**Dr. Halima Hawesa**

**Contact Details**

Tel 966533114973

Email [hhawesa\_h@yahoo.com](mailto:hhawesa_h@yahoo.com), hhawesa@ksu.edu.sa

**Personal Details**

Sex Female

Nationality Canadian

**Education**

2008(Jun-August) NMR spectroscopy training course and MRI Scanner radiologist training, Advanced Imaging center, UT Southwestern medical center, Dallas, Texas, United States

2001 – 2006 University of Manchester, UK (Imaging Science Department)

Ph. D. Nuclear Magnetic Resonance Spectroscopy

*Thesis title: Measurement of Amino Acids in the Human Brain by Proton Magnetic Resonance Spectroscopy*

2001 – 2001 Completed a course in IDL language programming

(Advanced Level Programming in Medical Physics and Imaging Science), IDL Research Group, Berkshire, UK

2000 – 2000 Completed a programming course in FORTRAN and Intro to

C language, Niagara College, Ontario, Canada

1996 – 1998 Brock University, Ontario, Canada (Physics Department)

M. Sc. Physics

1995 – 1996 Brock University, Ontario, Canada (Physics Department)

B. Sc. (Hons.) Physics

1985 – 1988 7th April University, Zaiwa, Libya (Physics Department)

B.Sc. Physics and Mathematics

1985 –1985 Zawia Science College, Libya

Diploma in Teaching

1981 – 1984 Zawia High School, Libya

High School Diploma

**Affiliation:**

-[International Society for Magnetic Resonance in Medicine](http://www.ismrm.org/) (ISMRM)

**-**The European Physical Society (EPI)

**Teaching and research Experience**

2010-present *Assistance Professor at King Saud University*, *Applied Medical College, Radiology department,*

*Riyadh Saudi Arabia*. Teaching Nuclear medicine, computer, MRI, CT, and physics

based courses. Supervising the daily duties in the department, report to the male head of radiology department, and the head of the female college.

2008-2010 *Research Scientist at UT Southwestern Medical Centre, Dallas*

*Texas, USA*. Carried out research in magnetic resonance spectroscopy and its medical applications. Trained in running 3&7 Tesla Philips magnet, design medical protocol for spectroscopy measurements to many important amino acids and brain metabolites, prepare Phantom samples for these studies, recruit volunteers and patients, data analysis using MATLAB and other soft wares.

2006- 2008 *Assistance Professor and Physics Lab Coordinator* at

Prince Mohamed University, Khobour, Saudi Arabia

**Teaching duties:**

Teaching Physics: Introductory Course

Conceptual Physics, by Paul Hewitt

Teaching Engineering Physics courses

Physics for Scientists and Engineers, sixth edition, by Paul Tipler and Gene Mosca

**Lab supervision duties:**

Setting up physics lab for three courses:

Introductory Physics, Engineering I and Engineering II

Design experiments that suites each course, prepare lab manual, guide the lab instructor through out the lab sessions

2003 – 2005 *Lecturer* at Manchester Islamic College

Taught Maths and Physics to A level students

1998 – 2001 *Lecturer and Research Associate* at

7th April University, Physics Department, Libya

Taught Maths and Physics courses to B.Sc. students, i.e.

B. Sc. Year 1 - Physics 1 and 2, Maths 1

B. Sc. Year 2 - Optics, Solid State Physics, Maths 2

B. Sc. Year 3 - Electronics and Optics Laboratory Sessions, Quantum Physics

1996 –1998 *University Teaching Assistant* at

Brock University, Physics Department, Ontario, Canada

Laboratory instructor to B.Sc. Year 1 Physics students and a teaching assistant to Physics students in B.Sc. Years 1 and 2

1992 – 1994 *University Teaching Assistant and Laboratory Manager* at

7th April University, Zawia, Libya

**Laboratory Instructor duties:**

Supervise and instruct B. Sc. Year 1 and 2 Physics students, Optics laboratory instructors and Teaching Assistant to B. Sc. Years 1 and 2 Physics students and a Teaching Assistant in Mathematics to B. Sc. Year 1 Physics students

1991 – 1992 *High School Teacher* at Zawia High School, Zawia, Libya

Taught Physics to high school students, Years 11 and 12

1988 – 1991 *Elementary School Teacher* at

Zawia Elementary and Secondary School, Zawia, Libya.

Taught Maths, Science, Arabic and Islamic Studies, Years 7, 8, and 9

## Research Interests

* Magnetic resonance spectroscopy : theory and medical applications
* Teaching Physics: challenges and rewards
* Arab Science and TechnologyFoundation

**Publications**

* 2D J-RESOLVED (PRESS) NMR AMINO ACIDS IN-VVO MEASUREMENTS AND DATA ANALYSIS. Halima Hawesa, King Saud University. IEEE (paper ID1585693), December, 2010.
* In Vivo Detection of Serine in the Human Brain by 1H-MRS at 7.0 Tesla. Changho Choi,1\* Ivan Dimitrov,1,2 Deborah Douglas,1 Chenguang Zhao,1 **Halima Hawesa**,1 Subroto Ghose,3 and Carol A. Tamminga. [Magn Reson Med. 2009 October; 62(4): 1042–1046](http://www.ncbi.nlm.nih.gov/entrez/eutils/elink.fcgi?dbfrom=pubmed&retmode=ref&cmd=prlinks&id=19526507)
* Measurement of glutathione in human brain at 3T using an improved

double quantum filter in vivo. Changho Choi1\*, Chenguang Zhao1, Ivan Dimitrov1,2, Deborah Douglas1, **Halima Hawesa1** and Jeannie Davis1, submitted December 2008.

Journal of Magnetic Resonance, [J Magn Reson. 2009 June; 198(2): 160–166](http://www.ncbi.nlm.nih.gov/entrez/eutils/elink.fcgi?dbfrom=pubmed&retmode=ref&cmd=prlinks&id=19261496)

* Measurement of Glycine in Human Prefrontal Brain by Point-Resolved Spectroscopy at 7.0 Tesla In Vivo. Changho Choi1\*, Chenguang Zhao1, ,2, Deborah Douglas1, **Halima Hawesa1,** Jindal Ashish, and Ivan Dimitrov. Journal: Magnetic Resonance in Medicine, Manuscript ID M|RM-09-010700, accepted Feb. 19, 2009.
* Why do I have to study physics? How does physics influence my daily life? And what impact will physics have on my future careers?

**Dr. Halima Hawesa** and Ummara Ahmed-*submitted in December 2008*

* MRS Measurements of Phenylalanine in Phenylketonuria -The Effect of Dietary Supplements on Brain Levels

**Halima Hawesa** and Professor S. Williamson- submitted December 2007

* **Robust Quantification of Short Echo Time 1H Magnetic Resonance Spectra Using the Padé Approximant**  
  David C. Williamson, **Halima Hawesa**, Neil A. Thacker, Stephen R. Williams. *Magn. Reson. Med***.**55 (4) 762-771, 2006.

**Abstract and Presentations**

* Th Anuual Dallas PDA, January, 2009. Dr. **Halima Hawesa**- Poster session,

Measurement of glutathione in human brain at 3T using an improved

double quantum filter in vivo

* The Saudi Physical society 4th meeting (NCMP-KACST), November 2008,

**Dr. Halima Hawesa** and Miss Umme Ammara Shaeque–Oral Presentation

Why do I have to study physics? How does physics influence my daily life? And what impact will physics have on my future careers?

* 11th Annual Meeting of the British Chapter of International Society of Magnetic Resonance (ISMRM), Oxford, UK, 2005

**Halima Hawesa** and Stephen R. Williams – Poster Presentation

Amino Acid Measurements in Vivo (GABA) Using 2D J-resolved MR Spectroscopy

* 10th Annual Meeting of the British Chapter of ISMRM, Adenborah, UK, 2004

**Halima Hawesa** – Oral Presentation

Amino Acid Measurements in Vivo Using 2D J-resolved MR Spectroscopy

* 10th Annual Meeting of the British Chapter of ISMRM, Adenborah, 2004

David C. Williamson,**Halima Hawesa**, Neil A. Thacker and Stephen R. Williams – Poster presentation

Robust Quantitation of Short Echo Time 1H Magnetic Resonance Spectroscopic Data Using the Padé Approximant

* 10th ISMRM Scientific Meeting and Exhibition, Hawaii, USA, 2003

**Halima Hawesa**, A. Chakrapani, M. Cleary and Stephen. R. Williams – Poster Presentation

MRS Measurements of Phenylanine in Phenylketonuria-Evidence of Intra and Inter-Individual Variation, and LNAA Supplements Effect on the Brain Concentration

* 8th Annual Meeting of the British Chapter of ISMRM, Sheffield, UK, 2003

**Halima Hawesa**, A. Chakrapani, M. Cleary and Stephen R. Williams– Poster Presentation

MRS Measurements of Phenylalanine in Phenylketonuria-The Effect of Dietary Supplements on Brain Levels

**Referees**

### Ms Deborah Doughlas, Senior Radiologist

UT South Westren medical Center, Dallas

Deborah.Doughlas@UTSouthwestern.edu

### Dr Hamied A. Haroon

The University of Manchester

Imaging Science and Biomedical Engineering Department

Stopford Building

Oxford Road

Manchester M13 9PT

UK

Tel 0044 161 275 6871

Email hamied.haroon@manchester.ac.uk

Web [www.isbe.man.ac.uk/~hharoon](http://www.isbe.man.ac.uk/~hharoon)

# Dr. Shabnam Lutafali, Associate professor

The University of St. Thomas, Huston, TX, USA

Tel: 0012817394198

Email: [lutafas@stthomas.uk](mailto:lutafas@stthomas.uk) , **shabnam.lutafali@gmail.com**

**Ms Claudia Kiburz** (currently working at ACK)

English Lecturer

11 Marvin Avenue

Troy, NY 12208

Tel +965 922 3182

+15189862754  
Email [***ckib@yahoo.com***](mailto:ckib@yahoo.com)