



Curriculum Vitae

Of Dr. Emad S. Soliman

Personal Data

Name: M.- Emad S. Soliman

Nationality: Egyptian

Current Position: Assistant Professor, Mechanical Engineering Dept., Faculty of Engineering, Assiut University, Assiut, Egypt.

Mailing Address: Mechanical Engineering Dept., Faculty of Engineering, Assiut University, Assiut, Egypt.

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English Language proficiency: professional (Reading/Writing/Speaking)

Academic Degrees:

Bachelor Degree: Bachelor of Mechanical Engineering- Production Engineering & Design from Assiut University, Egypt.

Grade: *Very Good* Rank: *Top of class*

Master Thesis: "Design of an Electromechanical System to replace the Classical Cam-Follower Design", Assiut University.

Ph. D Thesis: " Design of an Electromagnetic Variable Valve Actuation System (VVA) for Internal Combustion Engines", Joint degree program between Northwestern University, USA and Assiut University, Egypt. Spent 2 years of study, research and teaching assistance at the USA.

Part-time Employment:

Part-time teaching at El-Minia High Institute of Engineering & Technology, Mechatronics Engineering Program, El-Minia, Egypt.

Part time teaching at the Mechatronics & Robotics Engineering Program, Assiut University, Egypt.

Part-time teaching at the faculty of technical education, Sohag University, Egypt.

Part time teaching at the University of "Labor", Assiut branch, Egypt.

Professional Engineering Consultations:

Oversee implementation, execution supervision, design, specification writing, evaluation of competitive bids, legal technical receipt of equipment.

Through the "Engineering Studies and Consultation Center", Assiut University, Egypt.

Consulting and part-time work on service maintenance of offset printing equipment & copy machines at the faculty of Engineering, Assiut University.

Activities & Memberships:

- Member of the Egyptian Engineers Syndicate
- Member of the Engineering studies and consultations center, Assiut University.
- Supervisor of students activities in the Assiut University science club.
- Member of the organizing committee of the 2nd & 3rd International conference on Mechanical Engineering Assiut University.
- Member of the organizing committee of the 1st International conference on Civil Engineering Assiut University.
- Member of the organizing committee of the International conference of Control Systems, IEEE & Assiut University.
- Member of the organizing committee of the Egyptian Youth week held at Assiut University.

Professional Teaching Experience/Interests: The following courses has been frequently taught:

Undergraduate Courses:

Mechanical Vibrations
Balancing Theorems
Mechanics of Machinery
Mechanics of Materials/ Stress Analysis/ Strength of Materials
Properties of Materials
Machine Design/Mechanical Engineering Design
Failure Diagnosis
Engineering drawing & Projection
Machine Constructional Drawing
Production Engineering/ Workshop Technology
Metal Cutting Theory
CAD/CAM
Mechatronics Engineering
Mechatronic Design of Smart Machines
Computer-Assisted Measurements
Practical Electromagnetism
Material Handling Equipment
Modeling & Simulation of Dynamic Systems
Mechanical Engineering Laboratories
Internal Combustion Engines
Welding Quality
Graduation Project

Graduate Courses (PhD, MS & CAD/CAM Graduate Diploma):

Advanced Topics in Mechanical Engineering (Electromechanical Systems)
Advanced Topics in Mechanical Engineering (Failure Analysis)
Advanced Engineering Measurements
Advanced Mechanical Vibrations
Computer Aided Manufacturing (CAM)
Seminar Series
Graduate CAD/CAM Diploma Project

Professional Experience:

1. member of the managing team of the following "Higher Education Enhancement Program Fund" (HEEPF) projects: (2003- 2005), Assiut University.

- ✓ Developing and Restructuring the Curricula and the Study Plans of the Graduate Studies at the Sugar Technology Research Institute.
 - ✓ Technicians Training and Instruments Maintenance.
2. Supervised more than 30 Graduation Projects.
 3. Offered many engineering and technical consultations for companies, Industrial Projects, governorates, and jurisdiction courts.

Research Interests:

mechatronic systems, mechanical vibrations, acoustics, vehicle suspension systems, noise control, and metal forming.

Publications:

- [1]. *Abdullah A. Dhaiban, M-Emad S.Soliman, M.G. El-Sebaie*, “Finite Element Simulation of Acoustic Attenuation Performance of Elliptical Muffler Chambers”, *Journal of Engineering Sciences, Assiut University, Vol. 39 No 6 pp.1361-1373 November 2011.*
http://www.aun.edu.eg/faculty_engineering/jes/pAbstract.php?JP_ID=1214
- [2]. *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*
<http://link.springer.com/article/10.1007%2Fs13042-013-0155-7>
- [3]. *Abdullah A. Dhaiban, M-Emad S. Soliman, M.G. El-Sebaie*, “Development of Deep Drawing without Blank-Holder for Producing Elliptic Brass Cups Through Conical Dies”, *Journal of Engineering Sciences, Assiut University, Faculty of Engineering, Vol. 41, No. 4, pp. 1530 – 1548, July, 2013.*
http://www.aun.edu.eg/faculty_engineering/jes/pAbstract.php?JP_ID=1472
http://www.aun.edu.eg/journal_files/101_J_7374.pdf
- [4]. *Abdullah A. Dhaiban, M-Emad S.Soliman, M.G. El-Sebaie*, “A New Elliptical Cup Deep Drawing Technique for Better Formability of Commercial Aluminum”, *INTERNATIONAL CONFERENCE ON INDUSTRY ACADEMIA COLLABORATION , Fairmont Hotel, Cairo, Egypt, 3-5 March 2014.*
<http://www.iacconf.com/>

- [5]. *Abdullah A. Dhaiban, M-Emad S.Soliman, M.G. El-Sebaie*, "Finite element modeling and experimental results of brass elliptic cups using a new deep drawing process through conical dies", *Journal of Materials Processing Technology Volume 214, No. 4,pp. 828 -838, April 2014.*
<http://www.sciencedirect.com/science/article/pii/S0924013613003634>
- [6]. *M-Emad S. Soliman, Hany A. Mohamed, O.A. Abdelhafez, and A. M. Nassibe*, "Production and characterization of biodiesel fuels from castor oil utilizing methanol", *International Research Journal of Engineering Science, Technology and Innovation (IRJESTI), Vol.3(2) PP. 17-23, April 2014.*
<http://www.interestjournals.org/irjesti/april-2014-vol-3-issue-2/production-and-characterization-of-biodiesel-fuels-from-castor-oil-utilizing-methanol>
- [7]. *Gamal Abdel Nasser, Abdel Badie Sharkawy, M-Emad S. Soliman*, "An auto-tuning method for the scaling factors of fuzzy logic controllers with application to SISO mechanical system", *International Conference on Mechanics and Mechatronics Research (ICMMR 2014), Kuala Lumpur, Malaysia, May 8-9, 2014.*
<http://www.icmmr.org/>
Also published in the *International Journal of Materials, Mechanics and Manufacturing (IJMMM) (ISSN: 1793-8198) Volume 2 Number 3 (Aug. 2014).*
- [8]. *Abdallah Farrage, Abdel Badie Sharkawy, Ahmed S. Ali, M-Emad S. Soliman, and Hany A. Mohamed*, "Experimental Investigation of an Adaptive Neuro-Fuzzy Control Scheme for Industrial Robots" *Journal of Engineering Sciences, Assiut University, Vol.42 No3 pp.703-721, May 2014.*
http://www.aun.edu.eg/journal_files/158_J_6850.pdf