

RESUME

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Personal Data:

- Country of Birth: Egypt
- Citizenship: Egyptian
- Marital Status: Married, Three Children
- Languages Spoken: Arabic, English

Education:

- Ph.D., Systems Control
Kyoto University, Japan, 1978.
Thesis: *On Identification of Stochastic Dynamic Systems*
- M.Sc., Mechanical Engineering
Ain Shams University, Egypt, 1970.
Thesis: *An Investigation into the Effect of Alternating & Mean Stress on the Damping Properties of Materials.*
- B. Sc., Mechanical Engineering
Cairo University, Egypt, 1967.

Employment History:

- **Demonstrator**
September 1967 - September 1970.
Department of Design and Production Engineering
Ain-Shams University, Egypt.
- **Lecturer**
September 1970 - April 1973
Department of Design and Production Engineering
Ain-Shams University, Egypt.
- **Assistant Professor**
September 1978 - September 1984
Department of Design and Production Engineering
Ain-Shams University, Egypt.

September 1983 - September 1986
Department of Mechanical Engineering
Yarmouk University, Jordan.
On leave from Ain-Shams University, Egypt
- **Associate Professor**
September 1984 - September 1986
Department of Design and Production Engineering

Ain-Shams University, Egypt.

September 1986 - September 1989
Department of Mechanical Engineering
Jordan University of Science & Technology, Jordan.

September 1989 - September 1998
Department of Mechanical Engineering
King Fahd University of Petroleum & Minerals, Saudi Arabia.

September 1998 - October 2000
Department of Industrial Engineering & Systems
Zagazig University, Egypt.

- **Professor**
October 2000 – September 2002
Department of Industrial Engineering & Systems
Zagazig University, Egypt.

September 2002 - September 2014
Department of Mechanical Engineering
United Arab Emirates University, UAE
- **Visiting Professor**
September 2014 - present
Department of Mechanical Engineering
United Arab Emirates University, UAE
- **Director**
September 2007- 2011
Master of Engineering Management Program
United Arab Emirates University, UAE

Teaching Experience:

Undergraduate Courses:

- Mechanical Vibrations
- Mechanics of Machines
- Kinematic Design of Machinery
- Dynamics
- Machine Design I
- Machine Design II
- Dynamic Systems and Control
- Differential Equations and Engineering Applications
- Fundamentals of Engineering 1B
- Introduction to Design and Ethics
- Math & Engineering Applications II
- Fundamentals of Engineering III
- Automatic Control
- System Modeling & Simulation
- Human Factors Engineering
- Dynamic Systems Modeling and Analysis
- Discrete Systems Simulation
- Mechanical Engineering Analysis
- Graduation Project I
- Graduation Project II

Graduate Courses:

- Systems Modeling
- Systems Simulation
- Advanced Dynamics
- Advanced Dynamics and Control
- Advanced Vibrations
- Modern Control
- Advanced Mathematics for Engineers

Committees:

Served as a member or as a chairman in the following committees:

- Graduate Committee
- Curriculum Committee
- Doctoral Committee
- ABET Preparation Committee
- Student Advising Committee
- Textbook Committee
- ME Department Promotion Committees
- College of Engineering Promotion Committees
- Teaching Performance Committee
- Research Committee
- Course Development Committee
- Lab Development Committee
- Central Advising Unit
- Aerospace Joint (with Italy) Master Program Ad-Hoc Committee
- Graduate Studies Luminous Group
- Cross Listed Courses Ad-Hoc Committee
- Industrial Training Ad-Hoc Committee
- Several Ad-Hoc Committees
- Program Committee Co-Chair – International Conference on Automation, Robotics and Control (ARCS-09), Orlando, USA
- Program Committee Co-Chair – International Conference on Automation, Robotics and Control (ARCS-10), Orlando, USA

Research Interests:

- Modeling and Simulation of Dynamic Systems
- Identification and Parameter Estimation of Dynamic Systems
- Systems Control
- Modeling and Control of Overhead Cranes
- Mechanical Vibrations and Modal Analysis

Academic Awards and Grants:

- Government of Egypt Distinguished Student Undergraduate Scholarship, 1962 - 1967.
- Japanese Government Ph.D. Scholarship, 1973 - 1978.
- School of Graduate Studies, Yarmouk University, Jordan, Research Grant entitled: *Dynamic Modeling of Offshore Towers with General Damping Subjected to Earthquake*, 1985 - 1987.
- School of Graduate Studies, Jordan University of Science & Technology, Jordan, Research Grant entitled: *Nonlinear Modeling & Control of Overhead Cranes*, 1987 - 1988.
- School of Graduate Studies, King Fahd University of Petroleum & Minerals, Saudi Arabia, Research Grant entitled "Nonlinear System Identification," 1991 - 1994.
- King Abdulaziz City of Science & Technology (KACST), Research Grant entitled: *Detection and Localization of Leaks in Pipelines*, approved, Feb. 1998.
- One of the graduation projects under my supervision received the award of his Highness Prince Mohammed for the best project competition for the academic year 1993/94. An instrument that electronically measures the RPM of rotating machinery was designed and

manufactured as part of this project. Project Title: Tachometer Analysis and Applications

- Awarded a merit increase for the academic year 2005/2006 at UAEU
- One of the graduation projects under my supervision received the 2nd best award at the Fourth Engineering Students' Gathering, Sultan Qaboos University, Sultanate of Oman, 4-6 April, 2010. Project Title: Design and Manufacturing of a Self-Bailing Mechanism for Small Boats

Course & Program Development:

1. Developed or participated in developing ME 488 Lab, ME 491 Lab, a new course for the new curriculum entitled "Applied Math, Probability and Statistics", New Coop guidelines and regulations, and Guidelines for the Ph.D. Program preliminary and comprehensive exams.
2. Chaired an adhoc committee that was assigned the task of developing and setting guidelines and curriculum for a new Ph. D. program in the ME Department at KFUPM.
3. Involved in curriculum development at KFUPM since joining the university in 1989. In particular, the candidate was actively involved in developing the zero-base ME and AME new curricula.
4. Involved in curriculum and course development at other educational institutes since 1978 till 1989.
5. Participated in a committee during the academic year 1994/1995 that was assigned the task of establishing a new branch of the 10th of Ramadan Higher Technical Institute, a private engineering institute in Egypt. Among the duties of the committee were developing the programs of the ME, EE and Mechatronics Departments, selection of equipment for the labs, developing the description and syllabi of different courses, establishing the branch library and selection of soft and hard ware for the computer labs. The committee was involved also in other administrative and academic tasks.
6. Chaired a committee to investigate the requirement of EE courses for ME students. This investigation was needed in the course of developing the new ME & AME zero-base curriculum. The committee looked at the contents of existing related courses and suggested two new EE courses for ME students and reference has been made to other leading university.
7. Appointed as the dynamics lab director in KFUP. In this capacity, the lab has been updated continuously by purchasing new up to date equipment and the candidate has been involved in developing new experiments in the control and vibrations area.
8. Contributed in preparing the Arabic and English versions of the ME Bulletin.
9. Participated in writing a report entitled "Low Performance Students". The report, which was prepared while chairing the ME student advising committee, proposes concrete measures to help students facing problems improve themselves and get out of probation. Pre-registration guidelines and one sheet form for pre-registration were developed to help both students and advisors during pre-registration.
10. Prepared several course files for the ABET volume in preparation for the first ABET committee visit to the university.
11. Conducted a survey about the academic departments that usually teach Statics and Dynamics courses in Engineering curricula of some top leading universities.
12. Attended a Workshop in MATLAB as part of the UN/NASA/ESA/UAE Workshop on the International Heliophysical Year (IHY) 2007, for the duration 20-23 November 2007. The Workshop is organized by the Department of Physics, College of Science, UAEU.
13. Attended a Workshop in ABET Accreditation, May 2007, The Workshop is organized by the College of Engineering, UAEU.

Short Courses:

Participated, as a teacher or as a coordinator, in developing new short courses as well as modifying some existing courses. This is detailed in the table below.

Year	Semester	Title	# of participants	Function*
1990/91	901	Control Systems Design and Analysis (new)	10	T
	902	Vibration Monitoring, Balancing ...		T
1991/92	912	Hydraulic Power Systems (new)	9	T
	912	Failure Prediction in Mechanical Systems (new)	30	T

1992/93	921	Vibration Analysis & Monitoring of Machinery**	17	T
	921	Vibration Analysis & Monitoring of Machinery**	17	T, C
1993/94	931	Fundamentals of Vibration Analysis ...** (modified)	23	T, C
		Fundamentals of Vibration Analysis ...** (modified)	15	T, C
	932	Hydraulic Valves & Circuits	17	T
1995/96	952	Vibration Measurement, Analysis, ... Analysis & Performance of Hydraulic Systems	19	T
	952			T
1996/97	961	Hydraulic Valves & Circuits	20	T
	962	Vibration Measurement, Analysis, ...	18	T, C
1997/98	971	Operation & Maintenance of Valves and Hydraulic Circuits	22	T
	972	Vibration Measurement, Analysis, ...	18	T, C
2007	June	Pumps: Operation, Condition Monitoring, Trouble Shooting and Maintenance and Hydraulic Circuits	25	T, C
2008	February	Pressure Vessels and Piping	4	T, C
2009	February	Rotating Equipment for the Operator	20	T, C
2012	June	Workshop Technology – STRATA	40	T

* T: Teacher; C: Coordinator.

** Course offered twice in the same semester because of the large number of participants.

SERVICE TO THE COMMUNITY

A. Consulting Work

- Evaluation of the performance of the elevators and escalators installed in Al-Waha Mall in Dammam. A report was prepared that included the technical findings and recommendations. The report was submitted to Al-Waha Mall via the Research Institute.
- Preparing a proposal to solve some of technical problems related to the CNC punching machines for the Saudi Transformer Company.
- Participated in preparing a proposal in response to the request from Petromin Shell Refinery Company. The purpose of the proposal was to investigate the possible causes of failure of the tubes of some heat exchangers located in the company Hydro cracker Unit.
- Reviewing several technical drafts of Saudi Standards in the Mechanical Engineering field.
- Reviewing several technical drafts of Emirates Authority for Standardization and Metrology in the Mechanical Engineering field.
- Participated in a committee that is investigating the possible causes of the failure of a tower crane as requested by the police department. The crane was installed at the new head quarter building of ADNOC group of companies. The accident took place in Abu Dhabi and resulted in one human death, 2005.
- Member of a technical expert team to investigate the factories, equipment, stores, raw materials, spare parts, furniture and cars of the National RAK Tile Limited Company. The

objective was to assess the technical details of the company and estimate its current value, May 2006.

- Chairing a committee to technically evaluate the Bid of Maintenance of HVAC Systems & Equipment of UAEU, May 2007.
- Chairing a committee to evaluate the maintenance cost to be saved due to replacing some of the HVAC Systems & Equipment of UAEU, January 2008.
- Chair of a technical expert team to evaluate the current value of the assets of the National RAK Tile Limited Company for the purpose of sale of the company by Court order, February 2008.
- Member of a technical expert team to evaluate the case of a ship that sank in the Nasr Oil field, Abu Dhabi and to find the reasons for sinking and determine the responsibility of the involved parties. The committee was formed according to the request of Abu Dhabi court, December 2011.

B. Editorial & Review Work

- Served on the editorial board of the Arab Journal for Science & Engineering (AJSE)
- Invited to review a number of technical papers for regional and international conferences and societies
- Invited to review a number of technical papers for peer reviewed journals.
- Invited to review a book entitled “Mechanical Vibrations: Theory and Applications to Structural Dynamics”, 2nd ed., by M. Geradin and D. Rixed for publication in AJSE.
- Invited to review a book proposal, in the Mechanics of Machines area, which was submitting for possible funding from KFUPM
- Acted in the steering committee of international conferences

RESEARCH

A. Research Projects

Start Date	Sponsor	Topic	Status
1985	Yarmouk University, Jordan	Dynamic Modeling of Offshore Towers with General Damping Subjected to Earthquakes <i>Project No. 1/87.</i>	Completed
1987	Jordan Univ. of Science & Technology, Jordan	Nonlinear Modeling & Control of Overhead Cranes <i>Project No. 28/87.</i>	Completed
1991	KFUPM	Identification of Nonlinear Systems <i>Project No. SE/NONLINEAR/137</i>	Completed
1996	KACST	Detection and Localization of Leaks in Pipelines <i>Project No. AT-17-34</i>	Approved Feb. 1998
2004	UAEU	Generalized Model for an Overhead Crane with Flexible Cable and Load Hoisting	Completed
2005	UAEU	Color Particle Image Velocimetry (Individual)	Completed
2006	UAEU	Glucometer Like Device for Rapid Detection of Acute Myocardial Infraction (Inter-Disciplinary)	Completed

2007	UAEU	Modeling and Control of Interval Parameter Cranes (Individual)	Completed
2008	Emirates Foundation	Development and Experimental Implementation of Control Strategies for Hexapodic Machine Tools	Completed
2008	Emirates Foundation	Leaks Diagnosis of Petroleum Pipeline Networks Using Computational Pipeline Monitoring	Submitted
2009	UAEU	Identification of a Class of Non-Linear Systems with Uncertain Parameters	Completed
2011	UAEU	Statistical Modeling and Prediction Of SO ₂ Pollution Levels in Al Ain	Completed
2012	UAEU	Active Control for Damage Associated with Dental Repair	On going
2013	Water Center	Leak Detection and Localization of Desalinated Water Pipeline Networks using Computational Pipeline Monitoring	Submitted

B- Graduate Students

(A: Advisor; CM: Committee Member)

Name	Function	Level	Thesis
Taher Abu-El-Yazid	A	M.Sc.	Identification of An Environmental System, Graduated, Oct. 1981, Ain-Shams University, Egypt
Falah Dries	A	M.Sc.	On Mathematical Modeling of Offshore Structures, Graduated, May 1986, Yarmouk University, Jordan.
Abdulrehim Al-Akhmimi	CM	M.Sc.	Vibrations and Stress Investigation in Compressor Blades of Gas Turbines, Graduated, June 1990, King Abdulaziz University (KAU)
Abdulaziz Bazoune	CM	M.Sc.	Vibration Frequencies of Rotating Tapered Beam Including Rotary Inertia and Transverse Shear Deformation, Graduated, June 1990, KFUPM
Mohammed Mohiuddin	CM	M.Sc.	Coupled Bending-Torsional Vibrations of Rotating Shafts Using Finite Elements, Graduated, Oct. 1992, KFUPM
Zafar Khan	A	M.Sc.	Modeling and Anti-Swing Control of Overhead Cranes, Graduated, Jan. 1993, KFUPM
Neaz Ahmed	CM	M.Sc.	Comparative Study of Different Methods of

			Vibrations Control of Rotor Bearing Systems, Graduated, May 1993, KFUPM
Jalil Talaq	A	M.Sc.	Identification of Block Cascade Models for Nonlinear Systems, Graduated, June 1994, KFUPM
Mohammed Mohiuddin	CM	Ph.D.	Finite Element Dynamic Analysis of Multi-Body Rotor-Bearing Systems, Graduated, May 1997, KFUPM
Hussain Khalil	A	M.Sc.	Torsional Vibration Analysis of Synchronous Motor-Compressor Drive-train, Graduated, March 1999, KFUPM
Suliman El-Naggar	A	Ph.D.	Modeling & Fuzzy Control of Robotic Manipulators, Graduated, February 2002, Zagazig University, Graduated, Egypt
Mohammed Ismael	A	Ph.D.	Modeling & Control of Overhead Cranes with Flexible and Time Variable Cable Length, Graduated, July 2005, Zagazig University, Egypt
Mohsen Foad	A	Ph.D.	Modeling and Fault Diagnosis of Pipelines, Graduated, Feb. 2008, Zagazig University, Egypt
Abdulla A.F. Abed	CM	M.Sc.	Optimum Non Hydrocarbon Gas Injection Development Process and Ultimate Recovery Factor Maximization, Graduated, November 2008, UAEU
Mohamed R. Alrashed	CM	M.Sc.	CO2 Removal from a Flue gas, Graduated May 2009, UAEU
Khaled Ashoor	A	M.Sc.	Diagnosis of leak in pipelines, 2010, UAEU

C. Technical Reports

1. Moustafa, K.A., "Dynamic Modeling of Offshore Towers with General Damping Subjected to Earthquakes", Final Research Project Report, Jordan University of Science & Technology, 1987
2. Moustafa, K.A., and Ebeid, A., "Nonlinear Modeling and Control of Overhead Cranes," Final Research Project Report, Jordan University of Science & Technology, 1989
3. Emara-Shabaik, H.E., and Moustafa, K.A., "Identification of Nonlinear Systems," Final Research Project Report, KFUPM, June 1994.
4. Khulief, Y., and Moustafa, K.A., "Detection and Localization of Leaks in Pipelines," A Research Proposal, Submitted to King Abdul-Aziz City for Science & Technology (KACST), Oct. 1996. (Tentatively approved on Feb. 1998).
5. El-Shafi, M., Moustafa, K.A., and Shueib, A., "Retrofitting of CNC Systems to Conventional machines," A Research Proposal, Submitted to KFUPM, Nov. 1997.
6. A final report about the findings of technical expert team to investigate the factories, equipments, stores, raw materials, spare parts, furniture and cars of the National RAK Tile Limited Company. The objective was to assess the technical details of the company and estimate its current value, June 2006
7. A final report to technically evaluate the Bid of Maintenance of HVAC Systems & Equipments of UAEU, May 2007.
8. A final report to evaluate the maintenance cost to be saved due to replacing some of the HVAC Systems & Equipment of UAEU, January 2008.

9. A final report about the findings of technical expert team to evaluate the current value of the factories and cars of the National RAK Tile Limited Company for the purpose of sale the company assets by court order, February 2008.
10. A final report to evaluate the case of a ship that sank in the Nasr Oil field, Abu Dhabi and to find the reasons for sinking and determine the responsibility of the involved parties, December 2011.

D-Publications

D 1. Refereed Journal Papers

1. Akashi, H., and Moustafa, K. A., "Parameter Identification of Systems with Noise in Input and Output," *Memoirs of The Faculty of Engrg. Kyoto Univ., Japan*, Vol. 37, 1975.
2. Akashi, H., Nose, K., and Moustafa, K. A., "Parameters and Order identification in a Class of Stochastic Multivariate Systems," *Memoirs of The Faculty of Engrg. Kyoto Univ., Japan*, Vol. 38, 1976.
3. Akashi, H., Nose, K., and Moustafa, K. A., "Comments on Parameters Estimation in Multivariate Stochastic Difference Equations," *IEEE Trans. Autom. Contr.*, Vol. 21, No. 1, 1976.
4. Akashi, H., Moustafa, K. A., and Nose, K., "On Stochastic System Identification Through Lyapunov Functions," *Int. J. Control*, Vol. 26, No. 4, 1977.
5. Akashi, H., Imai, H., and Moustafa, K. A., "Identification of Multi-Output Systems," *Trans. Soc. Instruments Control Engrs.*, Vol. 14, 1978. (In Japanese.)
6. Akashi, H., and Moustafa, K. A., "Comments on and Extensions to Stochastic System Identification Through Lyapunov Functions," *Int. J. Control*, Vol. 27, No. 2., 1978.
7. Akashi, H., Imai, H., and Moustafa, K. A., "Parameter Identification Technique for Multi-Variate Stochastic Systems," *Automatica*, Vol. 15, P. 217-221, 1979.
8. Akashi, H., and Moustafa, K. A., "A Stable Identification Structure for a Class of Stochastic Systems," *IEEE Trans. Autom. Contr.*, Vol. 26, No. 3, 1981.
9. Moustafa, K. A., "Identification of Stochastic Time Varying Systems," *IEE-D Control Theory and Applications*, Vol. 130, No. 4, P. 137-142, July 1983.
10. Moustafa, K. A., Gaafar, M., and Abo-El-Yazid, T., "Modeling and Identification of a Stochastic Water Quality System Using Actual Data," *IEE-D Control Theory and Applications*, Vol. 133, No. 4, July 1986.
11. Asfar, K. A., Nayfeh, A. H., and Moustafa (Barrash), K. A., "A Nonlinear Oscillator Lanchester Damper," *ASME Trans., Journal of Vibrations, Acoustics, Stress and Reliability*, Vol. 109, No. 4, P. 343-347, 1987.
12. Moustafa, K. A., Asfar, K., and Dries, F., "Modeling and Identification of Offshore Towers with General Damping," *Int. J. Systems Science*, Vol. 19, No. 11, P. 1367-1379, 1988.
13. Moustafa, K. A., and Ebeid, A. M., "Nonlinear Modeling and Control of Overhead Crane Load Sway," *ASME Trans., Journal of Dynamic Systems, Measurements and Control*, Vol. 110, No. 3, P. 266-271, 1988.
14. El-Gebeily, M., and Moustafa, K. A., "New Linearization Technique for a Class of Nonlinear Systems," *Int. J. Control*, Vol. 49, No. 5, P. 1569-1579, 1989.
15. Moustafa, K. A., "On Line Extraction of Offshore Tower Vibration Parameters from Response Measurements," *Int. J. of Analytical and Experimental Modal Analysis*, Vol. 4, No. 3, P. 83-88, 1989.
16. Moustafa, K. A., "Real Time Identification of Ill-Condition Structures," *ASME Trans., Journal of offshore Mechanics and Arctic Engineering*, Vol. 112, No. 3, P. 181-186, 1990.
17. Moustafa, K. A., Asfar, K., "Identification of Journal Bearing Modal Parameters," *Int. J. of Analytical and Experimental Modal Analysis*, Vol. 5, No. 4, P. 213-222, 1990.
18. Moustafa, K. A., and El-Gebeily, M., "Free Vibration Characteristics of Structures with Nonlinear Underlying Soil," *ASME Trans., Journal of Vibrations and Acoustics*, Vol. 113, No. 1, p. 95-99, 1991.
19. Zibdeh, H. S., and Moustafa, K. A., "Free Vibration of Structural Systems with Stochastic Coefficients," *Engineering Structures*, Vol. 13, No. 1, P. 54-58, 1991.
20. El-Gebeily, M., and Moustafa, K. A., "Asymptotic Analysis of Almost Periodic Weakly Non-linear Systems," *Int. J. Control*, Vol. 54, No. 3, P. 561-575, 1991.
21. Moustafa, K. A., "Time Domain Structural Identification Using Free Response Measurements," *Int. J. Control*, Vol. 56, No. 1, P. 51-65, 1992.
22. Moustafa, K. A., and Emara-Shabaik, H., "Nonlinearity Detection of weakly Nonlinear Dynamic System," *Int. J. Systems Sci.*, Vol. 23, No. 7, P. 1167-1177, 1992.
23. Ebeid, A. M., Moustafa, K. A., and Emara-Shabaik, H., "Electromechanical Modeling of Overhead Cranes," *Int. J. Systems Sci.*, Vol. 23, No. 12, P. 2155-2169, 1992.
24. Emara-Shabaik, H., and Moustafa, K. A., "Characterization of Dynamic System Nonlinearities Via Probabilistic Approach," *Int. J. Systems Sci.*, Vol. 25, No. 3, P. 603-611, 1994.
25. Emara-Shabaik, H., Moustafa, K. A., and Talaq, J., "On Identification of Parallel Block-Cascade Nonlinear Models," *Int. J. Systems Sci.*, Vol. 26, No. 7, P. 1429-1438, 1995.

26. Al-Garni, A., Moustafa, K. A., and Nizami, S., "Optimal Control of Overhead Cranes," *Control Eng. Practice*, Vol. 3, No. 9, P. 1277-1284, 1995.
27. Emara-Shabaik, H., and Moustafa, K. A., "Structure Identification Criteria of Nonlinear Systems Via Bispectrum," *The Arabian Journal for Science and Engineering*, Vol. 20, No. 3, P. 535-546, 1995.
28. Moustafa, K. A., and Abo-El Yazid, T., "Load Sway Control of Overhead Cranes with Load Hoisting Via Stability Analysis," *Japan Society of Mechanical Engineers Int. Journal (JSME), Series C*, Vol. 39, No. 1. P. 34-41, March 1996.
29. Emara-Shabaik, H., and Moustafa, K. A., "Non-Parametric Identification of Generalized Hammerstein Models," *Int. J. Systems Sci.*, Vol. 25, No. 1, P. 91-93, 1998.
30. Elgindi, M. B., El-Gebeily, M. A., and Moustafa, K. A., "Improved Estimate of the Margin of Stability of Interval Matrices," *Japan Society of Mechanical Engineers Int. Journal (JSME), Series C*, Vol. 41, No. 1, p. 90 – 93, March 1998.
31. Al-Bedoor, B. O., Moustafa, K. A., and Al-Hussain, K. M., "Dual Dynamic Absorber for the Torsional Vibrations of Synchronous Motor-Driven Compressors," *Journal of Sound and Vibrations*, Vol. 220, No. 4, P. 729 – 748, 1999
32. Moustafa, K. A., "Stability of Journal Bearing-Rotor Systems with Interval Bearing Parameters," *Journal of Vibration and Control*, Vol. 5, No. 6, P. 941-953, Nov. 1999.
33. Moustafa, K. A., "Overhead Crane Automation Via Lyapunov Functions," *Al-Azhar University Engineering Journal*, Vol. 3, No. 1, P. 43 – 49, Jan. 2000.
34. Moustafa, K. A., and Emara-Shabaik, H., "Convergence Analysis of a Recursive Identification Scheme for a Class of Nonlinear Systems," *Journal of Vibration and Control*, Vol. 6, No. 1, P. 49 – 60, Jan. 2000.
35. Al-Bedoor, Moustafa, K.A., and Al-Hussain, K.M., "Predicting the Fatigue Life of Synchronous Motor-Driven Compressor Using the Complex Modal Reduction Technique," *Computer Methods in Applied Mechanics and Engineering*, Vol. 187, P. 53-68, 2000.
36. El-Gebeily, M., and Moustafa, K.A., "Necessary and Sufficient Conditions for the Stability of Linear Parameter Dependent Systems," *Int. J. Systems Sci*, Vol. 32, No. 7, P. 931-936, July 2001.
37. Moustafa, K.A., "Reference Trajectory Tracking of Overhead Cranes," *ASME Trans., Journal of Dynamic Systems, Measurement and Control*, Vol. 128, No. 1, P. 139-141, March 2001.
38. A.B. Sharkawy, H. El-Awady and Kamal A.F. Moustafa, "Stable Fuzzy Control for a Class of Nonlinear Systems," *Transactions of the Institute of Measurement and Control*, Vol. 25, No. 3, p. 265-278, 2003.
39. A.B. Sharkawy, H. El-Awady and Kamal A.F. Moustafa, "Lyapunov Based Fuzzy Control with Application to Robotic System," *Journal of Engineering and Applied Science*, Vol. 50, No. 5, October 2003.
40. Moustafa, K.A., Gad E.H., El-Moneer, A.M., and Ismail, M.I., "Modeling and Control of Overhead Cranes with Flexible Variable Length Cable by Finite Element Method," *Transactions of the Institute of Measurement and Control*, Vol. 27, No. 1, P. 1-20, 2005.
41. Moustafa, K.A., Ismail, M.I, Gad E.H., El-Moneer, and A.M., "Fuzzy Control of Flexible Cable Overhead Cranes with Load Hoisting," *Transactions of the Institute of Measurement and Control*, Vol. 28, No. 4, P.371-386, 2006.
42. Haik, Y., and Moustafa, K.A., "Thinking and Learning Preferences for a Sample of Engineering Students at the United Arab Emirates University," *Emirates Journal for Engineering Research (EJER)*, Vol. 12, No. 1, P. 65-72, 2007
43. Moustafa, K. A., and El-Awady, H., "Interval Rotor-Bearing System Stability via Monte Carlo Simulation," *International Journal of Modeling and Simulation*, Vol. 28, No. 2, p. 202-208, 2008.
44. Trabia, M., Reno, J.M., and Moustafa, K.A., "A Generalized Design of Anti-Swing Fuzzy Logic Controller for an Overhead Crane with Hoisting," *Journal of Vibration and Control*, Vol. 14, No. 3, p. 319-346, March, 2008.
45. Moustafa, K.A., Trabia, M, and Ismail M., "Modeling and Control of an Overhead Crane with a Variable Length Flexible Cable", *International Journal of Computer Applications in Technology (IJCT)*, Vol. 34, No. 3, p. 216-228, 2009.
46. Moustafa, K. A., Trabia, M., Emira, N., and Elnaggar, S., "Modeling And Simulation Of A Three-Link Spatial Manipulator With One Flexible Link, " *International Journal of Modeling and Simulation*, Vol. 29, No. 4, 2009.
47. Moustafa, K.A., Emam, S., Nawara, G., Elawady, H., and Fouad, M. "On Leak Detection of Pipelines Using Computational Pipeline Monitoring," *Journal of Advanced Research in Dynamics and Control Systems*, Vol. 3, 1, p. 34-44, 2011
48. Omar, F., and Harib, K., Moustafa, K.A., "Control of Interval Parameter Overhead Cranes via Monte Carlo Simulation," *Transactions of the Institute of Measurement and Control*, Vol. 33, No. 2, p. 260-273, 2011.
49. Moustafa, K.A , Haik, Y , Aldajah, S., and Omar, F., "Leak Localization in Pipelines via Computational Pipeline Monitoring," *ASME Journal of Pressure Vessel Technology (PVT)*, Vol. 134, No. 4, 2012.
50. Omar, F., Moustafa, K.A., and Emam, S., "Mathematical Modeling of Gearbox Including Defects with Experimental Verification," *Journal of Vibration and Control*, Vol. 18, No. 9, p. 1310-1321, 2012.

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52. Moustafa, K.A., Haik, Y., and Omar, F., "Time Series Model of Air Pollution Levels in Al Ain City, UAE," to be published, J. of Environmental Protection, December 2012.
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E-Conference Attendance

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