

Curriculum Vitae

Osama Ahmed Mohamed Abdelaal

□ PERSONAL INFORMATION

Position : Assistant Professor
Date & Place of Birth : July 02, 1983 Assiut, Egypt
Gender : Male
Marital Status : Married
Citizenship : Egyptian
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□ EDUCATION

- **Ph.D.** in Industrial Engineering and Systems Management, Egypt-Japan University of Science and Technology-(E-JUST), Alexandria, Egypt, through joint supervision with Tokyo Institute of Technology, Japan, February 2014.
- **M.Sc.** in Mechanical Engineering, December 2009, Assiut University, Egypt.
- **B.Sc.** in Mechanical Engineering, June 2005, Assiut University, Egypt.

Ph.D. Thesis title: "Development of Innovative Hip Implant Using Additive Manufacturing".
M.Sc. Thesis title: "Influence of Journal Groove Geometry on the Performance of Oil-Lubricated Grooved Journal Bearings".
B.Sc. Project Thesis Title: "A Reverse Engineering of Mechanical Press Using Computer-Aided Design and Engineering (CAD/CAE)".

□ EMPLOYMENT

- **Assistant Professor**, Mechanical Engineering Department, Faculty of Engineering, Assiut University, Egypt (April 2014 - now).
- **Assistant Lecturer**, Mechanical Engineering Department, Faculty of Engineering, Assiut University, Egypt (Jan. 2010 - April 2014).
- **Demonstrator** (teaching and research assistant), Mechanical Engineering Department, Faculty of Engineering, Assiut University, Egypt (Jan. 2006 - Jan. 2010).

❑ RESEACH AREAS

- Computer Aided Design (CAD), Computer Aided Manufacturing (CAM), Computer Aided Engineering (CAE), Reverse Engineering (RE), 3D Printing/Additive manufacturing, and Auxetic materials.
- Custom design and manufacturing of biomedical implants and medical devices.

❑ TEACHING EXPERIENCE

- **Undergraduate level:**

Tribology	Assiut University, Egypt
Engineering metrology	Assiut University, Egypt
Engineering statistics and Quality control	Assiut University, Egypt
Design of machinery	Al Azhar University, Egypt
Production engineering	Al Azhar University, Egypt
Metal forming theory and it's applications	Sohag University, Egypt
CAD, CNC	Sohag University, Egypt
Engineering materials and it's applications	Assiut University, Egypt
Theory of metal cutting	Assiut University, Egypt
Machine drawing and construction	Assiut University, Egypt
mechanical engineering laboratories	Assiut University, Egypt
- **Graduate level:**

Design of machinery	Suger Technology Research Institute, Assiut University, Egypt
Advanced topics in machine design	Assiut University, Egypt
Mechanical Behavior of Engineering Materials	Assiut University, Egypt

❑ LANGUAGES

- 1- **Arabic** (*native language*).
- 2- **English** (*very good*).
- 3- **French** (*basics*).

❑ COMPUTER SKILLS

- **Software:**
 - Solidworks.
 - Mastercam X2 ,CNC Software.
 - CNC Machining Centers Programming.
 - AutoCAD.
 - Microsoft Office.
 - FORTRAN 77.
 - Materialise Mimics, 3-Matic and Magics.
 - ANSYS.

- RapidForm.

▣ AWARDS

- Syndicate of Egyptian Engineers award for first class honor (L.E.350) 2006
- Certificate of Excellence from head of Assuit Engineers syndicate due to my excellence during my undergraduate studies (L.E. 150). 2007
- Certificate of appreciation from head of Mechanical Engineering Department due to my contribution in Assuit university international conference on mechanical engineering 2006
- Prof.Dr/Fathi Abdallah Abd-Elhafiz Award in Machine Design, Assiut University. 2004
- 6-months Mitsubishi research grant at Egypt Japan University of Science and Technology, Alexandria, Egypt. 2010

▣ SCIENTIFIC AND PROFESSIONAL MEMBERSHIPS

- Member in the Egyptian Syndicate of Engineers.
- Member in the Society for the Advancement of Material and Process Engineering (SAMPE®).
- Engineering Consultations Center, Assiut University, Egypt.

▣ PUBLICATIONS

[1] [Osama A. M. Abdelaal](#), Khalil, A. A., Nasr, A. A. "Characteristics of Oil-Lubricated Partially Herringbone Grooved Journal Bearing", Journal of Engineering Sciences, Vol. 37, No. 4, PP.925-942, Assiut University, July 2009.

[2] [Osama A. M. Abdelaal](#) and Saied M. H. Darwish, " Review of Rapid Prototyping Techniques for Tissue Engineering Scaffolds Fabrication," in :A. Öchsner et al. (eds.),Characterization and Development of Biosystems and Biomaterials, Advanced Structured Materials 29, Springer-Verlag Berlin Heidelberg, 2013.

[3] [Osama A. M. Abdelaal](#) and Saied M. H. Darwish, " Analysis, Fabrication and a Biomedical Application of Auxetic Cellular Structures," International Journal of Engineering and Innovative Technology, Volume 2, Issue 3, September 2012.

[4] [Osama Abdelaal](#), Jiang Zhu, Tomohisa Tanaka, Saied Darwish, Yoshio Saito, " Additive manufacturing of custom-made hip implants," Proceedings of The Japan Society of Mechanical Engineers (JSME), Manufacturing Systems Division Conference 2013, Chuo University, Tokyo, Japan, 2013.

[5] [Osama Abdelaal](#), Saied Darwish, Yoshio Saito, Tomohisa Tanaka, Jiang Zhu" An integrated approach for design and fabrication of Patient Specific hip prosthesis, " Proceedings of the 33rd Bio-Tribology Symposium, Kitasato University, Kanagawa, Japan March 16, 2013.

[6] Ibrahim Eldesouky, [Osama Abdelaal](#), Hassan El-Hofy," Femoral Hip Stem with Additively Manufactured Cellular Structures," Proceedings of the 2014 IEEE Conference on Biomedical Engineering and Sciences ", Miri, Sarawak, Malaysia, December 2014.

❑ FUNDED RESEARCH PROJECTS

- Principal Investigator of a project entitled: "Development of Improved Fused Deposition Modeling Nozzle System". STDF Research Support & Technology Development Grant (RSTDG), Egypt, 2015 (Project ID: 12612).

❑ BOOKS REVIEWING

- Reviewer of the Arabic translation of the book " H-POINT: The Fundamentals of Car Design and Packaging" , By Stuart Macey and Geoff Wardle translated by the translation center at King Saud University, Riyadh, Saudi Arabia.

❑ PROJECTS PARTICIPATION

- Assisting in the project of Quality Assurance and Accreditation (QAAA) in Faculty of Engineering, Assiut University.

❑ REFEREES

- **Referee (1)**

Prof. Dr. Hassan El-Hofy

Professor of Production engineering.

Dean of the School of Innovation Design Engineering.

Egypt-Japan University of Science and Technology (E-JUST).

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- **Referee (2)**

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- **Referee (3)**

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- **Referee (4)**

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