

**University of Khartoum**  
**Academic Affairs Secretariat**  
**Department of Promotion & Visiting Professor**  
**Application form**

## **1. Personal Details**

### **1.1. Personal definition**

Name	Abubakr Hussein Merghani
Date of Birth	17 Jan 1970
Place of Birth	Khartoum
Gender	Male
Marital Status	Married
Nationality	Sudanese
Academic Status	Assistant Professor
Department	Architectural Design
Faculty	Architecture
Email	<a href="mailto:ahmerghani@uofk.edu">ahmerghani@uofk.edu</a>
Mobile No.	00249 (0)912314086



### **1.2. Fields of Work**

Architectural design
Environmental Design in Architecture
Sustainability and renewable energy.
Thermal comfort research

### **1.3 Special Interests**

History of Architecture in Sudan and Africa
Parametric architectural design
Building Information Modelling BIM
Integration in Buildings

## 2. Academic Qualifications

Degree	Awarding Body	Country	Date
B.Sc. Architecture - 1st Class	U. of Khartoum	Sudan	1994
MPhil	U. of Cambridge	UK	1999
PhD	U. of Cambridge	UK	2001

## 3. Academic Appointments Experience (Including Indications of External Recognition)

Position/Title	Institution/ country	Date
Teaching Assistant	University of Khartoum	1994 - 2004
Assistant Professor	University of Khartoum	20014 - Now

## 4. Specialised/ Professional Training

Training	Date	Country
Advanced Construction Systems Workshops	10/2013	UAE
VRV AC Systems	10/2009	UAE
LG Air-conditioning Systems	02/2008	Sudan
Thermal Comfort Group - Sheffield	08/2000	UK
Architectural Training Course - Aleppo University	01/1993	Syria
Building Construction - United Contractors	05/1992	Egypt
Architectural Practice - A & S Consultants	06/1991	Sudan

## 5. Scholarships, Awards, Honours and Distinctions

### 5.1. Scholarships

Award	Awarding Body	Country	Date
Chevening Scholarship	British Council	Sudan	1997
U. of K. University Prize for best performance in final year	U. of K.	Sudan	1994
Engineer Merghani Hamza Prize for the best graduation project in final year	U. of K.	Sudan	1993
The National Council for Arts and Letter Prize for best performance in penultimate year	U. of K.	Sudan	1992
The National Council for Arts and Letter for the best performance in third year	U. of K.	Sudan	1991
Shell Prize for the best performance in second year	U. of K.	Sudan	1990

### 5.2. Awards

Award	Awarding Body	Country	Date
Cambridge Commonwealth Trust Scholarship in conjunction with Overseas Research Scholarship to read for PhD Degree	Cambridge Commonwealth Trust CCT - University of Cambridge	UK	1999 - 2001
1st Prize - Design Competition	RIBA - Wates Built Homes Design Competition	UK	06/1998
Malaysian Commonwealth Scholar	Malaysian Commonwealth Studies Centre and CCT	UK	10/1998
The Production Medal for obtaining the top mark at the High School Sudanese Certificate Examination	The president	Sudan	11/1988

## 6. Professional Courses & Workshops Attended

Training	Date	Country
Air-conditioning Systems	10/2011	Thailand

## 7. Courses & Workshops Attended in Education

Training	Date	Country

## 8. Teaching & Examination Experience

### a) Teaching Responsibilities for this Academic year and last Academic year

This year 2015/2016

#### i) Undergraduate

Course Title	Credit Hours	Sem/Yr	Curriculum Yr
Arch. Design Theory	2	1 / 1	
History of Architecture	2	5 / 3	

#### ii) Postgraduate

Course Title	Credit Hours	Sem/Yr	Curriculum Yr
Environmental Design in Arch ARC 603	2	1 / 1	
Technology in Architecture I ARC 604	2	2 / 1	
Project - ARC 612	4	2 / 1	
Technology in Architecture II ARC 701	2	3 / 2	

#### iii) Staff Training

Training	Staff Grade	Institution	Date

### b) Summary of Teaching Responsibilities in the two Academic years prior to

a) above

Last year 2014/2015

#### i) Undergraduate

Course Title	Credit Hours	Sem/Yr	Curriculum Yr
Arch. Design Theory	2	1 / 1	
History of Architecture	2	5 / 3	
Architectural Science	2	6 / 3	

## ii) Postgraduate

Course Title	Credit Hours	Sem/Yr	Curriculum Yr
Environmental Design in Arch ARC 603	2	1 / 1	
Technology in Architecture I ARC 604	2	2 / 1	
Project - ARC 612	4	2 / 1	
Technology in Architecture II ARC 701	2	3 / 2	

## iii) Staff Training

Training	Staff Grade	Institution	Date

## c) Examinations

### i) Undergraduate

Status	Course Title	Faculty / Institution	Date
External Examiner	B. Arch.	ADD, U. of Nairobi, Kenya	Jun 2016
External Examiner	BSc Arch	Arch., Sudan University	Aug 2009
External Examiner	BSc Arch	Arch., Sudan University	Aug 2008
External Examiner	BSc Arch	Arch., U of Technical Studies	Sep 2006
External Examiner	BSc Arch	Arch., Khartoum Applied Studies	Nov 2005
External Examiner	BSc Arch	Arch., U of Technical Studies	Oct 2005

### ii) Postgraduate

Status	Course Title	Faculty / Institution	Date
External Examiner	M Arch	ADD, U. of Nairobi, Kenya	Jun 2016
External Examiner	Master in Urban Management	ADD, U. of Nairobi, Kenya	Jun 2016
Internal Examiner	PhD Arch	Arch., U of Khartoum	Mar 2016
Internal Examiner	PhD Arch	University of Khartoum	Jun 2015
External Examiner	Master of Arch	Arch., Sudan University	Jul 2013

Internal Examiner	Master of Arch	Arch., U of Khartoum	Mar 2013
Internal Examiner	Master of Arch	Arch., U of Khartoum	Aug 2009
Internal Examiner	Master of Physical Planning	Arch., U of Khartoum	May 2009
Internal Examiner	Master of Arch.	Arch., U of Khartoum	Sep 2008
Internal Examiner	Master of Physical Planning	Arch., U of Khartoum	Jul 2008

### iii) Professional

Status	Course Title	Faculty / Institution	Date
Key Speaker	Competition Documents Preparation	Sudanese Institute of Architects	Jan 2015

## 9) Administrative & Professional Responsibilities & Activities at University of Khartoum

### i) Administrative Responsibilities

Date	Position
Apr 15 - Now	Dean, Faculty of Architecture
Apr 15 - Now	Head of the research board, Faculty of Architecture
Feb 10 - Apr 15	Deputy Dean for Administrative Affairs, Faculty of Architecture
Oct 08 - Feb 10	Deputy Dean for Academic Affairs, Faculty of Architecture
Dec 07 - Apr 15	Head of the Architectural Design Department, Faculty of Architecture

### ii) New Establishments

Date	Establishment

### iii) Service Activities

Date	Activity
Apr 2015 - Now	Member of the U of K. Investment advisory committee.
Apr 2015 - Now	Head of Planning and Environment Committee, U of K.

2013	Member of a committee for site investigation for the proposed private university college owned U. of K.
2012	Member of a committee assigned with assessing termite damage to the vice-chancellor's office and proposing suitable structural and architectural solutions.
2010	Prepared (upon the request of the Academic Affairs) conceptual design drawings for the renovation of Khidir Alshareef Hall.
2010	Designed and supervised (in collaboration with the University Engineering Dept.) the renovation and Construction of the Main Campus Northern boundary wall.
2009	UKCC Project Team Leader: Supervised the renovation works of Sharja Hall.
2008	Senior member in the UKCC team for the design of the University of Khartoum Medical City in Soba. Work in the project stopped at the initial design stage.
2008 - 2010	UKCC (University of Khartoum Consultancy Corporation) Design Project Team Leader: design and project management of the Faculty of Medicine completion and renovation project. The project involved structural strengthening of existing buildings, architectural redesign and construction supervision.

#### iv) Other Activities

Date	Activity
Apr 16 - Now	Member of the technical advisory committee for the National Students Welfare Fund NSWF.
Jun 14 - Jul 14	Member of the committee selected by the Ministry of Higher Education for the review of proposed B.Sc. Architecture course 2014 by Sudan International University.
Jan 14 - Jun 14	Head of the Organisation Committee for the International Design Competition - Faisal Islamic Bank (Sudan) HQ and Cultural Centre. The first of its kind in Sudan. Tasks included preparation of competition documents, invitation to international firms, follow-up during competition stage, selecting jury, preparing for jury work, preparing competition result announcement celebration, exhibition and public lectures.
Jul 2013	Head of a competition jury for the design of Islamic Complex in Suakin, Hajj and Omra Corporation.
Nov 2012	Member of the review board for the proposed Revision of Arch. B.Sc. course of Omdurman Islamic University, OIU.
2010 - Jun 14	Member of the technical advisory committee for the National Students Welfare Fund NSWF.
Nov 2011	Member of the jury for the Conservation and Redesign competition of Post Office HQ colonial building, Khartoum.
Oct 2011	Member of a competition jury for an international design competition, University of Nairobi Tower, Kenya. "Building an iconic green tower". Nairobi, Kenya.

Dec 2009	Member of the competition jury for the Design Competition of Financial Investment Bank (FIB) Headquarters.
Oct 2007	Member of the competition jury for the Design Competition of Tabarak Charity Hospital in Omdurman.
Dec 2006	Member of the competition jury selected by the Sudanese Architects Association for the Design Competition of Organization Council of Consultancy Firms (OCCF) Headquarters.
Feb 2006	Head of the competition jury selected by the Sudanese Architects Association for the Design Competition of Khartoum International Preparatory School (KIPS).
Jan 2006	Member of the tender committee for the NTC tower in Burri – administering the winning bid selection procedure.
Dec 2004	Member of the competition jury selected by the Sudanese Architects Association for the Design Competition of Sudan Taxation Chamber.

## 10) Memberships

### i) Local

Status	Association / Society	Town / Country	Date
Full - Specialist	Sudanese Engineering Council	Sudan	2006 - Now
Full membership	Sudanese Institute of Architects	Sudan	1995 - Now
Fellow	Cambridge Commonwealth Society / Cambridge Commonwealth Trust	UK	1998 - Now
Lifet time member	Clare Hall College - U. of Cambridge	UK	1997
Member	Sudenses Environment Society	Sudan	1997

### ii) Regional

Status	Association / Society	Town / Country	Date
Member	African Traditional Architecture Forum	Online	2015

### iii) International

Status	Association / Society	Town / Country	Date
Fellow	Cambridge Commonwealth Society / Cambridge Commonwealth Trust	UK	1998 - Now

Lift time member	Clare Hall College - U. of Cambridge	UK	1997
Member	International Council for Research and Innovation in Building Construction CIB	International	2013

## 11) Organisation of Professional Training Courses

Status	Training Course / Symposium	Country	Date
Member - Organisation Committee	CPD in Valuation - delivered by Professors from University of Reading, UK.	Sudan	2014
Member - Organisation Committee	CPD in Quantity Surveying - delivered by Professors from University of Reading, UK.	Sudan	2013
Joint organiser	Training course for building inspectors. Faculty of Architecture, U. of K.	Sudan	2007

## 12) Organisation of Scientific Conferences, Meetings & Symposia

Status	Seminar / Meeting / Conference / Public Lecture	Country	Date
Member - Organisation Committee	College of Postgraduate Studies International Conference	Sudan	2016
Member of Scientific Committee	DeLPHIE International Conference. Joint project between Faculty of Arch. and University of Reading.	Sudan	2012

## 13) Research and related administration

### a) Supervision of Research Work

#### i) Undergraduate

Student (s) No.	Thesis Title	Faculty	University	Date
3	Different graduation projects	Architecture	U. of K.	2015/16
4	Different graduation projects	Architecture	U. of K.	2014/15
4 to 5 every year	Different graduation projects	Architecture	U. of K.	2007 - 2014
4	Value Engineering	Engineering	U. of K.	2009
3	Total Quality Management	Engineering	U. of K.	2008

## ii) Postgraduate Supervision (Higher Research Degrees)

### 1) Master

#### (i) (Fulfilment Research Thesis)

Student Name	Thesis Title	University	Date

#### (ii) (Partial Fulfilment Research Thesis)

Student Name	Thesis Title	University	Date
Khalid Awad Mirghani	Sustainable Urban Energy Planning for Khartoum City	U. of K.	2016
Saeida Ahmed Bahloul	Validating Radiance Daylight Simulation Software in Office Buildings in Khartoum Environment	U. of K.	2015/16
Malaz Elrasheed Yousif	Accuracy of Ecotect Energy Simulation Software Results in Khartoum: Comparative Study of Khartoum Weather File	U. of K.	2015/16
Malay Mohamed Ali	Usability of Energy Simulation Programs for the Early Stages of Office Buildings	U. of K.	2014/15
Omsalama Abdelhadi	Effect of Residential Buildings' Setback at Urban Street Scale: A CFD and Thermal Analysis Coupled with Empirical Methods	U. of K.	2014/15
Wala Hashim Bashari	Gender Variation Effects on Public Space's Use Patterns	U. of K.	2013
Reem Mohamed Saif	Solid Waster Management in Assajana Area	U. of K.	2008
Waleed Ahmed Abdelrahim	Appraisal of Urban Planning Environment with Emphasis on Solid Waste Treatment in Khartoum	U. of K.	2007

### 2) PhD

Student Name	Thesis Title	University	Date
Rania Obeid - Co-Supervsor	Net Zero Energy Houses in Greater Khartoum.	U. of K.	2016

**b) Research Grants**

Proposed Title	Granting Body / Country	Amount	Date

**c) Generation of Funds**

Fund	Body / Country	Amount	Date
DeLPHIE - 3 yrs Project - project admin member	UK - A joint project between the Faculty of Architecture and School of Building Construction and Management, University of Reading, UK.	£60,000	2010 -12013

**d) Publications****i) Summary**

No of articles, Books and Book chapters	9
No of articles after Assistant Professor promotion	
No of articles after Associate Professor promotion	
No of articles in International Journal	
No of articles in Regional Journal	
No of articles in Local Journal	2
No of articles in conference proceedings	6
No of articles as First Author	8
No of articles as Second Author	1
No of articles as Last Author	
No of articles as Original article	6
No of articles as Review article	
No of articles as Short communication	1
No of articles as Case report/ Letter	3
No of Books and Book-Chapters	1

## ii) Publications List

All of your publications in chronological order within each category following one Standard order for bibliographic references.

Example of citation: Light, M. A., & Light, I. H. (2008). The geographic expansion of Mexican immigration in the United States and its implications for local law enforcement. *Law Enforcement Executive Forum Journal*, 8(1), 73-82. Please provide the journal impact factor.

In addition, in the left-hand margin please star (\*) what you consider were especially significant publications and enter a 'T' against those related specifically to publications about teaching.

Where there is more than one author, you must indicate as precisely as possible the degree of your contribution, either as a percentage figure or descriptively in terms of your particular input.

### (A) Articles in Journals

Authors, title, journal, date, issue no, pages, Journal impact factor
Merghani, A. & Malaz M. A. 2015. "The Effect of Non-orthogonal Forms on Energy Consumption in Tall Office Buildings". <i>Journal of Building and Road Research</i> , U. of Khartoum, ISSN 1858-5019, Vol. 18, July 2015, pp. 33-56.
Merghani, A. 2013. "Women in Sudanese Construction Industry". <i>Journal of Building and Road Research</i> , U. of Khartoum, ISSN 1858-5019, Vol. 15, Dec. 2013, pp. 33-53.

### (B) Articles in conference proceedings

Authors, title, conference, date, issue no, pages, Journal impact factor
Wala, H., Merghani, A. and Zakaria, I. "Spatial impact of gender variation on Khartoum city river side public open space". Sudanese Institute of Architects 4th Scientific Conference SIA May, 2016.
Merghani, A. "Competition Documents Preparation". Working paper in Sudanese Institute of Architects SIA Workshop on Design Competitions: The Role of SIA. Jan 2015.
Merghani, A. "Participation of women in the Sudanese Construction Industry". In: The 3rd International Conference for Postgraduate Studies and Scientific Research. University of Khartoum, Feb 17-20, 2012, Khartoum, Sudan.
Merghani, A. "Survey of women in Sudanese Construction Industry". Working paper presented in "Challenges Facing the Management of Construction Industry and Housing in the Sudan" Workshop organized by the Faculty of Architecture, University of Khartoum and the School of Construction Management and Engineering, University of Reading, UK. Khartoum, 12-14 Dec 2010.
Merghani, A. "Adaptive behaviour and thermal comfort in traditional houses in Khartoum". In proceedings of: "Living in Deserts: Is a sustainable urban design still possible in arid and hot regions" International conference at Ghardaia, Algeria, 9-12 December 2006, pp. 174-186.

Merghani, A. "Control of wind blown sand and dust by town planning and building design. In proceedings of: Physical Development in Arid Zones and the Associated Construction Problems". Ministry of Public Works and Housing, Riyadh, Saudi Arabia, 2-4 November 2002, pp. 721-730

### C) Textbooks or Book - chapter

Authors, title, book, author, publisher, date, pages

Merghani, A. "Exploring thermal comfort and spatial diversity". Chapter 12 in Environmental Diversity in Architecture. Eds. Koen Steemers and Mary Ann Steane. Spon Press - Taylor and Francis Group – UK, Sep 2004, pp. 195-213.

### iii) Forthcoming publication

Authors, title, journal, date, issue no, pages, journal impact factor

### v) Referee of Textbooks OR Journals

Journal / Textbook	Date
Peer reviewer and assessor for BRRI journal paper.	Feb 2013

### 14) Additional Information & Future plans

#### Additional Information

06/04 – Now Founder and main shareholder of Abubakr Engineering Consultants. Designed a variety of buildings including educational, health, office, mixed-use developments, etc.

2011-2012 Prepared, edited, reviewed and coordinated the M.Sc. degree in Architecture, presented, modified and approved it at different levels at the university up to the University Senate on Oct 2012. Work later included academic co-ordinator for the course. The teaching started in Feb 2013.

Sep 2013 Prepared an illustrated manual for final year students giving them vital information which helps them to develop their work through different design stages (21 weeks duration) - attached as Additional\_1.

2007 - Now Prepared, edited and presented all architectural design competitions' reports listed in section (9 - iv Other Activities). Three sample reports are attached named Professional\_ 1 to 3.

2013 - 2014 Master Degree in Architecture course Coordinator.  
2011 - 2014 Fifth year Coordinator.  
2005 - 2009 Fifth year Coordinator. Follow-up and coordination of final year graduation project work.

### **Future Plans**

One of main objectives for the coming years is to establish an Environmental Design Research Group at the Faculty of Architecture. Moreover, work is currently underway in preparing a Masters degree in Environmental Design. The course will focus on issues dealing with building science, energy efficiency in buildings, sustainable design and construction, etc.