

DATE

2008

---

## PERSONAL DATA

**Name:** Ibrahim Elshafiey

**Business Address:**

King Saud University  
xxx Engineering Department,  
P.O. Box 800, Riyadh 11421, Saudi Arabia  
Telephone (966-1) 467-6751  
E-mail: ishafiey@ksu.edu.sa

**Home Address:** 13 Seda St., Werood District, Riyadh

---

## EDUCATION

*{Institute Cairo University }*

| <u>Year</u> | <u>Degree</u> | <u>Faculty</u> | <u>Field</u>                            |
|-------------|---------------|----------------|---|
| 1985        | B.Sc.         | Engineering    | Electronics & Communication Engineering |

*{Institute Iowa State University }*

| <u>Year</u> | <u>Degree</u> | <u>Faculty</u> | <u>Field</u>           |
|-------------|---------------|----------------|------------------------|
| 1991        | M.S.          | Engineering    | Electrical Engineering |
| 1994        | Ph.D.         | Engineering    | Electrical Engineering |

---

## CURRENT POSITION

Assoc. Professor, Electrical Engineering Department, King Saud University, Riyadh, Saudi Arabia

---

## POSITIONS HELD

**ACADEMIC - KING SAUD UNIVERSITY, RIYADH, SUDI ARABIA**

*Elect. Engineering Department*

1. Assoc. Professor (2004-present)

**ACADEMIC - {INSTITUTE CAIRO UN., FAYOUM BR. }**

*Department of Elect. Eng.*

1. Assoc. Professor (2003-2004)

2. Assist Professor (1998-2003)

---

## PROFESSIONAL MEMBERSHIPS

-Joined American Society for Optical Engineering during 1994

-Joined IEEE Society during 1995

---

## PUBLICATIONS (*Summary*)

- Refereed Journal Papers (9)
  - Invited / Magazine Papers (1)
  - Conference Papers (30)
  - Utility Industry Technical Reports (1)
-

## ACADEMIC SUPERVISION

### GRADUATE/UNDERGRADUATE SUPERVISION

Ph.D. Programs: 1 student

M.Eng. & M.Sc. Programs: 5 students

Graduation Thesis & Summer Projects: 99 students

### GRADUATE/UNDERGRADUATE EXAMINATION & SUPERVISORY COMMITTEES

M.Sc. Examination Committees: 1 students

B.Sc. Thesis Examination Committees: 200 students

---

## RECENT R&D FUNDED CONTRACTS

### *(Last Five Years)*

Development of Magnetic-Field Maps Imaging System for Metal Inspection (SR 40,025)

---

## RECENT PUBLICATIONS *(Last Five Years)*

### Journal Papers

Ibrahim Elshafiey, "BIOMEDICAL IMAGING USING MAGNETIC RESONANCE DIFFUSION TENSOR", *International Journal of Scientific Research (IJSR)*, United Arab Emirates University, Vol. 15, pp. 168, 2005.

Ibrahim Elshafiey, "Diffusion Tensor Magnetic Resonance Imaging of Spinal Cord Injury," *Egypt J. Biophys. Biomed. Eng.*, 2004.

Ibrahim Elshafiey, Mehmet Bilgen, Renjie He, Ponnada A. Narayana, "In vivo diffusion tensor imaging of rat spinal cord at 7 T," *Magnetic Resonance Imaging*, Vol. 20, pp. 243-247, April 2002.

Mehmet Bilgen, Ibrahim Elshafiey, and Ponnada A. Narayana, "Mohr Diagram Representation of Anisotropic Diffusion Tensor in MRI," *Magnetic Resonance in Medicine*, Vol. 47, pp. 823-827, 2002.

Mehmet Bilgen, Ibrahim Elshafiey, and Ponnada A. Narayana, "Implantable rf coils for in vivo magnetic resonance microscopy of rat spinal cord at 7 T," *Magnetic Resonance in Medicine*, Vol. 46, pp. 1250-1253, Dec. 2001.

### Conference Papers

Ibrahim Elshafiey and Lalita Udpa, "Sensitivity Analysis of Magneto-Optic Imaging in Nondestructive Evaluation of Pipelines", Third Middle East Non-Destructive Testing Conference and Exhibition, Gulf International Conference Center, Manama, Bahrain, Nov. 2005.

Ibrahim Elshafiey, "Magnetic resonance monitoring of spinal cord injury using implanted RF coil," 21th National Radio Science Conference, Cairo, Egypt, 2004.

Ibrahim Elshafiey and Lalita Udpa, "A New Eddy Current Imaging System for Enhancement of Nondestructive Evaluation", Second Middle East Nondestructive Testing Conference and Exhibition, Royal Commission Conference Center, Jubail Industrial City, Saudi Arabia, Dec. 2003.

Ibrahim Elshafiey, Mustafa Abd-Elnaby, Salah Khamees, Salwa Serag-Eldin, "Transient Finite Element Modeling of Magneto-Optic Imaging of Aging Aircraft," 20th National Radio Science Conference, Cairo, Egypt, 2003.

Ibrahim Elshafiey, Ponnada A. Narayana, "Characterization of Eddy Current Distortion Effects on Magnetic Resonance Axonography of Human Brain," Review of Progress in Quantitative Nondestructive Evaluation (QNDE), Vol. 21A, pp. 1843-1849, D.O. Thompson and D. E. Chimenti (eds.), AIP, New York, 2002.

Ibrahim Elshafiey, Ponnada A. Narayana, "In Vivo Magnetic Resonance Imaging of Spinal Cord at 7T," Review of Progress in Quantitative Nondestructive Evaluation (QNDE), Vol. 21A, pp. 1850-1857, D.O. Thompson and D. E. Chimenti (eds.), AIP, New York, 2002.

M.M. Abd Elnaby, I.M. Elshafiey, S.A. Khamees, and S.S. Serag-Eldeen, "Finite Element Computational Modeling of Magneto-Optic Imaging", 14th International Conference on Microelectronics Beirut, Lebanon, December, 2002.

Ibrahim Elshafiey, "Diffusion Tensor Magnetic Resonance Imaging of Lesions in Multiple Sclerosis Patients," 19th National Radio Science Conference, Alexandria, Egypt, 2002.

Lalita Udpa and Ibrahim Elshafiey, "WINSAS: A New Tool for Enhancing the Performance of Eddy Current Inspection of Aging Aircraft Wheels", Invited Paper: Proceeding of The 5th Joint NASA/FAA/DoD Conference on Aging Aircraft, Hyatt-Orlando, Orlando, Florida September 10-13, 2001.

R. Albanese, G. Rubinacci, A. Tamburrino, A. Ventre, F. Villone, L. Xuan, B. Shanker, L. Udpa, S.S. Udpa, and I. Elshafiey, "A Comparative Study of Finite Element Models for Magneto-Optic Imaging Applications," Electromagnetic Nondestructive Evaluation (V), J. Pavo et al. (Eds.), IOS Press, 2001.

Ibrahim Elshafiey and Ponnada Narayana, "Exploring the b-Space for Diffusion Tensor Imaging of Human Brain," Ninth International Conference of the International Society of Magnetic Resonance in Medicine, Scotland, UK, April, 2001.

Ibrahim Elshafiey, Ponnada Narayana, and Mehmet Bilgen, "Optimization of Magnetic Resonance Diffusion Tensor Imaging of Human Brain," 19th Annual Houston Conference on Biomedical Engineering Research, Feb. 2001.

Mehmet Bilgen, Ibrahim Elshafiey, Ponnada Narayana, "Dynamic Contrast-Enhanced MRI of Experimental Spinal Cord Injury: in Vivo Studies," 19th Annual Houston Conference on Biomedical Engineering Research, Feb. 2001.

Fayes W. Zaki, Mustafa M. Abd Elnaby, Ibrahim M. Elshafiey and Amira S. Ashour, "DCT and DWT Feature Extraction and ANN Classification Based Technique for Non-Destructive Testing of Materials," 18th National Radio Science Conference, Mansoura, Egypt, 2001.

N. Eua-anat, X. Cai, L. Udpa, J. Chao and I. Elshafiey, "Crack Detection in Eddy Current Images of Jet Engine Disks," Review of Progress in Quantitative NDE, Vol. 19A, pp. 773-780, 2000.

Moustaf Nour El-Deen, Essam Hashish, Ibrahim Elshafiey, and Ismail Janoud, "Advanced System for Eddy Current Nondestructive Evaluation" 17th National Radio Science Conference, Shebeen El-koum, Egypt, Feb. 2000