transport Policy.

## **Professional Membership**

- Mohammed Bin Rashid Academy of Scientists (MBRAS)
- Institute for Operations Research & Management Science (INFORMS)
- Institute of Industrial Engineers (IIE)
- Production & Operations Management Society (POMS)

## **Editorial Activities**

- Associate Editor, Journal of Manufacturing Systems, Elsevier (2019 impact factor: 5.105)
- Area Editor, Journal of Computers & Industrial Engineering, Elsevier (2019 impact factor: 4.135)
- Associate Editor, Arabian Journal for Science and Engineering, Springer (2019 impact factor: 1.711)
- Guest Editor, Special Issue in Intelligent Transportation and Logistics in Manufacturing with Big Data, International Journal of Production Economics, Elsevier (2019 impact factor: 5.138)
- Guest Editor, Special Issue in Decision-Support Models and Tools for Helping to Make Real Progress to More Sustainable Societies, Journal of Cleaner Production, Elsevier (2019 impact factor: 7.246)

## **Invited Talks**

- A location-inventory-routing problem with perishable products: A genetic algorithm approach, American University of Sharjah, Sharjah, United Arab Emirates, 19<sup>th</sup> April 2017.
- Operating room planning with elective and emergency cases under downstream capacity constraints, National Taiwan University, Taipei, Taiwan, 15<sup>th</sup> December 2017.
- The quay crane scheduling problem: Novel formulation and Lagrangian relaxation solution approach, The Hong Kong University of Science and Technology, Hong Kong, 21<sup>st</sup> March 2018.
- A genetic algorithm for reverse logistics network design: A case study from the GCC, American University of Sharjah, Sharjah, United Arab Emirates, 18<sup>th</sup> April 2018.
- A two-stage multi-echelon stochastic blood supply chain problem, American University of Sharjah, Sharjah, United Arab Emirates, 17<sup>th</sup> April 2019.

## **Keynote Talks**

- On the quay crane scheduling problem: Formulations and solution approaches, 2018 Symposium on Up-to-Date Research on Logistics and Supply Chain Management, Southwest Jiaotong University, Chengdu, China, 15-16<sup>th</sup> March 2018.
- Design of hub-and-spoke networks with economies-of-scale and congestion Considerations, International Conference on Intelligent Transportation and Logistics with Big Data, Windsor, Canada, 26-28<sup>th</sup> July 2019.
- The fixed-partition policy inventory routing problem, The 49th International Conference on Computers & Industrial Engineering, Beihang University, Beijing, China during 18-21<sup>st</sup> October 2019.
- The tugboat scheduling problem with pilotage constraints, The 10<sup>th</sup> Annual International Conference on Industrial Engineering and Operations Management, Dubai, United Arab Emirates, 10-12 March 2020.

## THREE REFERENCES

- Dr. Samer Madanat, my current boss (at NYUAD)
   Xenel Distinguished Professor of Engineering Emeritus at University of California at Berkeley, and Dean of Engineering at New York University Abu Dhabi, United Arab Emirates.
- Dr. Marwan Khraisheh, my former boss (at Masdar Institute)
   Former and Founding Dean of Engineering at Masdar Institute from 2008 to 2013
   Fellow ASME, Fellow AAAS
   Professor and Chair of Mechanical Engineering, Texas A&M University at Qatar, Doha, Qatar.
- **Dr. Jean-Philippe Richard**, my PhD advisor (at Purdue University) Professor of Operations Research, Department of Industrial and Systems Engineering, University of Minnesota, Minneapolis, MN, USA.