# RESUME OF DR. ENG. MAHMOUD AHMED EL-SHARIEF

## Dr. Eng. Mahmoud Ahmed Abd Allah Ahmed Mohamed El-Sharief

Associated Professor in Mechanical Engineering Dept.
Faculty of Engineering, Assiut University
Assiut, 71516, Egypt.

Email: <a href="mailto:msharif@assiut.edu.eg">msharif@assiut.edu.eg</a>
Phone: 088-2411145 (office)
088-2329798 (home)
0122-1729571 (Mobile)



Personal:	<ul><li>Date of Birth: 07/01/1968</li><li>Citizenship: Egyptian</li></ul>
Education:	<ul> <li>Vienna University of Technology, Vienna, Austria 2004</li> </ul>
	<u>Doctor of Philosophy</u> , Dissertation Title, "Design and Operation of the Flexible Manufacturing Networks (FMNs)" During my work toward my Ph.D. Degree from October 2000 to July 2004 I passed successfully five graduate courses which are:
	Total Quality Management (TQM), Strategic Management, Production Management, Production Planning and Control, and Management.
	Assiut University, Assiut, Egypt 1998
	<u>Master of Science</u> in Mechanical Engineering, Thesis Title, "Application of Computerized Plant Layout Techniques to process industries" During my work toward my M. Sc. degree from October 1992 to December 98 I passed successfully five graduate courses, which are:
	Advanced Operations Research, Advanced Engineering Analysis, Advanced Quality Control, Applied Electronics and Computers, Advanced Mathematics.
	Assiut University, Assiut, Egypt 1990
	<b>Bachelor of Science</b> in Mechanical Engineering, Design and Production Engineering (with Honors).
Work Experience:	<ul> <li>Associated Professor, 2013 – present in mechanical Engineering Department, Assiut University, Assiut, Egypt</li> <li>Assistant Professor, 2004–2013 in Mechanical Engineering Department, Assiut University, Assiut, Egypt</li> <li>Ph.D. student, 2000-2004 in technical university of Vienna, Austria</li> <li>Assistant Teacher, 1998 – 2000 in Mechanical Engineering Department, Assiut University, Assiut, Egypt</li> </ul>

- Instructor, 1992-1998 in Mechanical Engineering Department, Assiut University, Assiut, Egypt
- During these periods I taught and shared in teaching the following undergraduate courses:

Factory planning and organization, Operations Research, Quality Control, Project Management, Theory of Machines, Machine Design, Engineering Drawing, Machine-shop Technology, and Mechanical Engineering Laboratories.

Also, I taught the following Post courses:

Advanced operation Research, Advanced Quality Control Systems, Total Quality Management, Flexible Manufacturing Systems

#### **Research Interests:**

- Flexible Manufacturing Systems (FMSs)
- Flexible Manufacturing Networks (FMNs)
- Supply Chain Management (SCM)
- Buffers of the Production Lines
- Industrial Clusters
- Production Planning and Control
- Quality Control
- > Total Quality Management (TQM)
- Global Manufacturing Environment
- Production Management and Simulation
- Operations Research
- Lean manufacturing
- Lean-Six Sigma manufacturing systems

## Skills & Qualifications:

## Mathematical and Simulation Modeling of many Manufacturing Systems:

Strong experience in modeling of the Flexible Manufacturing Networks

- ➤ Strong experience in AMPL (A Modeling Language for Mathematical Programming) using Operations Research techniques to solve many types of Partner selection problem (Partners sharing in the FMN) and coordination the processes between these partners.
- Strong experience in Simulation modeling (ARENA and SIMUL8 packages) of the Flexible Manufacturing Systems
- Strong experiences in facility layout planning, and production planning and control analysis
- Strong experiences in modeling and simulation of Supply Chain Management to overcome SCM problems such as uncertainty and inventory control
- Strong experience in modeling and simulation of buffers in the production lines
- Using Fuzzy logic, neural networks and genetic algorithm in modeling many engineering problems

#### **Computer Skills:**

- Programming Languages: Experienced in VB, FORTRAN, QBasic, Auto-Lisp, AMPL, and ARENA Simulation Package.
- Software Packages: AutoCAD, and MS-Office (Word, Excel, Access, Power Point).

- ➤ Platforms: MS Win 8/7/XP, UNIX
- Simulation Packages ARENA and SIMUL8

### List of Selected Publications

- [1]. Mahmoud A. El-Sharief, M. M. Sallam, Multi-Objectives Layout Planning, ASME Flexible Manufacturing Conference DTEC'2000 September 10-13 Baltimore, Maryland, USA
- [2]. Mohammad Abd El-Aal, Mahmoud A. El-Sharief, Ahmed Ezz El-Deen and Abo Bakr Nassr "Supply Chain Management Simulation Types: A Literature Review" Journal of Engineering Sciences, Assiut University, Vol. 36, No. 3, pp. 675-687, May 2008
- [3].vMahmoud A. El-Sharief, M.A. Hassan and A. Aboul-Kasem "A fuzzy model for evaluation, prediction and control of slurry erosion of ductile materials" Journal of Engineering Sciences, Assiut University, Vol. 37, No. 6, pp. 1449-1461, November 2009
- [4]. Hassan M. A., Abouel-Kasem A. and Mahmoud A. El-Sharief "Evaluation of the material constants of Nitrile Butadeine Rubbers (NBRs) with different Carbon Black (CB): FE-simulation and experimental" Journal of Engineering Sciences, Assiut University, Vol. 38, No. 1, pp. 119-134, January 2010
- [5]. Mohammad Abd El-Aal, Mahmoud A. El-Sharief, Ahmed Ezz El-Deen and Abo Bakr Nassr "A Framework for evaluating and comparing inventory control polices in Supply chains" Journal of Engineering Sciences, Assiut University, Vol. 38, No. 2, pp. 449-465, March 2010
- [6]. Mohammad Abd El-Aal, Mahmoud A. El-Sharief, Ahmed Ezz El-Deen and Abo Bakr Nassr "Supply chain performance evaluation: a comprehensive evaluation system" Int. J. Business Performance and Supply Chain Modelling, Vol. 3, No. 2, pp. 141-166, 2011
- [7]. M.A. Hassan, M.A. El-Sharief, A. Aboul-Kasem, S. Ramesh, J. Purbolaksono "A fuzzy model for evaluation and prediction of slurry erosion of 5127 steels" Materials and Design Vol. 39, pp. 186–191, 2012
- [8]. M.A. Hassan, A. Abouel-Kasem, Mahmoud A. El-Sharief, F. Yusof "Evaluation of the material constants of nitrile butadiene rubbers (NBRs) with different carbon black loading (CB): FE-simulation and experimental" Polymer Vol. 53, pp. 3807-3814, 2012
- [9]. M. Heshmat, M. A. El-Sharief, M. G. El-Sebaie "Simulation Modeling of Production Lines: A Case Study of Cement Production Line" Journal of Engineering Sciences, Assiut University, Faculty of Engineering, Vol. 41, No. 3, May, 2013, pp. 1045-1053
- [10]. M. A. A. El-Gendy, A. A. Nasr, Mahmoud A. El-Sharief "Burr Formation in Aluminum and Steel Holes Drilled by A Bench Drill with A Spindle-Mounted Spring" Journal of

Engineering Sciences, Assiut University, Faculty of Engineering, Vol. 41, No. 3, May, 2013, pp. 930-946

[11]. Abdel Badie Sharkawy, Mahmoud A. El-Sharief & M-Emad S. Soliman "Surface roughness prediction in end milling process using intelligent systems" International Journal of Machine Learning and Cybernetics, Springer, ISSN 1868-8071, DOI 10.1007/s13042-013-0155-7, accepted in 12 March 2013

[12]. M. Heshmat, Mahmoud. A. El-Sharief, M. G. El- Sebaie "Simulation Modeling of Automatic Production Lines with Intermediate Buffers" International Journal of Scientific & Engineering Research, Volume 4, Issue 6, June 2013 ISSN 2229-5518.

[13]. Mahmoud A. El-Shareif, "Using Value Stream Mapping for Lean Manufacturing Implementation: Cement Sacks Factory as an Industrial Case Study", Journal of Engineering Sciences, Assiut University, Faculty of Engineering, Vol. 41, No. 6, November, 2013

[14]. Mahmoud A. El-Sharief, "Improvement of Manufacturing Processes Utilizing Value Stream Mapping Technique: Cement Sacks Factory as an Industrial Case Study", International Journal of Scientific & Engineering Research, Volume 4, Issue 11, November-2013, ISSN 2229-5518

[15]. Abdulrakeeb A. Ghaleb, Mahmoud A. El-Sharief, Mohamed. G. El-Sebaie "Study of Tools, Techniques and Factors used in Lean Six Sigma", International Journal of Scientific & Engineering Research, Volume 5, Issue 12, December-2014 ISSN 2229-5518

[16]. Abdulrakeeb A. Ghaleb, Mahmoud A. El-Sharief, Mohamed. G. El-Sebaie "An Application of Lean Six Sigma (LSS) in Small and Medium En-terprises (SMEs): Cement bags industry", International Journal of Scientific & Engineering Research, Volume 6, Issue 5, May-2015, ISSN 2229-5518

## Selected Consultation works experiences

- Preparation a technical report in 15/7/2006 about the situation of the production departments in the Egypt Aluminum Company (Naga Hamadi) for preparing the company to the certificate of ISO (occupational safety and health).
- Preparation a technical report in 26/12/2006 about study of production analysis and planning for EL-MOHANDES factory for flagstones in Arab-Elawamer-Assiut as the request of the factory owner contract with the Centre of Industry Modernization Organization.
- Preparation a technical report in 12/1/2007 about study of production analysis and planning for HAMZA EKHWAN factory to mobilize and packaging foodstuffs - Assiut as the request of the factory owner contract with the Centre of Industry Modernization Organization.

- Preparation a technical report in 19/1/2007 about study of production analysis and planning for Factory 2000- Assiut in the city of Al-Safa industrial district- Assiut as the request of the factory owner contract with the Centre of Industry Modernization Organization.
- Preparation a technical report in 8/3/2007 on the status of Al Kawthar Factory-SOHAG province to produce animal feed as the request of the factory owner contract with Centre of Industry Modernization Organization to inspect the technical condition of the production machines, identification of the efficiency of each
- Consultation works experiences as a technical consultant and a member in the Center of Engineering studies and Consultation ( please see the attached file (in Arabic)