

Ashraf W. Labib

(BSc, MBA, MSc, PhD, CEng, FORS, FIEE, MIEEE)

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Summary

Dr. Labib has an international reputation in the field of Operations and Asset Management Systems. He has published 70+ refereed papers in professional journals and international conferences proceedings. He received the 1999 and 2000 “Highly Commended” awards for two published papers (Labib, 98b and Labib, 99a) from the Literati Club, MCB Press (a publisher of 140 journals).

He currently leads a strong group of 10 PhDs (6 of which are under his direct supervision and 2 have graduated). He has been appointed to act as an Associate Editor of the IEEE Transactions SMC part C. He has acted as a guest editor of a special issue of the Journal of Logistics Information Management in 1999 in the area of Crisis Management. He has also been elected to be on the executive committee of the IPROMS European Network of Excellence (FP6).

He has been active in attracting research-funded projects from EPSRC, European Commission and industry. Dr. Labib has been awarded two EPSRC grants to study reliability models and maintenance systems and to understand their effect on crisis management. He has also been involved in the EuroBrite European research project. Recently he has been awarded a European NoE Grant (IPROMS) as part of the Framework 6 Programme (30 Core Members 7.5 Million Euros for five Years); Co-investigators Prof Hinduja and Drs Mekid and Petty. He has been elected by the 30 members to be on the Executive Board in one of the four clusters for IPROMS. He has also secured an industrial research project sponsored by Federal Mogul.

He has acted as external examiner for several courses and PhDs. He has been invited to give key-note lectures in many countries, and has been invited to teach modules to various industries. Dr Labib has also been involved in the design, development, and implementation of Computerised Maintenance Management Systems (CMMSs), Stock Control Spares and Ordering Systems for major companies in the automotive sector such as Land Rover, Rockwell, Peugeot Talbot and Federal Mogul – Ferodo. Collaboration and consultancy on Maintenance Best Practice with companies including; Rolls Royce (Aero engines); the Royal Mail; Rockwell, Meritor Light Vehicle Systems, and Proctor and Gamble. He also advises oil and gas companies in the Gulf on preventive maintenance and turnaround management.

He has designed and initiated E-Maintenance courses with Professor Jay Lee, Director of the IMS Centre (NSF, USA Funded Centre of Excellence). These courses were held in both Manchester and the USA where it was attended by engineers from Intel, Rockwell Automation, Harley Davidson and other industries.

Dr. Labib is the First Year Tutor. He has been appointed as the Divisional Post Graduate Admissions Tutor and has served on the Strategy Working Group which has set the grounds for the merging strategy in terms of teaching and research of the 3 engineering departments prior to the merge and formation of the School of MACE.

Dr. Labib holds a PhD and MSc from Univ. of Birmingham, an MBA from the American University in Cairo, and a BSc in Mechanical Engineering from Univ. of Cairo. He is a Fellow of the Operational Research Society (ORS), a Fellow of the IEE, a Member of IEEE, and a Chartered Engineer.

EDUCATIONAL BACKGROUND

Ph.D. : University of Birmingham
Appropriate Productive Maintenance - A Multiple
Criteria D.S.S.
Graduated in July 1996.

M.Sc. (Eng.): University of Birmingham, Integrated Manufacturing Systems.
Graduated in September 1992.

MBA : American University in Cairo (A.U.C.)
Graduated in June 1990.

B.Sc. : Cairo University, Mechanical Production Engineering.
Graduated in June 1985.

RESEARCH TOPICS / INTERESTS

1. Maintenance Systems, Reliability Models and Asset Management.
2. Intelligent Manufacturing Systems, Industrial Computing & Automation.
3. Decision Analysis: Fuzzy Logic, and Multiple Criteria Decision-Making.
4. Reconfigurable Manufacturing Systems.
5. Next Generation Manufacturing Systems.

Employment:

Name: UMIST (University of Manchester Institute of Science & Technology)

Position: Senior Lecturer

Date: December, 1997 to Present.

Main Duties:

I. Teaching: Taking leadership for the design and coordination of a range of courses in the broad area of manufacturing systems and maintenance.

1. Teaching and developing the syllabus of an advanced course on Reliability and Maintenance Engineering to 4th Year M.Eng students in Aerospace and Mechanical Engineering from both UMIST and University of Manchester. Designing module description to support IEE and IMechE accreditation.
2. Teaching and developing the syllabus of a course on Industrial Computing (Fuzzy Logic and Programmable Logic Controllers) to 3rd Year students. Designing module description to support IEE accreditation.
3. Teaching Robotics Engineering for undergraduates.
4. Teaching Design for Manufacture for undergraduates.
5. Teaching a Masters Module on Manufacturing Systems.
6. Leading other staff in teaching Masters Module on Manufacturing Management.
7. Leading a team for the development of 3 new laboratory exercises which include:
 - Decision Analysis laboratory using Team Expert Choice which is an implementation software of the AHP approach
 - Programmable Logic Controllers (PLC) and Supervisory Control and Data Acquisition (SCADA) simulation laboratories.
 - Re-configuring a Robotics lab of four robots.

II. **Research:** Responsible for research in terms of: application for research grants, publication of papers, supervision of research students (attached list of funded grants, publications, and PhD projects supervised). Published 70+ journal papers and proceedings of international conferences. Leading the Manufacturing Systems Research Group – 10 doctoral research students and 3 members of academic staff.

Name: Rockwell / University of Birmingham

Position: Rockwell Research Fellow for World Class Maintenance

Dates: September 1996 – December 1997.

Main Duties:

- Design, development, implementation and analysis of a CMMS (Computerised Maintenance Management System).
- Responsible for project planning and implementation.
- Development and application of intelligent techniques for decision analysis.

Reasons for Leaving: Offered a Lectureship position.

Name: University of Birmingham

Position: MSc and PhD Candidate

Dates: October 1991 – August 1996.

Main Duties: Responsible for research and development of a maintenance management system, and a stock control system at Land Rover, Solihull, UK (as part of the research). Responsible for project planning and implementation.

Reasons for Leaving: Graduated with a MSc and PhD. Offered postdoctoral position.

Name: Merlin Gerin (A French company in Egypt)

Position: Production Line Manager

Dates: December 1989 – September 1991.

Main Duties:

- Managing a production line of 20 staff producing MCBs (Miniature Circuit Breakers) .
- Responsible for achieving quality and production targets (40,000 units per month).
- Budgetary responsibility of £500K per annum.

Reasons for Leaving: Awarded a Scholarship to carry out Post Graduate studies.

Name: AOI (Arab Organisation of Industry), Cairo, Egypt (Headquarters of ABD)

Position: Operations Specialist

Dates: September 1987 – December 1989.

Main Duties:

- Analysis and co-ordination of operations related to nine companies similar to ABD within the AOI.
- Evaluation of alternative technology transfer studies.
- Co-ordinating feasibility studies of new projects.

Reasons for Leaving: Managerial Position and Responsibility.

Name: ABD (Arab British Dynamics), Cairo, Egypt.

Position: Quality Control Engineer

Dates: September 1985 – September 1987.

Main Duties:

- Responsible for activities related to the quality assurance of processes and products (defence).
- Responsible for design improvements of test procedures and equipment.
- Specifying inspection procedures for calibration of equipment

Reasons for Leaving: Promotion to the Head Quarters of the company.

LIST OF CURRENT & PREVIOUS POSITIONS/ROLES IN PROFESSIONAL COMMUNITY

1. Appointed to act as Associate Editor of the IEEE Transactions SMC (Systems Man and Cybernetics) part C (2005-2006).
2. Elected on the Executive Board for one of the four clusters of the IPROMS European Network of Excellence – FP6 Programme (7.5 Million Euros Project, with 30 core members) 2004.
3. Elected as a Fellow of the Operations Research Society (2004).
4. Elected as a Fellow of the IEE (2004).
5. Accepted for a Chartered Status in Engineering (CEng) (2004).
6. Accepted for Membership of IEEE (2003).
7. Member of the Conference Committee of The Third European Conference on Intelligent management Systems in Operations (IMSIO) Conference (2005).
8. External Examiner for programmes in the School of Computing, Science and Engineering, the University of Salford, Manchester, (2005-2008).
9. External Examiner for an Asset Management MSc Course at the University of Robert Gordon, Aberdeen, Scotland (2003-2008).
10. Acted as an External Examiner for a PhD Thesis at Warwick University, Sept, 2004.
11. Acted as an External Examiner for a PhD Thesis at University of Birmingham, Sept, 2003.
12. Acted as an External Examiner for a PhD in France at Laboratoire de Robotique de Paris (Robotics Laboratory of Paris), University of Versailles (France), October, 2001.
13. Acted as an External Examiner for a PhD Thesis at University of Birmingham, Sept, 2000.
14. Acted as an External Examiner for a MPhil Thesis at Cranfield University Sept, 1999.
15. Member of International Advisory Board for the 2nd International Conference on Responsive Manufacturing, 26-28 June, 2002, Gazintep, Turkey.
16. First Year Departmental Tutor 2002-present.
17. Post Graduate Admissions Tutor 1998-2002.
18. Review of a book “Flexible Manufacturing Systems” by Martin Bates, Publisher: Butterworth Heinemann, 2000.
19. A Guest Editor of a Special Issue on “Crisis & Risk Management” for the Journal of Logistics Information Management (Volume 12, No 3, 1999).
20. Acted as Session Chairman in six International Conferences, ISAHP (Kobe, Japan), IFORS (Beijing, China), MATADOR (Manchester, UK), CAPE (Edinburgh, UK), ICPR (Czech), CIRP (Michigan, USA).
21. Founder Member of the Institute of Asset Management (IAM).
22. Member of the Multiple Criteria Decision Making (MCDM) Society.
23. Member of the Analytic Hierarchy Process (AHP) Society.
24. Member of the Artificial Neural Networks (ANN) Society.

RESEARCH SUMMARY

- **Research Grants:** Dr. Labib has been awarded two EPSRC grants to study reliability models and maintenance systems and to understand their effect on crisis management. He has also been involved in the EuroBrite European research project. Recently he has been involved and awarded a European NoE Grant as part of the Framework 6 Programme (30 Core Members 7.5 Million Euros for five Years), Co-investigators Prof Hinduja and Drs Mekid and Petty. He has been elected on the Executive Board in one of the four clusters for IPROMS. He has also secured a research project sponsored by Federal Mogul.

- **Publications:** He has published over 70-refereed papers in professional journals and proceedings of international conferences and has received two awards “Highly Commended Awards 1999 and 2000” from the Literati Club, MCB Press (a publisher of 140 journals) for published papers (Labib, 98b) and (Labib, 99a).

- **Editor:** Associate Editor of the IEEE Transactions SMC (Systems Man and Cybernetics) part C. He has been a Guest Editor of a special issue of the Journal of Logistics Information Management (1999) in the area of Crisis Management.

- **PhD Supervision:** He has established a strong research group and currently supervising and co-supervising 10 PhD students.

CURRENT REGISTERED PHD PROJECTS DIRECTLY SUPERVISED

	PhD Project Title	Candidate Name
1.	Intelligent Scheduling in Production and Maintenance Control.	Mr. Nur Yuniarto (Graduated 2005)
2.	Reconfigurable Manufacturing Systems Design	Mr. Reza Abdi (Graduated 2004)
3.	Intelligent Maintenance Systems	Mr. Oscar Fernandez
4.	Appropriate Technologies for SMEs	Mr. Ken Steele
5.	Maintenance Modelling and Optimisation	Mr. Mohsen Alardhi
6.	Asset management strategies for maximum through-life system performance and design improvement.	Miss Meng Wu
7.	Interaction of JIT and ERP Systems	Mr. Dan Perry (Co-supervision with Dr. Petty)
9.	Six Sigma in Manufacturing and Service	Mr. Nicholas Zolamouglu (Co-supervision with Dr. Petty)
10.	Application of Advanced Production Scheduling Systems.	Mr. Ali (Co-supervision with Dr. Petty)

AWARDS/HONOURS

1. Received an award “Highly Commended Award 1999” from the Literati Club, MCB Press (a publisher of 140 journals), for paper titled “A Logistics Approach to Managing the Millennium Information Systems Problem”, Journal of Logistics Information Management, MCB Press, 1998.
2. Received an award “Highly Commended Award 2000” from the Literati Club, MCB Press (a publisher of 140 journals), for paper titled “The Millennium Problem Versus the Maintenance Problem”, Journal of Logistics Information Management, MCB Press, 1999.
3. Supervision of a final project, which received IEE Manufacturing Project Prize 2002 - Professor James Cherry Prize.
4. Supervision of a final project, which received IEE Automation Project Prize 2004 – Sir Alan Veale Prize.
5. Received Fellowship of the Operational Research Society (FORS), 2004.
6. Received Fellowship of the Institute of Electrical Engineers (IEE), 2004.

RESEARCH GRANTS

A. Completed Research Grants:

1. Principal Investigator for an EPSRC Grant. Completed a Final Report on Research Grant GR/M35291 EPSRC Grant, Analysis of Maintenance Systems and Reliability Models. Received Overall Assessment of: Outstanding (2002).
2. Principal Investigator for an EPSRC Grant. A Comparative Model between Catastrophic Situations in Maintenance and the Millennium Problem (EPSRC Funded, GR/M74641). Received Overall Assessment of: Outstanding (2001).
3. As part of the EuroBrite (ProTool) European project, I have been involved in the investigation and development of the Fuzzy Logic Controller of a sheet metal forming press for Hot Point, North Wales (Funded by European Commission).

B. Current Research Grants:

4. Principal Investigator for a collaborative research with Industry: Intelligent Maintenance System (Funded by Industry - Federal Mogul). Total of £30K over three years to support PhD Project in Intelligent Maintenance System (Funded by Industry - Federal Mogul, UK).
5. Principal Investigator (University of Manchester) in a European Network of Excellence Application (I*PROMS) as a core member. This NoE has been recently accepted through Framework VI (7.5 Million Euros over 5 years). I*PROMS involves 30 core partners representing 14 EU countries, including three Fraunhofer Institutes (IAO, IPA and IPK), IFW and Schneider in Germany, Tekniker in Spain, TNO in the Netherlands, VTT in Finland, the Universities of Cambridge, Oxford, UMIST, Newcastle, and Warwick in the UK, led by Professor Pham at the MEC at Cardiff University in the UK. This is an exciting initiative to integrate the activities of leading EU research institutions in the field of advanced production research. It is considered to be a good recognition (the only accepted Production Management related NoE across Europe), as it will contribute towards integration of our research in an international level. It will also help in participation in preparing proposals for attracting funds from EU, regional and national funding bodies.

Details of Award EPSRC Grant Reference: GR/M35291/01

ANALYSIS OF MAINTENANCE SYSTEMS AND RELIABILITY MODELS

Principal Investigator: [Dr A Labib](#)

Department: Mechanical, Aerospace & Manufac Eng

Organisation: UMIST

Abstract: The proposed research aims at investigation and analysis of maintenance systems, and reliability models, and developing an interactive, web-based toolbox of models and performance indicators that support decision-making in maintenance. Different models in CMMSs, and reliability will be evaluated in terms of criteria of benefits, costs, and risks involved in design and implementation. Performance measures that have proven to be feasible and effective will be investigated and evaluated.

Starts: 1 April 1999 **Ends:** 31 March 2002 **£ Value:** 52,694 **Award Type:** Standard Research
Received Overall Assessment of: Outstanding (2002).

Details of Award EPSRC Grant Reference: GR/M74641/01

A COMPARITIVE MODEL BETWEEN CATASTROPHIC SITUATIONS IN MAINTENANCE / RELIABILITY AND THE MILLENIUM PROBLEM

Principal Investigator: [Dr A Labib](#)

Department: Mechanical, Aerospace & Manufac Eng

Organisation: UMIST

Starts: 19 April 1999 **Ends:** 18 April 2000 **£ Value:** 10,000 **Award Type:** Standard Research
Received Overall Assessment of: Outstanding (2001).

Industrial Funding: Collaborative research with Industry: (Federal Mogul).

INTELLIGENT MAINTENANCE SYSTEM

Principal Investigator: [Dr A Labib](#)

Total of £30K over three years to support PhD Project in Intelligent Maintenance System (Funded by Industry - Federal Mogul, UK).

Starts: 2003

Ends: 2005 **£**

Value: 30,000

European Funding: European Network of Excellence Application (I*PROMS), Contract No: 500273-2.

Principal Investigator: [Dr A Labib](#) (University of Manchester)

Co-Investigators: Prof Hinduja, Drs. Mekid and Petty

UMIST is a core member. This NoE has been recently accepted through Framework VI (7.5 Million Euros over 5 years). I*PROMS involves 30 core partners representing 14 EU countries.

Starts: 2004

Ends: 2009

Euros Value: 131,000.

TEACHING EXPERIENCES

A. Courses Taught at Academic Institutions

1. Teaching a course, in conjunction with Prof. Jay Lee (Director of IMS, Univ. of Michigan, USA) on E-Manufacturing and E-Maintenance, to industrialists and MSc postgraduates at UMIST, January, 2004, 2005 and to industrialist at University of Milwaukee, September, 2004.
2. Teaching and developing the syllabus of an advanced course on Reliability and Maintenance Engineering to 4th Year M.Eng students in Aerospace and Mechanical Engineering from both UMIST and University of Manchester.
3. Teaching and developing the syllabus of a course on Industrial Computing (Fuzzy Logic and Programmable Logic Controllers) to 3rd Year students.
4. Teaching modules related to reliability and availability, maintenance benchmarking, and maintenance strategy and TQM to Glasgow Caledonian University as part of MSc in Maintenance.
5. Teaching Robotics Engineering for undergraduates.
6. Teaching Design for Manufacture for undergraduates.
7. Developed 3 new laboratory exercises which include:
 - Decision Analysis laboratory using Team Expert Choice which is an implementation software of the AHP approach
 - Programmable Logic Controllers (PLC) and Supervisory Control and Data Acquisition (SCADA) simulation laboratories.
 - Re-configuring a Robotics lab of four robots.
8. Teaching a Masters Module on Manufacturing Systems.
9. Teaching a Masters Module on Manufacturing Management.

B. Short Courses, Training, and Tutorials

1. Co-lectured two courses in E-Maintenance with Professor Jay Lee, Director of the IMS Centre (NSF, USA Funded Centre of Excellence). The course in USA was attended by engineers from Intel and Rockwell Automation (2003, 2004).
2. Teaching and developing a course in Design Awareness in Maintenance (taught and distance learning modes) as part of the MSc IGDS Programme in Maintenance Engineering, University of Manchester, 2004.
3. Teaching a course on Maintenance Planning Scheduling and Control to delegates from two companies; Qatar Ras Gas, and Qatar Petroleum, in Doha, Qatar, May, 2004.
4. Teaching a course on Machine Condition Monitoring to delegates from three companies; Qatar Gas, Ras Gas, and Qatar Petroleum, in Doha, Qatar, March, 2004.
5. Teaching a course on Maintenance to ADGAS in DAS Island, Abu Dhabi, December, 2003.
6. Invited to teach a workshop on TPM in Mexico, Guadlajara, March 2003.
7. Three days course to various companies in Oil and Gas Industry on Asset Management Planning and Control, Dubai, 2003.
8. Three days course on Maintenance Control and Condition Based Monitoring to GASCO (Abu Dhabi), Oct 2002.
9. One week course on Maintenance Planning and Scheduling to SABIC (Saudi Arabia), Nov 2001.
10. One week course on Preventive Maintenance to Qatar Gas - a Liquid Natural Gas (LNG) company (Doha, Qatar), October 2000.
11. Two days course on Learning from other Industries to an Industrial Forums in the Construction Engineering field in Glasgow, Scotland, 2000.
12. Teaching manufacturing systems and manufacturing management to industrialists as part of the several MSc IGDS programmes in Manchester and Scotland 2000-.
13. Teaching a module for an MBA (Strategic Procurement Module: Selection of Advanced Manufacturing Systems), at University of Birmingham, 1998-1999.
14. Business Systems Modelling using IDEF0 for undergraduates, at University of Birmingham, 1998-1999.

INVITED SPEECHES

A. Invited Keynote, Plenary, and Featured Speeches (for the past three years)

1. Invited to give a Key Note Lecture on "Selection of Appropriate Maintenance Strategy", to the Annual Pan-European Maintenance and Plant Engineering Conference on Process Industry Maintenance, Brussels, October, 2003.
2. Invited to give a joint Key Note Lecture with Professor Kobbacy from University of Salford on "Towards a Hybrid & Intelligent Decision Support Maintenance System", to to the Annual Pan-European Maintenance and Plant Engineering Conference on Process Industry Maintenance, Brussels, October, 2003.
3. Invited to give a Key Note Lecture on "Maintenance Systems and Decision Making in Manufacturing", at the 2nd Congress of Mecatronics, ITESM, Monterrey, Mexico, 11-13 Sept 2003.
4. Invited to give a Key Note Lecture on TPM, to the Quality Management Conference in Mexico, March 2003.
5. Invited to give a Key Note Lecture on Computerised Maintenance Management Systems, to the 1st European Conference on Maintenance in Process Industry, Brussels, September 2002.
6. Invited to give a Key Note Lecture on Next Generation Manufacturing Paradigms, to the International Consortium of Holonic Enterprises in Germany, October 2002.

B. Invited Speeches to Corporate Executives, Industrial Associations, and Special Committees (for the past 3 years)

1. Invited to give a course on Near Zero Breakdown in Milwaukee, Wisconsin, USA, September 2004. The course was attended by 25 industrialists from well known companies such as Intel, and Rockwell Automation, as well as industrialists from Japan, and Singapore.
2. Invited by Federal Mogul (Ferodo), to consult on Intelligent Maintenance Systems, March 2002.
3. Invited by Rolls Royce Derby to consult on Decision Analysis in Asset Management, Feb 2002.
4. Invited as a speaker in several dissemination and exploitation events in London organised by the Outreach Programme in conjunction with the DTI and EPSRC (2000-2002).
5. Invited by members of a world-wide consortium of engineering insurers (IMIA) to consult and give a presentation on Risk and Asset Management, 2001.

PATENTS, COPYRIGHTS AND LICENCES

1. A developed model, the Maintenance Decision Making Grid (DMG), has been incorporated into a software system which has been copyrighted and licensed to be used by a manufacturing company in the automotive sector (Ferodo), Chapel-en-le-Frith, Stockport, UK 2003-....
2. Development of a Fuzzy Logic Controller for a Sheet Metal Forming Press at Hot Point & Fagor, Spain (Patented by Fagor), 1999.
3. Design, programming and implementation of an Intelligent Real-time Maintenance System at Rockwell, Birmingham, UK, 1996-1997.
4. Optimisation algorithm for Scan Time Response of Programmable Logic Controllers (PLC) at Ford Motors, Dagenham, UK, 1997.
5. Development of a Stock Control and Spare Parts System for Peugeot Talbot, Coventry, UK, 1994.
6. Design, programming and implementation of a Computerised Maintenance Management System (CMMS) at Land Rover, Solihull, UK, 1991-1993.

PUBLICATIONS

Fully Refereed Journal Papers

1. **Brunn, P.** and **A.W. Labib**, "New lamps for old!" A method to rejuvenate old robots through the use of a simple set of micro-controller based control boards to replace outdated control systems, *The International Journal of Mechanical Engineering Education, IJMEE*, (In Press), **2005**.
2. Vanegas, and **A.W. Labib**, "Fuzzy Approaches to Evaluation in Engineering Design", *ASME Journal of Mechanical Design*, (In Press), **2005**.
3. Yuniarto, N, and **A.W. Labib**, "Intelligent Real time Control of Disturbances in manufacturing Systems", *Journal of Manufacturing Technology Management*, Volume 17 Issue 5, (In press), **2005**.
4. Kumar, A. and **A.W. Labib**, Simulation Games for Training Leaders of 21st Century Manufacturing, *International Journal of Engineering Education, IJEE*, Vol 20, No 5, pp 787-800, **2004**.
5. **Labib, A.W.**, A Decision Analysis Model for Maintenance Policy Selection Using a CMMS, *Journal of Quality in Maintenance Engineering (JQME)*; MCB Press; ISSN: 1355-2511; Vol 10, No 3, pp 191-202, **2004**.
6. Abdi, M.R. and **A.W. Labib**, A feasibility study of the tactical design justification for reconfigurable manufacturing systems (RMSs) using the fuzzy analytical hierarchical process (FAHP), *International Journal of Production Research, (IJPR)*, Vol 42 No. 15, pp 3055 - 3076, **2004**.
7. Perris, T., and **A.W. Labib**, An Intelligent System for Prioritisation of Organ Transplant Waiting List, *Journal of Operational Research Society (JORS)*, Vol 55, pp 103-115, **2004**.
8. Abdi, M.R. and **A.W. Labib**, Grouping and selecting products: the design key of reconfigurable manufacturing systems (RMSs), *International Journal of Production Research, (IJPR)*, Vol. 42, No. 3, pp521-546, **2004**.
9. Fernandez, O. , **A.W. Labib**, R. Walmsley, **D.J. Petty**, "A Decision Support Maintenance Management System: Development and Implementation", *International Journal of Quality and Reliability Management, IJQRM*, Vol 20, No 8, pp 965-979, **2003**.
10. **Labib, A.W.**, Towards An Intelligent Holonic Maintenance System, *Journal of Maintenance & Asset Management*, ISSN 0952-2110, Vol 18 No4, pp 5-12, **2003**.
11. Davidson, G., and **A.W. Labib**, "Learning from failures: design improvements using a multiple criteria decision making process", *Journal of Aerospace Engineering, Proceedings of the Institution of Mechanical Engineers Part G*, Vol 217, pp 207-216, **2003**.
12. Abdi, M.R. and **A.W. Labib**, A design strategy for Reconfigurable Manufacturing Systems (RMSs) using the Analytical Hierarchical Process (AHP): A case study, *International Journal of Production Research, (IJPR)*, Vol. 41, No. 10, pp2273-2301, **2003**.
13. **Labib, A.W.**, Computerised Maintenance Management Systems (CMMSs): A black hole or a black box?, *Journal of Maintenance & Asset Management*, ISSN 0952-2110, Vol 18 No3, pp 16-21, **2003**.
14. Sudiarso, A and **A.W. Labib**, A Fuzzy Logic Approach to an Integrated Maintenance / Production Scheduling Algorithm, *International Journal of Production Research (IJPR)*, Vol 40, No 13 pp 3121-3138, **2002**.
15. Exton, T. and **A.W. Labib**, Spare Parts Decision Analysis – The Missing Link in CMMSs (Part II), *Journal of Maintenance & Asset Management*, ISSN 0952-2110, Vol 17 No1, pp 14-21, **2002**.
16. **Labib, A.W.**, and T. Exton, Spare Parts Decision Analysis – The Missing Link in CMMSs (Part I), *Journal of Maintenance & Asset Management*, ISSN 0952-2110, Vol 16 No 3, pp 10-17, **2001**.
17. Alvi and **A.W. Labib**, "Selecting Next Generation Manufacturing Paradigms – An AHP Based Criticality Analysis", *Proc. Of IMechE, Journal of Engineering Manufacture - Part B*, Vol 2 No 5, pp 1773-1786 (December), **2001**.
18. **Labib, A.W.**, and J. Shah, "Management Decisions for a Continuous Improvement Process in Industry Using the Analytical Hierarchy Process", *Journal of Work Study*, ISSN 0043-8022, Vol 50, No 5, pp 189-193, **2001**.
19. Vanegas, and **A.W. Labib**, "A FQFD model for deriving optimum targets", *International Journal of Production Research (IJPR)*, Vol 39, No 1, pp 99-120, **2001**.

20. Vanegas, and **A.W. Labib**, “Application of new fuzzy weighted average (NFWA) method to engineering design evaluation”, *International Journal of Production Research (IJPR)*, Vol 39, No. 6, pp 1147-1162, **2001**.
21. **Hinduja, S., J. Atkinson**, D K Lau, **A W Labib** and P Agirrezabal, *An intelligent controller for improving the quality of deep drawn components*, *Annals of the CIRP*, **49/1**, Sydney, Australia, **2000**.
22. **Labib, A.W.**, “*A Framework for Benchmarking Appropriate Productive Maintenance*”, *Journal of Management Decisions*, Vol. 37, No. 10, pp 792-800, **1999**.
23. **Labib, A.W.**, “*Is This the Biggest Maintenance Project Ever? Responsive Prioritisation for the Year 2000 Problem*”, *Journal of Maintenance & Asset Management*, ISSN 0952-2110, Vol 14, No 4, Oct **1999**.
24. **Labib, A.W.**, “*Y2K The Maintenance and Millennium Problems: A Salutary Comparison?*”, *Journal of Maintenance & Asset Management*, ISSN 0952-2110, Vol 14, No 2, pp3-8, May **1999**.
25. Wong, J.V., and **A.W. Labib**, “*Assessment of Selected papers on the Year 2000 Problem*”, *Journal of Logistics Information Management (JLIM)*, Vol 12, No 3, pp 246-253, ISSN: 0957-6053, **1999**.
26. **Labib, A.W.** “*The Millennium Problem Versus the Maintenance Problem*”, *Journal of Logistics Information Management (JLIM)*, Vol 12, No 3, pp 254-259, ISSN: 0957-6053, **1999**¹.
27. **Labib, A.W.** “*Optimising Scan Time of Programmable Logic Controllers Using Multiple Criteria*”, *Journal of Flexible Automation and Integrated Manufacturing*, Vol 6., No. 2, pp 95-109, ISSN: 1064-6345, **1998**.
28. **Labib, A.W.** “*A Logistic Approach to Managing the Millennium Information Systems Problem*”, *Journal of Logistics Information Management (MCB Press)*, Vol 11, No 5, pp 285-384, ISSN: 0957-6053, **1998**².
29. **Labib, A.W.**, Williams. G.B., and O’Connor, R.F.; “*An Intelligent Maintenance Model (System): An Application of A.H.P. and a Fuzzy Logic Rule-Based Controller*”; *Journal of Operational Research Society (JORS)*; Vol 9, No 7, pp 745-757, ISSN: 0160-5682, July, **1998**.
30. **Labib, A.W.**, O’Connor, R.F., and Williams, G.B.; “*An Effective Maintenance System Using the Analytic Hierarchy Process*”; *Journal of Integrated Manufacturing Systems (IMS)*, Vol 9; No 2.; pp 87-98; ISSN: 0957-6061; April **1998**.
31. **Labib, A.W.**; “*World Class Maintenance Using a Computerised Maintenance Management System*”; *Journal of Quality in Maintenance Engineering (JQME)*; MCB Press; Vol 4, No 1.; pp 66-75; ISSN: 1355-2511; April **1998**.
32. **Labib, A.W.**, O’Connor, R.F., and Williams, G.B.; “*Deriving A Maintenance Strategy Through the Application of a Multiple Criteria Decision Making Methodology*”; *Lecture Notes in Economics and Mathematical Systems*; No. 448; Gunter Fandel, Thomas Gal (Eds.), Springer-Verlag, pp 481-490; ISSN:0075-8442, ISBN:3-540-62097-4; **1997**.
33. **Labib, A.W.**, O’Connor, R.F., and Williams, G.B.; “*Formulation of an appropriate maintenance strategy using multiple criteria decision making*”; *Maintenance Journal*, 11, No. 2 pp 14-21, ISSN:0952-2110; April **1996**.

Fully Refereed Conference Papers

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