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Emad El-Din Farouk Omar El-Kashif

Identify data

Surname : El-kashif
First Name : Emad El-Din
Date of Birth : 10th Nov. 1973
Place of birth : Giza/Egypt
Religion : Islam
Nationality : Egyptian
Marital Status : Married
Language : Arabic & English
Address : 355 Tah, Hadayak El-Ahram – Haram – Giza
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Field of Specialization: Mechanical Design and Production (Mechanics of Materials – Machine Design)

Educational background

October 2003 Visiting Researcher, The University of Tokyo/Japan,
- September 2005 “Fabrication of HSLA steel structure”

October 2000 Ph. D candidate, The University of Tokyo/Japan,
- September 2003 Topic: “Behavior of B in Super Steels and its Effects in Mechanical properties”

September 1997 M.Sc. in Mechanical Engineering, Cairo University
- January 2000 Topic: ” Stepped Austempering of GGG40 Ductile
Cast Iron” Excellence with honor degree,

September 1991 B.S. in Metallurgical Engineering, Cairo University
Excellence with honor degree, the first rank of department
- July 1996

September 1988 High School, Orman High School, Giza- Egypt
1 July 1991

Experience

NATURE OF WORK EXPERIENCE:

- Metallurgy, metal forming, material characterization and steel making.
- 15 years experience in the area of materials applications & material selection.
- Relating the material microstructure to the mechanical properties and failure modes.
- Fracture mechanics, and life prediction methods for different mechanical elements.
- Good communication skills within business area.

Positions

2015 – Present **Associate Professor**- Mechanical Design and Production Eng. Dept., **Cairo Univ.**
2010- May 2015 **Assistant Professor**- Mechanical Design and Production Eng. Dept., **Cairo Univ.**
2004- May 2010 **Assistant Professor**- Metallurgical Engineering Dept., **Cairo Univ.**

October 2003-September 2005 **Postdoctoral researcher**, The University of Tokyo/Japan,
October 2000-September 2003 **Doctoral candidate**, The University of Tokyo/Japan,
March 2000-September 2000 **Research Assistant**, The Universite de Quebec- Canada

July 1996- February 2000 **Teaching assistant**, Metallurgical Engineering Dept., Cairo
University

Training Courses

- Successfully complete the training course held in the Iron and Steel Institute in Aachen (Germany) in 1995 for three months.

Affiliation

Associate Professor- Mechanical Design and Production Engineering Dept., Cairo University

Member of the Egyptian Engineering Syndicate

Member of the Egyptian Welding Academy

Member of the Iron and Steel Institute of Japan

References

- 1) **Prof. Mohamed Gadallah, Professor of Industrial Engineering- Cairo University**
- 2) **Prof. Mahmoud El-Sherbiny, Professor of mechanical design - Cairo University**
- 3) **Prof. Tarek Othman Professor of mechanical design - Cairo University**

Teaching Experience

I have taught the following courses during my work at Metallurgical and Mechanical Design and Production departments at Cairo University :

1. Engineering Materials
2. Casting
3. Metal Joining
4. X-ray Diffraction
5. Mechanics of Materials
6. Mechanical Testing
7. Physical Metallurgy
8. Engineering drawing
9. Production Engineering
10. Non-Ferrous Extractive Metallurgy

I have taught the following courses during my work at King Khaled and Hail Universities in Saudia Arabia beside supervising the quality and accreditation committee at college of engineering for both universities

Courses taught at Mechanical engineering dept.:

- 1- **Mechanics of Materials**
- 2- **Materials Engineering**
- 3- **ME drawings graphics**
- 4- **Machine Design I**
- 5- **Machine Design II**
- 6- **Mechanics of Machines**

Courses taught at industrial and systems engineering dept.:

- 1- **Engineering Probability and Statistics**
- 2- **Quality Control**
- 3- **Engineering Economic Analysis**

List of Publications on international conferences:

1. E. El-kashif et al.; Behavior of Boron in 9Cr-3W-3Co Ferritic Heat Resistant Steels; Proceeding of the first international conf. On advanced structural steels (ICASS) Tuskuba, (2002), p.193.
2. E. El-kashif et al.; Role of Boron in Preventing Intergranular Fracture of IF Steels; Proceeding of the IF steels 2003, (2003), Tokyo, p.188.
3. E. El-kashif et al.; Effect of Boron on the Grain Boundary Segregation of Phosphorous and Intergranular Fracture in Interstitial Free Steels; CAMP-ISIJ, 14(2001) p.1364.
4. E. El-kashif et al.; Role of Boron in Improving Creep Rupture Strength of Ferritic Heat Resistant Steels; CAMP-ISIJ, 14(2001) p.1360.
5. E. El-kashif et al.; Effect of Niobium on HAZ Microstructure and toughness of HSLA Steels; Thermec 2006, Vancouver.
6. E. El-kashif et al.; Dissimilar Friction Stir Spot Welding of Aluminum, Steel and Brass Alloys; 9th Cairo University International Conference on Mechanical Design and Production (MDP-9); January 8-10, 2008, Cairo, Egypt.
7. E. El-kashif; Formation Mechanism of Martensite Austenite Constituents in HAZ of HSLA Steels; 9th Cairo University International Conference on Mechanical Design and Production (MDP-9); January 8-10, 2008, Cairo, Egypt.
8. E. El-kashif et al. ; Dissimilar Friction Stir Spot Welding of Aluminum, Stainless Steel and Brass Alloys; 9th International Conference on Production Engineering Design and Control PEDAC'2009, 10-12 February 2009, Alexandria, Egypt.
9. E. El-kashif and Morsy Amin Morsy; Electron Beam Welding of Stainless, Cr-Mo and Heat Resistant Steels, 9th International Conference on Production Engineering Design and Control PEDAC'2009, 10-12 February 2009, Alexandria, Egypt.
10. E. El-kashif et al. ; Surface Modification of Mild Steel by Hardfacing Electrodes; 7th International Engineering Conference, Mansoura – Sharm El-Sheikh, 23 – 28 March 2010, Egypt.
11. E. El-kashif et al. ; Microstructure and Mechanical Properties of ZK-61 Mg-Zn Alloy; 7th International Engineering Conference, Mansoura – Sharm El-Sheikh, 23 – 28 March 2010, Egypt.

- 12.** E. El-kashif et al., Repair of Diesel Engine Cylinder Head Failures, Al-Azhar Engineering Eleventh International Conference, Cairo, 21-23 December, 2010.
- 13.** M. A. Morsy and E. El-Kashif, Comparison between the performance of covered and tubular Hardfacing Electrodes (I-1206-13), Int. Institute of welding, Annual Assembly 2013 in Essen, Germany.
- 14.** E. El-Kashif et al., Effect of Niobium on HAZ Microstructure of HSLA Steels, International Conference on Advances in Manufacturing and Materials Engineering (ICAMME2014), Kuala Lumpur, Malaysia, 23-25 September 2014.
- 15.** E. El-Kashif et al., Rapid Prototyping as a tool of fabricating biomodel in Medical applications: Technique and cost evaluation, International Conference on Advances in Manufacturing and Materials Engineering (ICAMME2014), Kuala Lumpur, Malaysia, 23-25 September 2014.
- 16.** Emad El-kashif et al.; Repair Welding Reclamation of 42CrMo4 and C45 Steels , 70th IIW Annual Assembly and International Conference , 2017.
- 17.** Emad El-kashif et al.; Nanostructure coatings using plasma spray technique, 70th IIW Annual Assembly and International Conference, 2017.

List of publications on international journals:

- 1.** E. El-kashif, Kentaro Asakura, and Koji Shibata; Effects of Nitrogen on 9Cr-3W-3Co Ferritic Heat Resistant Steel Containing Boron; ISIJ International, 42, p. 1468, (2002).
- 2.** E. El-kashif, Kentaro Asakura, and Koji Shibata; Effect of cooling rate after recrystallization on P and B segregation along grain boundary in IF steels; ISIJ International; 43, p.2007, (2003).
- 3.** E. El-kashif, Elsayed El-banna, and Samir Riad; Stepped Austempering of GGG 40 Ductile Cast Iron; ISIJ International, 43 p. 1056 (2003).
- 4.** E. El-kashif, Kentaro Asakura, Toshihiko Koseki and Koji Shibata; Effects of Niobium, Titanium and Boron on the Grain Growth in Ultra High Purity 18%Cr Ferritic Stainless Steel; ISIJ International, 44, p.1568, (2004).
- 5.** E. El-kashif and Toshihiko Koseki; Effect of niobium on the HAZ toughness of HSLA Steels; Materials Science forum, Vol. 539-543, p. 4838 (2007).
- 6.** E. El-kashif et al.; Calthiothermec Reduction of Zirconium Oxide in Molten CaCl₂; ISIJ International, 47, p.25, (2007).
- 7.** E. El-kashif et al.; Preparation of Zirconium Metal by the Electrochemical Reduction of Zirconium Oxide; Metallurgical and Materials transactions B; Vol. 38B, p.35, (2007).

- 8.** E. El-kashif et al.; Novel decomposition method for Zircon; Journal of Alloys and compounds; Journal of alloys and compounds (2008).
- 9.** E. El-kashif and Toshihiko Koseki; Effect of Niobium on HAZ Toughness of HSLA Steels, Journal of Engineering and applied science, Vol. 56, No. 6, pp. 679-699, Faculty of Engineering – Cairo University, December 2009.
- 10.** E. El-kashif et al.; Dissimilar Friction Stir Spot Welding of Aluminum, Steel and Brass Alloys, Vol. 57, No. 2, pp. 149 – 165, Faculty of Engineering – Cairo University, April, 2010.
- 11.** E. El-kashif et al.; Repair maintenance of diesel engine cylinder head, Journal of American Science, 2011, 7 (3)pp. 158 – 168.
- 12.** E. El-kashif et al.; Welding of austempered ductile cast iron, New York science j., 2011, 4(4) pp. 21-27.
- 13.** E. El-kashif et al.; An Experimental Study on Heat Transfer and Entropy Generation in Circular Tube Fitted with Trapezium-Nozzles, Energy Science and Technology, Vol. 3, No. 2, 2012, pp. 74-83.
- 14.** E. El-kashif et al.; Experimental Study of Forced Convection over Equilateral Triangle Helical Coiled Tubes, Energy Science and Technology, Vol. 3, No. 2, 2012, pp. 1-9.
- 15.** Emad El-kashif et al.; The effect of microstructure on high-stress abrasion resistance of Fe-Cr-C hardfacing deposits, Weld World (2014) Vol. 58, International Institute of Welding, Springer, pp. 491–497.
- 16.** E. El-Kashif et al., Rapid Prototyping as a tool of fabricating biomodel in Medical applications: Technique and cost evaluation, Advanced Materials Research (2015) 1115, pp. 627-630
- 17.** Emad El-kashif et al.; "Effect of coke size on the mechanical and wear properties of carburized mild steel", Arabian Journal for Science and Engineering, Springer, 2017.