IBRAHIM H. GARBIE

CURRICULUM VITAE

IBRAHIM GARBIE

Ibrahim Garbie Curriculum Vitae, August 2022

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IBRAHIM H. GARBIE

Professor of Industrial Engineering
Mechanical Engineering Department
College of Engineering at Helwan, Helwan University, Cairo, Egypt

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EDUCATION

Ph.D. University of Houston – Houston, TX

Department of Industrial Engineering – 2003

Dissertation Title: Designing Cellular Manufacturing Systems Incorporating

Production and Flexibility Issues.

M.S. Helwan University - Cairo, Egypt

Department of Mechanical Engineering – 1996

Major: Manufacturing Engineering

B.Sc. Helwan University – Cairo, Egypt

Department of Mechanical Engineering – 1991

RESEARCH AND TEACHING INTERESTS

Industry 4.0, Smart Manufacturing, Sustainable Systems Design, Lean Production, Agile Manufacturing, Hybrid Manufacturing Systems, Economics of Manufacturing Processes, Lean Six Sigma, Probability, and Statistics.

PROFESSIONAL APPOINTMENTS

Helwan University – Cairo, Egypt

Professor: Department of Mechanical Engineering, 2019 – Present (on Leave)

Associate Professor: Department of Mechanical Engineering, 2014 – 2019

Assistant Professor: Department of Mechanical Engineering, 2004 – 2014

Lecturer: Department of Mechanical Engineering, 1996-2004

Demonstrator (Teaching Assistant): Department of Mechanical Engineering, 1991-1996

Higher Colleges of Technology - Sharjah, UAE

Faculty: Department of Industrial Engineering, 2019 – Present

Nile University - Cairo, Egypt

Visiting Associate Professor: Department of Industrial, Service Engineering, and

Management, 2018 – 2019

Modern University of Sciences and Arts - Cairo, Egypt

Visiting Associate Professor: Department of Industrial Systems Engineering, 2018 - 2019

Visiting Assistant Professor: Department of Industrial Systems Engineering, 2006 – 2007

Curriculum Vitae, August 2022

University of Sharjah - Sharjah, UAE

Visiting Associate Professor: Industrial Engineering and Engineering Management Department, January 2018- June 2018

Sultan Qaboos University - Muscat, Oman

Associate Professor: Department of Mechanical and Industrial Engineering, 2014 – 2017 Assistant Professor: Department of Mechanical and Industrial Engineering, 2008 – 2014

University of Houston - Houston, TX

Post-Doctoral Fellow: Department of Industrial Engineering, 2003 – 2004 Graduate Teaching Assistant, Department of Industrial Engineering, 2001-2003

University of Louisville- Louisville, KY

Graduate Teaching Assistant, Department of Industrial Engineering, 1999-2000

COURSES TAUGHT

Helwan University

Advanced Production Systems (MECH 1732)

Engineering and Industrial Operations (MECH 1602)

Operations Research II (Stochastic Models) (MECH 6321)

Marketing and Management (GE 7214)

Industrial Organization (MECH 4312)

Engineering Economy (MECH 4313)

Production Systems (MECH 6331)

Occupational Safety and Health (GE 5214)

Work Study and Productivity Analysis (MECH 6312)

Maintenance Planning and Control (MECH 5324)

Mechanical Maintenance (MECH 5324)

Production Management (MECH 5432)

Material Handling Systems (MECH 6412)

Courses as a teaching Assistant: Design Senior Projects, Production Technology,

Engineering Drawings, Machine Tools Design, Theory of Metal Machining,

Manufacturing Processes, Advanced Methods in Manufacturing, Theory of Elasticity and Plasticity

Higher Colleges of Technology

Introduction to Industrial Engineering (IET 2003)

Technology Innovation and Integration (IET 2103)

Work Measurements and Ergonomics (IET 2103)

Logistics and Supply Chain Management (LGE 2003)

Financial Analysis and Cost Accounting (IET 3613)

Sophomore Design Project (IET 2902)

Capstone Design Project I/II (IET 4902/IET 4912).

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Modern University for Science and Arts

Probability and Statistics Senior Design Project

University of Sharjah

Manufacturing Processes (0405202),

Maintenance Planning and Control (0405434),

Industrial Automation (0405331),

Co-op in Industry (0405499)

Sultan Qaboos University

Sustainable Industrial Systems (MEIE 6220)

Sustainable Manufacturing Systems (MEIE 5280)

Advanced Statistics and Probability (ENGR 6910)

Quality, Reliability, and Maintainability (MEIE 6002)

Directed Studies (MEIE 6212)

Applied Statistics (MEIE 5282)

Industrial Engineering Design (MEIE 5261)

Industrial Systems Design (MEIE 5262)

Reliability and Maintenance Engineering (MEIE 5232)

Maintenance and Reliability (MEIE 5233)

Facilities Planning (MEIE 4223)

Facilities Design and Logistics (MEIE 4275)

Management for Engineers (MEIE 4286)

Engineering Methods and Work Measurements (MEIE 3212)

Work Systems Analysis and Design (MEIE 3292)

Engineering Economics (MEIE 4285/PNGE 5103)

Seminar (MEIE 5198, 4298, 5292/MCTRE 4298, 5198)

ADMINISTRATIVE APPOINTMENTS

Division Chair: Industrial Engineering Programs at Higher Colleges of Technology (HCT) – Faculty of Engineering and Technology (Abu Dhabi, Dubai and Sharjah), (2020 - 2021).

Assistant Department Chair: Mechanical Engineering Department, College of Engineering, Helwan University, Cairo, Egypt. (2018 - 2020).

Chair and Coordinator: Curriculum Committee, Industrial Engineering Program, Sultan Oaboos University, Muscat, Oman. (2014 – 2017)

Chair and Coordinator: Department Publication Committee, Industrial Engineering Program, Sultan Qaboos University, Muscat, Oman. (2011-2017)

Chair and Coordinator: Postgraduate Studies and Research Committee, Industrial Engineering Program, Sultan Qaboos University, Muscat, Oman. (2009 – 2013)

Track Chair: Technical Manufacturing Committee, Sultan Qaboos University, Muscat, Oman. (2010).

Curriculum Vitae, August 2022

Member: Mechanical and Industrial Engineering Department Board, Sultan Qaboos University, Muscat, Oman. (2008-2017).

Consultant: Projects Management Unit (Higher Education Enhancement Project HEEP) –

Egyptian Ministry of Higher Education, Cairo, Egypt. (2005 – 2007)

Consultant: Postgraduate Studies Development Committee, Helwan University, Menofia University, Egypt. (2005 – 2006)

Member: Engineering Education Development Project Team, Helwan University, Cairo, Egypt. (1993 – 1998)

SELECTED AWARDS AND HONORS

Book-of-the-Year Award: IISE 2022 Joint Publishers, CRC Press- Taylor and Francis, 2022.

ABET Recognition: Sultan Qaboos University, 2014.

Doctoral Studies Scholarship: Egyptian Ministry of Higher Education (MoE), 1999 – 2003.

Graduate Fellowship: Helwan University, 1991.

Outstanding Graduating Student: Helwan University, 1991.

APPOINTMENTS AND ACTIVITIES

Member: Institute of Industrial and Systems Engineers (IISE) (2000-Present)

Member: Society of Manufacturing Engineers (SME) (2000-2009)

Member: Industrial Engineering and Operations Management Society (IEOM) (2010- Present)

Member: Egyptian Engineers Syndicate (1991- Present)

Member: Alpha Pi Mu (2002-2004)

Member: Institute for Operations Research and Management Sciences (INFORMS) (2003-2005)

OUTREACH AND PROFESSIONAL SERVICE

Peer Reviewer

Journals

- International Journal of Production Research (2006 Present).
- Journal of Manufacturing Technology Management (2011 Present).
- IEEE Transactions on Engineering Management (2009-Present).
- Journal of Cleaner Production (2012-Present).
- International Journal of Information and Operations Management Education (2019-Present).
- International Journal of Industrial Ergonomics (2012-Present)
- International Journal of Industrial and Systems Engineering (2014-present)
- International Journal of Operation and Production Management (2011-Present)
- Computers and Industrial Engineering: An International Journal (2010-Present)
- RAIRO- Operations Research (2015-Present)
- IEEE Transactions on Automation Science and Engineering (2014-Present)
- Annals of Operations Research (2013-Present)
- International Journal of Systems Science: Operations & Logistics (2015-Present)
- International Journal of Advanced Operations Management (2015-Present)

Curriculum Vitae, August 2022

- Journal of Engineering Research (TJER), Sultan Qaboos University (2009-Present)
- The International Journal of Agile Systems and Management (2008-Present)
- International Journal of Computer Applications in Technology (2008-Present)

Conferences

- International Conference of Advances in Science and Engineering Technology (ASET), Dubai, UAE (2020, 2022)
- International Conference on Production Research (ICPR 2019), Chicago, IL, USA
- Annual Conference of Industrial and Systems Engineering Research Conference (ISERC 2018), Orlando, FL, USA
- Annual Conference of Industrial and Systems Engineering Research Conference (ISERC 2016), Anaheim, CA, USA
- Annual Conference of Industrial and Systems Engineering Research Conference (ISERC 2015), Nashville, TN, USA
- International Conference on Industrial Engineering and Operations Management (IEOM 2015), Dubai, UAE, March 3-5, 2015
- Annual Conference of Industrial and Systems Engineering Research Conference (ISERC 2014).
- Journal of Engineering Research (TJER), Sultan Qaboos University, Muscat, Oman, 2013.
- International Conference on Industrial Engineering and Operations Management (IEOM 2012), Istanbul, Turkey
- Annual Conference of Industrial and Systems Engineering Research Conference (ISERC 2012)
- IIE Engineering Lean and Six Sigma Conference (2011), Atlanta, GA.
- International Conference of Industrial Engineering Research (IERC2011), (Research Tracks).
- International Conference on Industrial Engineering and Operations Management (IEOM 2011), Kuala Lumpur, Malaysia.
- Annual Conference of Industrial Engineering Research (IERC2010), (Research Tracks).
- The 39th CIE (2009) International Conference of Computers and Industrial Engineering.
- Annual Conference of Industrial Engineering Research (IERC), (Research Tracks).
- The 2010 International Conference on Industrial Engineering and Operations Management (IEOM 2010), Dhaka, Bangladesh.
- "Operations Management Research and Cellular Manufacturing: Innovative Methods and Approaches" edited by V. Modrak and R.S. Pandian, IGI Global, Hershey, PA, 2012.

Curriculum Vitae, August 2022

- Annual Conference of Industrial Engineering Research (IERC), (Research Tracks).
- The CIE 37th (2007) International Conference on Computers and Industrial Engineering.
- Annual Conference of Industrial Engineering Research (IERC), 2007 (Research Tracks).
- Annual Conference of Industrial Engineering Research (IERC), 2006 (Research Tracks).
- Annual Conference of Industrial Engineering Research (IERC), 2004 (Research Tracks).

Session Organizer

- International Conference on Applied Mechanics and Industrial Systems (ICAMIS 2016), SQU, December 6-8, 2016 (October 2014- December 2016).
- International Conference on Applied Mechanics, Materials and Manufacturing (ICAMMM 2010), SQU, December 13-15, 2010 (December 2008-December 2010).

Session Chair

- 45th International Conference on Computers and Industrial Engineering (CIE 45), October 28-30, 2015 in Metz, France.
- 2015 (5th) International Conference on Industrial Engineering and Operations Management, Dubai, UAE, March 3-5, 2015.
- 44th International Conference on Computers and Industrial Engineering (CIE 44), in Istanbul, Turkey.
- 2012 International Conference of Industrial and Systems Engineering Research (ISERC2012), (Research Tracks-Lean Manufacturing and Manufacturing Planning).
- 2011 International Conference of Industrial Engineering Research (IERC2011), (Research Tracks-Logistics Management).
- 41st International Conference on Computers and Industrial Engineering, Los Angeles, CA, USA.
- 2010 International Conference on Applied Mechanics, Materials and Manufacturing (ICAMMM2010).
- Annual Conference of Industrial Engineering Research (IERC 2007), (Research Tracks).

Editorial Board Member

- International Journal of Information and Operations Management Education (August 2019- Present).
- Journal of Manufacturing Technology Management (April 2016- Present).

Doctoral Colloquium Evaluator

- IIE 2015 Conference of Institute of Industrial and Systems Engineers.
- IIE 2012 Conference of Institute of Industrial and Systems Engineers

Curriculum Vitae, August 2022

• IIE 2011 Conference of Institute of Industrial and Systems Engineers.

Academic Advisor

• IIE Society (local Chapter), SQU, (2008-2016)

GRANTS

- 1. **Principal Investigator (PI),** "Sustainable Development Strategy (SDS) of Omani Manufacturing/Industrial Enterprises", RO 150,000.00 (390,000 USD), The Research Council (TRC), Muscat, Oman, (1/5/2015-1/1/2016).
- 2. **Principal Investigator (PI),** "Enhancing Competence of Omani Industrial Enterprises through Implementation of Lean Manufacturing Philosophies", RO 10,000 (26,000 USD), Sultan Qaboos University (SQU), (1/9/2013-30/8/2015).
- 3. **Principal Investigator (PI),** "Feasibility of Reconfigurable Omani Manufacturing Firms for Globalization", RO 9,121.00 (23,714 USD), Sultan Qaboos University (SQU) (1/1/2010-1/1/2013).
- 4. **Co-Principal Investigator,** "Occupational Health and Safety Issues Affecting Worker Performance in Omani Industries", RO 97,500.00 (253,500 USD), Sultan Qaboos University (SQU) (1/9/2009-30/8/2012).

BOOKS

- 1. **Garbie, I.H.**, Parsaei, H.R., "Reconfigurable Manufacturing Enterprises for Industry 4.0", CRC Press Taylor and Francis, August 2021. ISBN: 978-3-0367190907 (Print); 978-3-0367190903 (online).
- 2. **Garbie, I.H.**, "Sustainability in Manufacturing Enterprises", Springer, March 2016. ISBN: 978-3-319-29304-2(Print); 978-3-319-29306-6 (online).

BOOK CHAPTERS

- 1. **Garbie, I.H.**, "Chapter 2: Social Economic Sustainable Development", Edited book titled "The Political Economy of Muslim Countries", (Editors: Özgür Ünal Eriş, Ahmet Salih İkiz, Muğla Sıtkı Koçman Üniversitesi), Cambridge Scholars Publishing, ISBN: 978-1-5275-1167-5, 2018.
- 2. **Garbie, I.H.**, "Chapter 2: Non-Traditional Performance Evaluation of Manufacturing Enterprises", Edited book titled "Industrial Engineering Non-Traditional Applications in International Settings", (Editors: Bidanda, B., Sabuncuoglu, S. and Kara, Y.K.), CRC Press, Taylor & Fancies, ISBN: 978-1-4822-2688-1, Baca Raton, pp. 21-36, 2015.
- 3. **Garbie, I.H.**, Parsaei, H.R., and Leep, H.R., "Chapter 12: Designing Cellular Manufacturing for Next Generation Production Systems", Collaborative Engineering: Theory and Practice (Editors: A.K. Kamrani, E.S.A. Nasr), Publisher: Springer). ISBN: 978-0-387-47319-2, 2008.

Curriculum Vitae, August 2022

TECHNICAL REPORTS

- 1. **Garbie, I.H.,** "Feasibility of Reconfigurable Omani Manufacturing Firms for Globalization", Sultan Qaboos University (SQU), March 2013.
- 2. **Garbie, I.H.,** and Mubarak, I., "Preparation book for the Technical Colleges under titled "Technical Reports Writing" January 2006, Cairo, Egypt.

PEER-REVIEWED JOURNAL ARTICLES

(Cited-Google Scholar > 1122 times with h-index 19)

- 1. **Garbie, I.H.**, Garbie, A., "Toward Smart Manufacturing Systems incorporating Reconfiguration Issues", International Journal of Industrial and Systems Engineering (in Press) DOI: 10.1504/IJISE.2021.10041796.
- 2. **Garbie, I.H.**, Garbie, A., "A Holistic Perspective of the Sustainable Manufacturing: A Novel Conceptual Approach", International Journal of Industrial and Systems Engineering, Vol. 41, No. 2, pp. 135-167, 2022.
- 3. Bashir, H. A., **Garbie, I.H.**, Hejaaji, A., "Reconfiguration of Hospital Outpatient Pharmacies by Adopting the Concept of Group Technology for Arrangement of Drugs on Shelves", International Journal of Industrial and Systems Engineering, Vol. 36, No. 3, pp. 430-450, 2020.
- 4. **Garbie, I.H.**, Al Shaqsi, R. D., "Building Sustainable Models and Assessments into Petroleum Companies: Theory and Application", International Journal of Industrial and Systems Engineering, Vol. 33, No. 4, pp. 473-512, 2019.
- 5. Bashir, H. A., Ojiako, G., **Garbie, I.H.**, "Joint Venture versus Non-Joint Venture Projects in the UAE Construction Industry: A Comparison of the Usage of Project Management Practices and Performance", International Journal of Project Organization and Management (IJPOM), Vol. 11, No. 3, pp. 243-266, 2019.
- 6. **Garbie, I.H.**, "Identifying Challenges facing Manufacturing Enterprises towards Implementing Sustainability in Newly Industrialized Countries", Journal of Manufacturing Technology Management (JMTM), Vol. 28, No. 7, pp. 928-960, 2017.
- 7. **Garbie, I.H.**, "Incorporating Sustainability/Sustainable Development Concepts in Teaching Industrial Systems Design Courses", Procedia Manufacturing, Vol. 8, pp. 417-423, 2017.
- 8. **Garbie, I.H.**, "A Non-Conventional Competitive Manufacturing Strategy for Sustainable Industrial Enterprises", International Journal of Industrial and Systems Engineering, Vol. 25, No. 2, pp. 131-159, 2017.
- 9. **Garbie, I.H.**, "Sustainable Development Index on Macro-Level Industrial Estates and Specified Sectors", International Journal of Industrial and Systems Engineering, Vol. 24, No. 3, pp. 384-421, 2016.
- 10. **Garbie, I.H.**, "Sustainability in Small and Medium-Sized Manufacturing Enterprises: An Empirical Study", the Journal of Engineering Research (TJER), Vol. 13, No.1, pp. 42-57, 2016.

- 11. **Garbie, I.H.**, "Fundamental Requirements for Sustainability Practices and Implementation: An Analytical Modeling and Empirical Investigation", International Journal of Sustainable Manufacturing, Vol. 3, No. 4, pp. 333-362, 2015.
- 12. **Garbie, I.H.**, "Integrating Sustainability Assessments in the Manufacturing Enterprises", International Journal of Industrial and Systems Engineering, Vol. 20, No. 3, pp. 343-368, 2015.
- 13. **Garbie, I.H.**, "Sustainability Awareness in Industrial Organizations", Procedia CIRP, Vol. 26, pp. 64-69, 2015.
- 14. **Garbie, I.H.**, "Sustainability Optimization in Manufacturing Enterprises", Procedia CIRP, Vol. 26, pp. 504-509, 2015.
- 15. **Garbie, I.H.**, and Al-Hosni, F.S., "New Evaluation of Petroleum Companies based on the Agility Level in Gulf Area", International Journal of Industrial and Systems Engineering, Vol. 18, No. 4, pp. 528-572, 2014.
- 16. **Garbie, I.H.**, "Performance Analysis and Measurement of Reconfigurable Manufacturing Systems", Journal of Manufacturing Technology Management (JMTM), Vol. 25, No. 7, pp. 934-957, 2014.
- 17. **Garbie, I.H.**, "An Analytical Technique to Model and Assess Sustainable Development Index in Manufacturing Enterprises", International Journal of Production Research, Vol. 52, No. 16, pp. 4876-4915, 2014
- 18. **Garbie, I.H.**, "A Methodology for the Reconfiguration Process in Manufacturing Systems", Journal of Manufacturing Technology Management (JMTM), Vol. 25, No. 6, pp. 891-915, 2014.
- 19. **Garbie, I.H.**, "An Experimental Investigation on Ergonomically Designed Assembly Workstation", International Journal of Industrial and Systems Engineering, Vol. 16, No. 3, pp. 296-321, 2014.
- 20. **Garbie, I.H.**, "DFMER: Design for Manufacturing Enterprises Reconfiguration considering Globalization Issues", International Journal of Industrial and Systems Engineering, Vol. 14, No. 4, pp. 484-516, 2013.
- 21. **Garbie, I.H.**, "DFSME: Design for Sustainable Manufacturing Enterprises (An Economic Viewpoint)", International Journal of Production Research, Vol. 51, No. 2, pp. 479-503, 2013.
- 22. **Garbie, I.H.**, "Concepts and Measurements of Industrial Complexity: A Stateof-the-Art Survey", International Journal of Industrial and Systems Engineering, Vol. 12, No. 1, pp. 42-83, 2012.
- 23. **Garbie, I.H.**, "Design for Complexity: A Global Perspective through Industrial Enterprises Analyst and Designer", International Journal of Industrial and Systems Engineering, Vol. 11, No. 3, pp. 279-307, 2012.
- 24. **Garbie, I.H.**, and Shikdar, A. A "Complexity Analysis of Industrial Organizations based on a Perspective of Systems Engineering Analysts", the Journal of Engineering Research (TJER) SQU, Vol. 8, No. 2, pp. 1-9, 2011.

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- 25. **Garbie, I.H.**, "Converting Traditional Production Systems to Focused Cells as a Requirement of Global Manufacturing", Journal of Service Science and Management (JSSM), Vol. 4, No. 3, pp. 268-279, 2011.
- 26. **Garbie, I.H.**, "Implementation of Agility Concepts into Oil Industry", Journal of Service Science and Management (JSSM), Vol. 4, No. 2, pp. 203-214, 2011.
- 27. **Garbie, I.H.**, and Shikdar, A.A., "Analysis and Estimation of Complexity level in Industrial Firms", International Journal of Industrial and System Engineering, Vol. 8, No. 2, pp. 175-197, 2011.
- 28. **Garbie, I.H.**, "A Roadmap for Reconfiguring Industrial Enterprises as a Consequence of Global Economic Crisis (GEC)" Journal of Service Science and Management (JSSM), Vol. 3, No. 4, pp. 419-428, 2010.
- 29. **Garbie, I.H.**, Parsaei, H.R., and Leep, H.R., "Measurement of Needed Reconfiguration Level for Manufacturing Firms", International Journal of Agile Systems and Management, Vol. 3, Nos. 1/2, pp. 78-92, 2008 (Special Issue on Complexity in Manufacturing), 2008.
- 30. **Garbie, I.H.**, Parsaei, H.R., and Leep, H.R., "A Novel Approach for Measuring Agility in Manufacturing Firms", International Journal of Computer Applications in Technology, Vol. 32, No. 2, pp. 95-103, 2008.
- 31. **Garbie, I.H.**, Parsaei, H.R., and Leep, H.R., "Machine Cells Formation Based on the New Similarity Coefficient", Journal of Industrial and Systems Engineering, Vol.1, No. 4, pp. 318-344, Winter 2008.
- 32. **Garbie, I.H.**, Parsaei, H.R., and Leep, H.R., "Introducing New Parts into Existing Cellular Manufacturing Systems based on a Novel Similarity Coefficient", International Journal of Production Research, Vol. 43, No. 5, pp. 1007-1037, 2005.
- 33. Moussa, A.M, Barakat, A.F., **Garbie, I.H.**, "Development of Constrained Optimization Analysis and Strategies for Multipass Milling Operations", Engineering. Research Journal, Helwan University, Vol. 50, pp.103-120, Nov. 1996.
- 34. Moussa, A.M, Barakat, A.F., **Garbie, I.H.**, "Computerized Determination of Optimum Cutting Variables for CNC Milling", Engineering. Research Journal, Helwan University, Vol. 5, pp.1-10, June 1995.

PEER-REVIEWED CONFERENCE PROCEEDINGS

- 1. **Garbie, I.H.**, and Parsaei, H., (2022), "Customizing Manufacturing Technologies for Industry 4.0", 12th Annual International Conference on Industrial Engineering and Operations Management, March 7-10, 2022, Istanbul, Turkey (8 Pages).
- 2. **Garbie, I.H.**, and Garbie, A., (2020), "Identifying and Estimating the Implementation Level for Industry 4.0", the 4th International Conference of Advances in Science and Engineering Technology (Multi-Conferences) ASET 2022, February 21-24, 2022, Dubai, UAE, (6 pages).
- 3. **Garbie, I.H.**, and Garbie, A., (2020), "Sustainability and Manufacturing: A Conceptual Approach", Proceedings of the Industrial and Systems Engineering

- Research Conference (IISE Annual Conference and Expo 2020), Nov.1-3, 2020, New Orleans, LA, USA (6 pages) (Held Virtually).
- 4. **Garbie, I.H.**, and Garbie, A., (2020), "Outlook of Requirements of Manufacturing Systems for 4.0", the 3rd International Conference of Advances in Science and Engineering Technology (Multi-Conferences) ASET 2020, February 4-6, 2020, Dubai, UAE, (6 pages).
- 5. **Garbie, I.H.**, and Garbie, A., (2020), "A New Analysis and Investigation of Sustainable Manufacturing through a Perspective Approach", the 3rd International Conference of Advances in Science and Engineering Technology (Multi-Conferences) ASET 2020, February 4-6, 2020, Dubai, UAE, (6 pages).
- 6. **Garbie, I.H.**, (2019), "Towards Designing Smart Manufacturing Systems for Industry 4.0 considering Reconfiguration", Proceedings of the 25th International Conference on Production Research Manufacturing Innovation: Cyber Physical Manufacturing, August 9-14, Chicago, Illinois, USA (10 pages)
- 7. **Garbie, I.H.**, and Bashir, H.A., (2018), "Modeling and Analyzing Critical Factors for Implementing Sustainability in Industrial Firms", Proceedings of the Industrial and Systems Engineering Research Conference (IISE Annual Conference and Expo 2018), May 19- 24, 2018, Orlando, Florida, USA.
- 8. **Garbie, I.H.**, and Bashir, H.A., (2018), "Proposing a Sustainability Course in Industrial, Manufacturing and systems engineering Program", Proceedings of the Industrial and Systems Engineering Research Conference (IISE Annual Conference and Expo 2018), May 19- 24, 2018, Orlando, Florida, USA.
- 9. **Garbie, I.H.**, (2016), "Analysis and Investigation of Critical Success Issues for Implementing Sustainability", the 14 th Global Conference on Sustainable Manufacturing (GCSM), October 3-5, 2016, Stellenbosch, South Africa.
- 10. **Garbie, I.H.**, (2015), "Creating Index for Sustainability/Sustainable Development in an Industrial Estate", International Conference on Computers and Industrial Engineering (CIE45) Proceedings, October 28-30, 2015, Metz, France.
- 11. **Garbie, I.H.**, (2015), "Sustainability Analysis and Evaluation in Oil and Gas Industry", Proceedings of the Industrial and Systems Engineering Research Conference (IISE Annual Conference and Expo 2015), May 30- June 2, 2015, Nashville, Tennessee, USA.
- 12. **Garbie, I.H.**, (2015), "Assessment the Awareness of Sustainable Development in Manufacturing Enterprises", Proceedings of the Industrial and Systems Engineering Research Conference (IISE Annual Conference and Expo 2015), May 30- June 2, 2015, Nashville, Tennessee, USA.
- 13. **Garbie, I.H.**, (2015), "Investigation of Sustainability Index in Omani Manufacturing Firms: Evidence from Industrial Company", Proceedings of the Ibrahim Garbie _ CV Page 11 2015 International Conference on Industrial Engineering and Operations Management, Dubai, UAE, March 3-5, 2015, 64-69.
- 14. **Garbie, I.H.**, (2014), "Assessing Sustainability Practices and Implementation in Manufacturing Firms", International Conference on Computers and Industrial

- Engineering joint with International Symposium on Intelligent Manufacturing and Service Systems (CIE 44 & IMSS'14) Proceedings, October 14-16, 2014, Istanbul, Turkey, pp. 2508-2518
- 15. **Garbie, I.H.**, (2013), "Developing a New Assessment Framework of Sustainability in Manufacturing Enterprises", the 11th Global Conference on Sustainable Manufacturing (GCSM), September 23-25, 2013, Berlin, German, pp. 564-569.
- 16. **Garbie, I.H.**, (2013), "Sustainable Development of Manufacturing Enterprises", the first IIE International Conference, Istanbul, Turkey, June 26-28, 2013.
- 17. **Garbie, I.H.**, (2013), "Non Traditional Evaluation Methodology of Manufacturing Enterprises Performance Measurement", the first IIE International Conference, Istanbul, Turkey, June 26-28, 2013.
- 18. **Garbie, I.H.**, and Al-Hosni, F.S., (2013), "Analysis and Investigation of the Agility in Petroleum Companies", the first IIE International Conference, Istanbul, Turkey, June 26-28, 2013.
- 19. **Garbie, I.H.**, (2012), "Pathways towards Sustainable Manufacturing Enterprises", Proceedings of the Industrial and Systems Engineering Research Conference, May 19-23, 2012, Orlando, FL, USA.
- 20. **Garbie, I.H.**, and Parsaei, H. R., (2012), "A Role of Reconfiguring Manufacturing Enterprise as a Major Requirement for Sustainability", Proceedings of the Industrial and Systems Engineering Research Conference, May 19-23, 2012, Orlando, FL, USA.
- 21. **Garbie, I.H.**, (2011), "Design for Reconfiguration as a Requirement of Global Manufacturing", Proceedings of the ASME 2011 International Mechanical Engineering Congress & Exposition (IMECE 2011), November 11-17, 2011, Denver, Colorado, USA.
- **Garbie, I.H.**, (2011), "An Experimental Study on Assembly Workstation considering Ergonomically Issues", Proceedings of the 41th of International Conference on Computers and Industrial Engineering, Los Angeles, CA, USA, October 23-26, 2011, pp. 275-282
- 23. **Garbie, I.H.**, (2011), "A Framework of Manufacturing Enterprises Sustainability incorporating Globalization Issues", Proceedings of the 41th of International Conference on Computers and Industrial Engineering, Los Angeles, CA, USA, October 23-26, 2011, pp. 266-274.
- 24. **Garbie, I.H.**, (2011), "Design for Industrial Enterprises Reconfiguration (DFR) based on Global Recession", Abstract for Poster Session for Manufacturing and Design in the 2011 Industrial Engineering Research Conference, May 21-25, 2011, Reno, NV, USA.
- 25. **Garbie, I.H.**, (2011), "Measuring the Agility Level in Petroleum Companies", Proceedings of the 2011 Industrial Engineering Research Conference, May 21-25, 2011, Reno, NV, USA.
- 26. Shikdar, A.A., **Garbie, I.H.**, and Khadem, M.K. (2011), "Development of a Smart Workstation for an Assembly Task", Proceedings of the 2011 International

- Conference on Industrial Engineering and Operations Management (IEOM 2011), Kuala Lumpur, Malaysia, January 22 24, 2011, pp. 826-831.
- 27. **Garbie, I.H.**, and Shikdar, A. A. (2010), "Analysis of Industrial Organizations Complexity: a Conceptual Model", Proceedings of the International Conference of Applied Mechanics, Materials, and Manufacturing (ICAMMM 2010), December 13-15, 2010, Muscat, Oman, 247-252.
- 28. **Garbie, I.H.**, (2010), "New Evaluation of Industrial Enterprises", Proceedings of the International Conference of Applied Mechanics, Materials, and Manufacturing (ICAMMM 2010), December 13-15, 2010, Muscat, Oman, 253-257.
- 29. **Garbie, I.H.**, and Shikdar, A.A., (2010), "Design for Manufacturing Systems Complexity: A perspective Approach", Proceeding of the ASME 2010 10th Biennial Conference on Engineering Systems Design and Analysis (ESDA 2010), Istanbul, Turkey, July 12-14.
- 30. **Garbie, I.H.**, (2010), "Enhancing the Performance of Industrial Firms through Implementation of Lean Techniques", Proceedings of the International Conference of Industrial Engineering Research (IERC), Cancun, Mexico, June 5-9, 2010.
- 31. **Garbie, I.H.**, and Shikdar, A.A., (2010) "Complexity level in Industrial Firms: Case Studies Implementation", Proceedings of the 2010 International Conference on Industrial Engineering and Operations Management (IEOM 2010), Dhaka, Bangladesh, January 9-10, 2010.
- 32. **Garbie, I.H.**, (2009) "A Vision for Reconfiguring Industrial Organization due to the Global Recession", Proceedings of the 39th of International Conference on Computers and Industrial Engineering, France, July 6-8, 2009, pp. 658-663.
- 33. **Garbie, I.H.**, and Shikdar, A.A., (2009), "Determination of Complexity Levels in Industrial Firms", Proceedings of the International Conference of Industrial Engineering Research (IERC), Miami, Florida, USA, pp. 1423-1428, May 30- June 3, 2009.
- 34. **Garbie, I.H.**,and Parsaei, H.R., (2009), "Reconfiguring Job Shops Manufacturing Systems to Cellular Systems", Proceedings of the International Conference of Industrial Engineering Research (IERC), Miami, Florida, USA, May 30- June 3, 2009, pp. 1429-1434.
- 35. **Garbie, I.H.**, (2008), "A Quantitative Performance Measurement regarding Reconfigurable Manufacturing Systems", Proceedings of the International Conference of Industrial Engineering Research (IERC), Vancouver, Canada, May 17-21, 2008, pp.734-739.
- 36. **Garbie, I.H.**, (2007), "A New Reconfiguration Strategy through a Global Perspective: Analysis and Methodology", Proceedings of the 37th of International Conference on Computers and Industrial Engineering, Alexandria, Egypt, October 20-23, 2007, pp. 1340-1350
- 37. **Garbie, I.H.**, (2007), "Measurement of Needed Reconfiguration Level Based on Manufacturing Firms Design and Agility", Proceedings of the International

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- Conference of Industrial Engineering Research (IERC), Nashville, Tennessee, May 19-23, 2007, pp. 76-81.
- 38. **Garbie, I.H.**, (2006), "Evaluation of Manufacturing Firms for Agility", Proceedings of the International Conference of Industrial Engineering Research (IERC), Orlando, Florida, May 20-24, 2006, pp. 1-6.
- 39. **Garbie, I.H.**, Parsaei, H.R., and Leep, H.R., (2004), "Comparison between the Optimal and Pragmatic Approach in Designing Cellular Manufacturing Systems," Proceedings of the 34th International Conference on Computer and Industrial Engineering, San Francisco, California, November 14-16, 2004.
- 40. **Garbie, I.H.**, Parsaei, H.R., and Leep, H.R., (2004), "A New Similarity Coefficient between a New Part and the Existing Manufacturing Cells," Proceedings of the International Conference of Industrial Engineering Research (IERC), Houston, Texas, May 15-19, 2004, pp. 2423-2423.
- 41. **Garbie, I.H.**, Parsaei, H.R., and Leep, H.R., (2003), "Part Families Formation and Part Process Plan Identification Based on a New Similarity Coefficient", Proceedings of the Conference "Group Technology/ Cellular Manufacturing World Symposium 2003", Columbus, Ohio, July 28-30, 2003.

CONFERENCE PRESENTATIONS

- 1. **Garbie, I.H.**, "Customizing Manufacturing Technologies for Industry 4.0", 12th Annual International Conference on Industrial Engineering and Operations Management, March 7-10, 2022, Istanbul, Turkey.
- 2. **Garbie, I.H.**, "Identifying and Estimating the Implementation Level for Industry 4.0", the 4th International Conference of Advances in Science and Engineering Technology (Multi-Conferences) ASET 2022, February 21-24, 2022, Dubai, UAE.
- 3. **Garbie, I.H.**, "Sustainability and Manufacturing: A Conceptual Approach", Proceedings of the Industrial and Systems Engineering Research Conference (IISE Annual Conference and Expo 2020), Nov.1-3, 2020, New Orleans, LA, USA (Held Virtually).
- 4. **Garbie, I.H.**, "Outlook of Requirements of Manufacturing Systems for 4.0", the 3rd International Conference of Advances in Science and Engineering Technology (Multi-Conferences) ASET 2020, February 4-6, 2020, Dubai, UAE.
- 5. **Garbie, I.H.**, "A New Analysis and Investigation of Sustainable Manufacturing through a Perspective Approach", the 3rd International Conference of Advances in Science and Engineering Technology (Multi-Conferences) ASET 2020, February 4-6, 2020, Dubai, UAE.
- 6. **Garbie, I.H.**, "Analysis and Investigation of Critical Success Issues for Implementing Sustainability", the 14th Global Conference on Sustainable Manufacturing (GCSM), October 3rd -5th, 2016 in Stellenbosch, South Africa.
- 7. **Garbie, I.H.**, "Incorporating Sustainability/Sustainable Development Concepts in Teaching Industrial Systems Design Courses", the 14th Global Conference on

- Sustainable Manufacturing (GCSM), October 3rd -5th, 2016 in Stellenbosch, South Africa.
- 8. **Garbie, I.H.**, "Creating Index for Sustainability/Sustainable Development in an Industrial Estate", the CIE 45 Conference on Computer and Industrial Engineering October 28-30, 2015 in Metz, France.
- 9. **Garbie, I.H.** "Sustainability Analysis and Evaluation in Oil and Gas Industry", (IIE Annual Conference and Expo 2015), May 30- June 2, 2015, Nashville, Tennessee, USA.
- 10. **Garbie, I.H.** "Assessment the Awareness of Sustainable Development in Manufacturing Enterprises", (IIE Annual Conference and Expo 2015), May 30- June 2, 2015, Nashville, Tennessee, USA.
- 11. **Garbie, I.H.** "Investigation of Sustainability Index in Omani Manufacturing Firms: Evidence from Industrial Company", International Conference on Industrial Engineering and Operations Management, Dubai, UAE, March 3-5, 2015.
- 12. **Garbie, I.H.**, "Assessing Sustainability Practices and Implementation in Manufacturing Firms", International Conference on Computers and Industrial Engineering joint with International Symposium on Intelligent Manufacturing and Service Systems (CIE 44 & IMSS'14) Proceedings, October 14-16, 2014, Istanbul, Turkey
- 13. **Garbie, I.H.** "Sustainability Awareness in Industrial Organizations", the 12th Global Conference on Sustainable Manufacturing (GCSM), September 22 -24th, 2014, in Johor Bahru, Malaysia.
- 14. **Garbie, I.H.** "Sustainability Optimization in Manufacturing Enterprises", the 12th Global Conference on Sustainable Manufacturing (GCSM), September 22 24th, 2014, in Johor Bahru, Malaysia.
- 15. **Garbie, I.H.** "Towards Industrial Innovative Solutions", April 22, 2014, Rusay1 Industrial Estate.
- 16. **Garbie, I.H.** "Developing a New Assessment Framework of Sustainability in Manufacturing Enterprises", the 11th Global Conference on Sustainable Manufacturing (GCSM), September 23 -25th, 2013, in Berlin, Germany.
- 17. **Garbie, I.H.** "Sustainable Development of Manufacturing Enterprises", the 1st IIE International Conference, June 26-28, 2013, in Istanbul, Turkey.
- 18. **Garbie, I.H.** "Non-Traditional Evaluation Methodology of Manufacturing Enterprises Performance Measurement", the 1st IIE International Conference, June 26-28, 2013, in Istanbul, Turkey
- 19. **Garbie, I.H.** "Analysis and Investigation of the Agility in Petroleum Companies", the 1st IIE International Conference, June 26-28, 2013, in Istanbul, Turkey
- 20. **Garbie, I.H.** "Pathways towards Sustainable Manufacturing Enterprises", the IIE Annual Conference, May 19-23, 2012 in Orlando, FL, USA.

- 21. **Garbie, I.H.** "A Role of Reconfiguring Manufacturing Enterprise as a Major Requirement for Sustainability", the IIE Annual Conference, May 19-23, 2012 in Orlando, FL, USA.
- 22. **Garbie, I.H.** "An Experimental Study on Assembly Workstation considering Ergonomically Issues", the 41st Computers and Industrial Engineering Conference, October 23-26, 2011 in Los Angeles, CA, USA
- 23. **Garbie, I.H.** "A Framework of Manufacturing Enterprises Sustainability incorporating Globalization Issues", the 41st Computers and Industrial Engineering Conference, October 23-26, 2011 in Los Angeles, CA, USA.
- 24. **Garbie, I.H.** "Design for Industrial Enterprises Reconfiguration (DFR) based on Global Recession", IIE Annual Conference (61st), May 21-24, 2011 in Reno, NV, USA.
- 25. **Garbie, I.H.** "Measuring the Agility Level in Petroleum Companies", IIE Annual Conference (61st), May 21-24, 2011 in Reno, NV, USA.
- 26. **Garbie, I.H.** "Analysis of Industrial Organizations Complexity: A Conceptual Model ", the ICAMMM Conference, December 12-15, 2010 in Muscat, Oman.
- 27. **Garbie, I.H.** "New Evaluation of Industrial Enterprises", the ICAMMM Conference, December 12-15, 2010 in Muscat, Oman.
- 28. **Garbie, I.H.** "Design for Manufacturing Systems Complexity: A perspective Approach", the 10th ASME, July 12-14, 2010 in Istanbul, Turkey.
- 29. **Garbie, I.H.** "A Vision for Reconfiguring Industrial Organization due to the Global Recession", the 39th Computers and Industrial Engineering Conference, July 6-8, 2009 in Troyes, France.
- 30. **Garbie, I.H.** "Determination of Complexity Levels in Industrial Firms ", the IIE Annual Conference, May 30- June 3, 2009, in Miami, Florida, USA.
- 31. **Garbie, I.H.** "Reconfiguring Job Shops Manufacturing Systems to Cellular Systems ", the IIE Annual Conference, May 30- June 3, 2009, in Miami, Florida, USA.
- 32. **Garbie, I.H.** "A Quantitative Performance Measurement regarding Reconfigurable Manufacturing Systems", the IIE Annual Conference, May 17-21, 2008, in Vancouver, British Columbia, Canada.
- 33. **Garbie, I.H.** "A New Reconfiguration Strategy through a Global Perspective: Analysis and Methodology", the 37th Computers and Industrial Engineering Conference, October 19-23, 2007 in Alexandria, Egypt.
- 34. **Garbie, I.H.** "A New Similarity Coefficient between a New Part and the Existing Manufacturing Cells", the IIE Annual Conference, May 15-20, 2004 in Houston, TX, USA.
- 35. **Garbie, I.H.** "Part Families Formation and Part Process Plan Identification Based on a New Similarity Coefficient", in the "Group Technology/ Cellular Manufacturing World Symposium 2003" Columbus, Ohio, USA, July 28-30, 2003.

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GRADUATE STUDENTS

- 1. Rahma Al Shaqsi, M.Sc.
 - "Investigating and Assessing the Sustainability in Oil and Gas Industry", 2017.
- 2. Fahad Al Honsi, M.Sc.
 - "Analysis and Estimation of Agility level in Petroleum Companies", 2012.
- 3. Md. Anisul Islam Ismail, M.Sc.
 - "Assessing the Occupational Health and safety (OHS) Risks using AHP in Micro and Small-Scale Enterprises (MSES) in Oman", 2012.
- 4. Khaled Khuseib Khamis Al Badi, M.Sc.
 - "A Study on Factors Affecting Project Success using Structural Equation Modeling (SEM)", 2012.
- 5. Aamer Mohammed Al-Riyami, M.Sc.
 - "Obstacles Restraining Productivity Improvement and Causes of Delay of Unsuccessful Implementation in the Manufacturing Sector of Oman", 2012.
- 6. Mohammed Al Ruqaishi, M.Sc.
 - "Causes of Delay in Construction Projects in the Oil and Gas Industry in Oman", 2011.
- 7. Khalida Omar Al Hakmani, M.Sc.
 - "An Investigation into Issues Related to the Productivity of Workers in the Oil and Gas Sector in Oman", 2011.
- 8. Khalid Ali AL Jaradi, M.Sc.
 - "The Impact of Improved Workstations on Employees Health and Productivity", 2010.
- 9. Sulaiman Khamis AL Siyabi, M.Sc.
 - "Post Evaluation of Project Cost Overrun by Using Interpretive Structural Modeling", 2010.

TEACHING EVALUATIONS

Quantitative Summary of Student Evaluations on a 4.0 scale at Sultan Qaboos University SQU.

Course Code	Semester/ Year	Overall, this instructor is a good teacher	Summary (overall score)
MEIE 4275	Spring 2017	3.56	3.39
MEIE 5262	Spring 2017	2.50	2.71
MEIE 3292	Fall 2016	3.67	4.00
MEIE 5280	Fall 2016	3.59	3.67
MEIE 5262	Spring 2016	4.00	4.00
MEIE 4275	Spring 2016	3.90	3.73
MEIE 5233	Fall 2015	3.50	3.37
MEIE 5261	Fall 2015	3.83	3.67
MEIE 3292	Spring 2015	3.08	3.06

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MEIE 4077	G : 2015	2.00	2.62
MEIE 4275	Spring 2015	3.80	3.62
MEIE 5261	Fall 2014	3.37	3.20
MEIE 4223	Fall 2014	3.25	3.19
MEIE 4223	Spring 2014	3.40	3.28
MEIE 3292	Spring 2014	3.33	3.51
MEIE 4223	Fall 2013	3.50	3.75
MEIE 5261	Fall 2013	3.38	3.34
MEIE 3212	Spring 2013	3.81	3.72
MEIE 5232	Spring 2013	3.50	3.44
PNGE 5103	Fall 2012	3.50	3.46
MEIE 5261	Fall 2012	3.67	3.71
MEIE 4223	Fall 2012	3.71	3.71
MEIE3212	Spring 2012	2.89	2.93
MEIE 5232	Spring 2012	3.44	3.25
PNGE 5103	Spring 2012	3.67	3.42
MEIE5261	Fall 2011	2.72	2.81
MEIE 4223	Fall 2011	2.67	2.71
PNGE 5103	Fall 2011	3.58	3.40
MEIE3212	Spring 2011	3.00	2.95
MEIE 4285/10	Spring 2011	3.46	3.35
MEIE 4285/20	Spring 2011	3.36	3.27
MEIE 5261	Fall 2010	3.22	3.16
MEIE 5282	Fall 2010	3.20	3.07
MEIE 3212	Spring 2010	3.56	3.36
MEIE 4285/20	Spring 2010	3.36	3.22
MEIE 5261	Fall 2009	3.56	3.11
MEIE 5282	Fall 2009	3.46	3.11
MEIE 3212	Spring 2009	3.60	3.24
MEIE 5261	Spring 2009	3.67	3.40
MEIE 4286	Spring 2009	3.47	3.23

COVER PAGES OF THE TWO BOOKS



