

CV Sara Abass

University of Khartoum

Department of Physics
Khartoum, Sudan
Phone: +249 928410601

Cell phone: +249 928410601
Email: abass@aims.ac.za.
sroiatna@gmail.com.

Personal

Full Name: Sara Abdel-Azeem Hassan Abass.

Date of Birth: January 8, 1983.

Place of Birth: Khartoum, Sudan.

Citizenship: Sudan.

Education

PhD in Physics, Sandwich program between [University of Khartoum](#), Khartoum, Sudan, February and ([ICTP](#)), Trieste, Italy, 2016-up to date.

Master of Science in Physics, [University of Cape Town](#), Cape Town, South Africa, December 2011 .

Postgraduate diploma, Second Class, Division One, [AIMS](#), Cape Town, South Africa, June 2008.

B.Sc (Honours) in Physics, Second Class, Division One, [University of Khartoum](#), Khartoum, Sudan, November 2006.

Research

Electrical Properties of Screen Printed of Nanoparticulate Silicon layer, Supervised by Prof. M. Härting and Prof. D. T. Britton, Thesis submitted in fulfilment of the requirements for the Degree of Masters in Science in the Department of Physics, University of Cape Town, Cape Town, South Africa, December 2011.

Van der Pauw Measurement of Hall Effect In Nanoparticulate Silicon Layer, Supervised by Prof. M. Härting and Prof. D. T. Britton, Submitted in Partial fulfilment of a Postgraduate Diploma at AIMS, Cape Town, South Africa, May 2008.

The Decade Counter, Supervised by Mr. Abu-Zaid Basheer, Submitted in Partial fulfilment of the Requirements of Honours Degree in Physics at University of Khartoum, Khartoum, Sudan, May 2006.

Awards

ICTP/IAEA Sandwich Training Educational Programme ([STEP](#)), ([ICTP](#)), Trieste, Italy, January 2016

African Institute of Mathematical Sciences (AIMS), South Africa. Scholarship in 2008.

The University prize for the best academic performance in Physics, Khartoum, Sudan, 2004.

Field of Interest

Recently I shifted my interest to focus on ab initio simulation of materials for energy applications using Quantum Espresso.

Previously I studied the Nanomaterials characterization, Nanomaterials for alternative energy systems and device applications.

Workshops and Schools Attended

School on Electron-Phonon Physics from First Principles, [ICTP](#), Italy, Trieste, 19-23 March, 2018.

Workshop on Spectroscopy and Dynamics of Photoinduced Electronic Excitations, [ICTP](#), Italy, Trieste, 8-12 May, 2017.

3rd Khartoum Workshop On Advance In Material Sciences (KWAMS17) [University of Khartoum](#), Khartoum, Sudan, 8-19 January, 2017.

Introductory level course of the Arduino Workshop [University of Khartoum](#) and [TReND](#) Khartoum, Sudan, December, 2016.

College On Multiscale Computational Modeling of Materials for Energy Applications, [ICTP](#), Italy, Trieste, 4-15 July, 2016.

School in Computational Condensed Matter Physics: From Atomistic Simulations to Universal Model Hamiltonians, [ICTP](#), Italy, Trieste, 7-25 September, 2015 .

2nd Khartoum Workshop On Advance In Material Sciences (KWAMS15) [University of Khartoum](#), Khartoum, Sudan, 1-10 February, 2015 .

1st Khartoum Workshop On Advance In Material Sciences (KWAMS13) [University of Khartoum](#), Khartoum, Sudan, 19-30 January, 2013 .

54th Annual Conference of South African Institute of Physics ([SAIP](#)), [University of Kwazulu Natal](#), Durban, South Africa, July 2009.

School on Electronic Structure Methods, [AIMS](#), Cape Town, South Africa, July 2008.

53th Annual Conference of South African Institute of Physics ([SAIP](#)), [University of Limpopo](#), Limpopo, South Africa, July 2008.

National Institute of Laser Enhanced Sciences ([NILES](#)), [Cairo University](#) , Cairo, Egypt, February 2005.

Talk and Poster present

" Structural and Electronic Properties of $\text{Na}_2\text{Ti}_3\text{O}_7$ and $\text{H}_2\text{Ti}_3\text{O}_7$ ", at Workshop on Spectroscopy and Dynamics of Photoinduced Electronic Excitations, [ICTP](#), Italy, Trieste, May, 2017.

"Electronic properties of nanoparticulate silicon composites", at ([SAIP](#)), [University of Kwazulu Natal](#), Durban, South Africa, July 2009.

Computational Skills

Computation using Python Programming Language.

Proficiency in the use of Windows and Linux operating systems.

Computation using Quantum ESPRESSO.

Languages

Arabic: Mother Tongue.

English: Very good.

Employment

Teaching the following courses: Modern Physics and Electromagnetism, 1st year Biology, University of Khartoum, 2014-2015.

Teaching Math course (Calculus) 1st year, Faculty of Medical Laboratory Sciences, University Of Khartoum, 2012.

Lecturer, University of Khartoum, Department of Physics, July 2012 –Up to date.

Teaching Assistant, Part-time, University of Khartoum, Department of Physics, 1st , 3rd and 4th year Laboratories, February 2011 -June 2012.

Tutor Assistant, Part-time, University of Cape Town, Department of Mathematics and Applied Mathematics, 2009 -2010.

Teaching Assistant, Part-time, University of Cape Town, Department of Physics, 1st Laboratory, 2008 -2010.

Teaching Assistant, Part-time, University of Khartoum, Department of Physics, 1st and 2nd year Laboratories, 2006 – 2007.

Teaching Assistant, Part-time, University of Juba, Department of Physics, 2nd year Laboratory, 2006 – 2007.

Visiting for Academic Work

Visiting International center for Theoretical Physics [ICTP](#) , Under ICTP/IAEA Sandwich Training Educational Programme ([STEP](#)), Trieste, Italy, 15 February - 13 August 2018.

Visiting International center for Theoretical Physics [ICTP](#) , Under ICTP/IAEA Sandwich Training Educational Programme ([STEP](#)), Trieste, Italy, 29 January - 27 July 2017.

Visiting International center for Theoretical Physics [ICTP](#) , Under ICTP/IAEA Sandwich Training Educational Programme ([STEP](#)), Trieste, Italy, 15 January - 15 July 2016.

Visiting International center for Theoretical Physics [ICTP](#) , Trieste, Italy, 06 September- 06 October 2015.

Visiting International center for Theoretical Physics [ICTP](#) , Trieste, Italy, 30 May- 30 June 2014.

References

Professor David Thomas Britton
NanoSciences Innovation Centre
Department of Physics
University of Cape Town
Tel: +27216503327
Fax: +27216503342
Cell: +27828258075
David.Britton@uct.ac.za

Professor Hisham Mohammed Wadatallah
Associate Professor
Sultan Qaboos University (SQU)
Tel: +968-24142416
Fax: +968-24414228
Cell: +968-9539332
Email: **hishammw@squ.edu.om**.

Dr. Nicola Seriani
Assistant Professor
Abdus Salam International Centre for Theoretical Physics(ICTP)
cell: +39 040 2240 279
Email: **nseriani@ictp.it**.

Professor Fritz Hahne
Former Director of **AIMS**
Email: **fjwh@aims.ac.za**.

Dr. Omer Ibrahim Eid
Assistant Professor
University of Khartoum
Faculty of Science
University of Khartoum
P.O Box 321, Khartoum 11115
Fax: +24-83-780539
Email: **oieid@uofk.edu, omereid@gmail.com**.

Dr. Ihab Fath allaha Riad
Assistant Professor
University of Khartoum
Faculty of Science
Department Of Physics
University of Khartoum
P.O Box 321, Khartoum 11115
Fax: +24-83-780539
Email: **ifriad@gmail.com**.