

Personal Details

Name MOHAMMED AWAD ALI
KHALID

Date of Birth 05/05/1974

Place of Birth WADRAMLI – KHARTOUM
BAHRY

Gander MALE

Marital Status Married (one child)

Nationality SUDANESE

Academic Status ASSOCIATE PROFESSOR

Department CHEMISTRY

Faculty SCIENCE
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Qualifications

Degree	Awarding Body	Country	Date
B. Sc. (Hons.) chemistry – 1 st class	University of Khartoum	Sudan	10/07/2000
Ph.D. – chemistry	University of Khartoum	Sudan	12/03/2007
Diploma – Intellectual property	World intellectual property organization	Sudan	06/03/2008

ACADEMIC APPOINTMENTS

Date	Position	affiliation
2012- present	Associate Professor	Department of Chemistry, University of Khartoum, Khartoum, Sudan.

2011-present Assistant Professor Department of Chemistry, College of

Applied Medical and Sciences, Taif
University, Torabah, Saudi Arabia.

	Assistant Professor	Applied Medical and Sciences, Taif University, Torabah, Saudi Arabia.
2007-2012	Assistant Professor	Department of Chemistry, University of Khartoum, Khartoum, Sudan.
2007-2009	Assistant Professor	Nile College for Medical Sciences, Om Dorman, Sudan
2004-2007	Lecturer	Department of Chemistry, University of Khartoum, Khartoum, Sudan.
2000-2004	Teaching Assistant	Department of Chemistry, University of Khartoum, Khartoum, Sudan.

SPECIALISED TRAINING

Training	Date	Country
Post Doctorate	07/2009-06/2010	University of Sydney, School of Chemistry, Australia

FIELD OF WORK

- P-type ATPase Enzyme Kinetics and Mechanisms.
- Kinetics and Mechanism of Redox Reactions.
- Autocatalytic reactions.
- Computational enzyme kinetics.

Special Research Interest

- Allosteric acceleration of P-type ATPases by ATP.
- Dual mechanisms of P-type ATPases by ATP.
- Exploring the allosteric sites of ATPases.

Professional Courses & Workshops Attended

Training Course/ workshop	Organizing Body	Country	Date
Applications of Nanotechnologies	faculty of Science, University of Neleen	Sudan	03-2009
Dual Mechanisms of Allosteric Acceleration of the Na^+,K^+ -ATPase by ATP	Australian Biophysical chemistry workshop	Australia	04-2010

Scholarships

Awarding Body	Country	Date
German Exchange Academic Services	Sudan	2002-2003 and 2005- 2007
World intellectual property organization (WIPO) and university of khartoum	Sudan	2007-2008
Ministry of higher education and scientific research	Australia	07.2009-06.2010

Academic, Administration, Professional Responsibilities &Activities Administrative Responsibilities

Date	Position
12/2008 – 01/2009	Department of chemistry acting head
2006-2009	Department of chemistry examination officer
2005- 2009	Secretariat theboard of chemistry department

Professional Affiliations

Type	Affiliation	Country	Date
Member	American Chemical Society	USA	2010-present

Member	Australian biophysical Society	Australia	2010-present
Member	Sudanese Chemical Society	Sudan	2008-present

Committees Membership

Type	Committee	Country	Date
Member	Maintenance and promotion of department of chemistry laboratory committee, University of Taif.	Saudi Arabia	2013 – presnt
Member	Electronic and distancelearning unit, college of applied medicine and sciences, Taif university	Saudi Arabia	2014- present
Member	Member Sport Committee, Faculty of Science, University of Khartoum	Sudan	2009-2010
Member	Graduate College Committee for Publishing Scientific Abstracts, University of Khartoum.	Sudan	2008-2009

Teaching & Examination Experience

Undergraduate

Course Title	Credit hours/ per week	Semester/year	Faculty/Department
General Chemistry	3	2 nd /first year	Science/Chemistry
Basic Physical Chemistry	2	2 nd / Second year	Science/Chemistry
Kinetics and Mechanisms	3	1 st / Fourth year	Science/Chemistry
Molecular Symmetry	3	2 nd / Fourth year	Science/Chemistry
Statistical thermodynamics	3	1 st / fifth year	Science/Chemistry
Solid and liquid state chemistry	3	2 nd /fifth year	Science/Chemistry
Quantum mechanics	3	2 nd /fifth year	Science/Chemistry

Postgraduate

Course Title	Credit hours/ per week	Master/Diploma	Faculty
Enzyme Kinetics	3	Master	Science/Chemistry
Electrochemistry	3	Higher diploma	Science/Chemistry
Photochemistry	3	Master	Science/Chemistry
Advanced Physical Chemistry – selected topics	3	Master	Science/Chemistry
Chemical kinetics	3	Higher diploma	Science/Chemistry

Supervision Of Research

Undergraduate (selected)

Thesis Title	University Date
Determination of chloramines in drinking water supply, Khartoum state	Khartoum 2007/2008
Determination of Aluminum in drinking water supply, Khartoum State	Khartoum 2007/2008
Determination of Lead in drinking water supply, Gadarif state	Khartoum 2007/2008
Kinetics of the oxidation of Asparagine by peroxydisulfate in aqueous media	Khartoum 2008/2009
Kinetics of the oxidation of glutamic acid by peroxydisulfate in aqueous media	Khartoum 2008/2009
Kinetics of the oxidation of glutamine by peroxydisulfate in aqueous media	Khartoum 2008/2009
Kinetics of the oxidation of Galactose by peroxydisulfate in aqueous media	Khartoum 2008/2009
Kinetics of the oxidation of Arabinose by peroxydisulfate in aqueous media	Khartoum 2008/2009
Determination of Vitamin-C in the common daily consumption Sudanese food	Khartoum 2009/2010

Postgraduate

Master

Thesis Title	University	Date
Investigation of Pharmaceutical active Components in the leaves of <i>BosciaSenegalensis</i> .	BakhtAlrodaa	2010
Presence of ATP active and allosteric sites in H^+,K^+ -ATPase, and interactions with some inhibitors.	Khartoum	2011
Determination of Allosteric site of Ca^{+2} -ATPase and discovery of novel inhibitors using docking programme	Khartoum	2011
Allosteric Acceleration of Na^+,K^+ -ATPase by ATP,Finding the the Allosteric Site and Evaluating Binding Affinity.	Khartoum	2011

PhD

Thesis Title	University	Date
Kinetics and mechanisms of some amines by persulfate in aqueous acidic media	Khartoum	2008-
Kinetics and mechanisms of epoxidation of some hydrocarbons using some heavy metalscomplexes	Khartoum	2013-

Publications

Publications List

1. **Mohammed A. A. Khalid**, Kinetics and mechanisms of α -amino acids-peroxodisulphate reaction, part I, *The Sudan journal for basic sciences*, part (C), 2008.
2. **Mohammed A. A. Khalid**, Oxidative kinetics of amino acids by peroxydisulfate, effect of dielectric constant, *the Arabian journal for science and engineering*, volume 33, number 2a, pp 199-210 July 2008.
3. **Mohammed A. A. Khalid**, SaifEldin M. B. Siddeeg, Alfatih A. A. Osman Oxidation of some α -amino acids by peroxydisulfate in an aqua-sulfuric acid medium, kinetics studies, *Phil. Nat. 1* (2009), no.1, pp. 43-59
4. SaifEldin M. B. Siddeeg, A. K. Sam, Alfatih A. A. Osman, IsamSalih and

Mohammed A. A. Khalid, Distribution of ^{238}U , ^{232}Th , ^{40}K and ^{137}Cs in River Nile Sediments, Khartoum, Sudan, , *Phil. Nat.* 1 (2009), no.1, pp. 109-120

5. **M. Khalid**, G. Fouassier, H.-J. Apell, F. Cornelius and R. J. Clarke. Interaction of ATP with the phosphoenzyme of the Na^+,K^+ -ATPase. *Biochemistry* 49 (2010) 1248-58. (journal impact factor 3.379)
6. **M. Khalid**, F. Cornelius and R. J. Clarke, Dual mechanisms of allosteric acceleration of the Na^+,K^+ -ATPase by ATP, *Biophysical Journal*, [Volume 98, Issue 10](#), 2290-2298, 2010, (journal impact factor 4.683)
7. [Awad A. Momen, Ali D. M. H., Mohammed A. Khalid](#), Malik A.Elsheikh,Assessment of Digestion Procedure for Determination of Trace Elements by ICP-OES,Open Science Repository Chemistry, 2013.

<http://www.open-science-repository.com/assessment-of-digestion-procedure-for-determination-of-trace-elements-by-icp-oes.html#INV>

8. **Mohammed Khalid**, Rania Suliman, Rasha Ahmed, Haifa Salim, and Ronald J Clarke,The high and low affinity binding sites of digitalis glycosides to Na,K-ATPase,Arabian Journal for science and engineering, published online through Springer, January 2014, Volume 39, [Issue 1](#), pp 75-85.
9. AwadAbdallaMomen, **Mohammed Awad Ali Khalid**, Malik AbdallaAbdelrahmanElsheikh, Dafaalla Mohamed Hag Ali,Assessment and modifications of digestion procedures for determination of trace elements in urine of hypertensive and diabetes mellitus individuals,Journal of Health Specialties, Vol. 1, Issue 3, 122-128, October 2013.
10. [Awad A. Momen](#), Ali D. M. H., **Mohammed A. Khalid**,Malik A. Elsheikh, Validation and quantification of Cd, Cr, Cu, Pb, and Zn in Scalp Hair and Finger Nails of Diabetes Miletus and Hypertensive Patients by ICP-OES, *J. Ind. Chem. Soc.*, 2014, (manuscript accepted).
11. AwadAbdallaMomen, **Mohammed Awad Ali Khalid**, Malik AbdallaAbdelrahmanElsheikh, Dafaalla Mohamed Hag Ali,Trace elements in scalp hair and finger nails as biomarkers in clinical studies, *Journal of Health Specialties*, , Vol. 3, 2015, 28-34.
12. AwadAbdallaMomen, **Mohammed Awad Ali Khalid**, Malik AbdallaAbdelrahmanElsheikh, Dafaalla Mohamed Hag Ali, Validation and quantification of some trace elements in drinking water and wells from Turabah province, KSA by ICP-OES, *International Journal of Multidisciplinary and Current Research*, Vol.3, 2015, 13-22.

Textbooks

Textbook	Date	publisher
Co-authored: University Teacher's Chemistry Hand-Book.	2005	Open Sudan University
http://www.intechopen.com/books/electrochemistry	2013	INTECH Open access publisher
Pumps, Channels and Transporters: Methods of Functional Analysis (In process (Proposal accepted))	2015	Willey

Chapters published in international Books

Membrane Electrochemistry and Bioelectrochemistry.	INTECH
http://www.intechopen.com/books/electrochemistry/membrane-electrochemistry-electrochemical-processes-in-bilayer-lipid-membrane , p71-92.	2013 Open access publisher

Chapters Edited in international books

Chapter title	Book title	Date	publisher
Shape Classification for Micro and Nanostructures by Image Analysis	Electrochemistry	2013	INTECH Open access publisher
Oxidation Chemistry of Metal(II)–salen Type Complexes	Electrochemistry	2013	INTECH Open access publisher
Electron beam ablation phenomenon theoretical model and applications	Electrochemistry	2013	INTECH Open access publisher
Electroanalytical Sensor Technology	Electrochemistry	2013	INTECH Open access publisher
Potentiometric determination of ion-pair formation constants of crown ether-complex ions with some pairing anions in water using commercial ion-selective electrodes	Electrochemistry	2013	INTECH Open access publisher
Chomatographic, polarographic and	Electrochemistry	2013	INTECH

ion-selective electrodes methods for
chemical analysis of groundwater
samples in hydrogeological studies
Membrane Electrochemistry and
Bioelectrochemistry.

Open access
publisher

INTECH
Electrochemistry 2013 Open access
publisher