

## ACADEMIC AFFAIRS SECRETARIAT THE STAFF PROMOTION UNIT

### PERSONAL DETAILS

<b>Name</b>	Fathelrahman Ali Bireir
<b>Date of Birth</b>	22. 5. 1964
<b>Place of Birth</b>	Omdurman, Sudan
<b>Gander</b>	Male
<b>Marital Status</b>	Married (3 children)
<b>Nationality</b>	Sudanese
<b>Academic Status</b>	Ph. D.
<b>Department</b>	Geology
<b>Faculty</b>	Science
<b>E. mail</b>	fabireir@gmail.com
<b>Fax no.</b>	

### QUALIFICATIONS

<b>Degree</b>	<b>Awarding Body</b>	<b>Country</b>	<b>Date</b>
Ph. D. (Geology)	Tsukuba University	Japan	2002
M.Sc.(Geology)	University of Khartoum	Sudan	1993
B.Sc. (Geology, Honours, Class II, Division 1)	University of Khartoum	Sudan	1989

### ACADEMIC APPOINTMENTS

<b>Date</b>	<b>Position</b>
1991-1998	Teaching Assistant, Dept. of Geology. Khartoum
1998 – 2002	Ph. D candidate, Tsukuba University, Japan
2002 – up to date	Assistant Professor, Geology Dept. University of Khartoum

### PROFESSIONAL APPOINTEMENT EXPERIENCE

<b>Date</b>	
2002 – 2004	Member of Faculty Board, Faculty of Science, U. of K.
2009 – 2010	Examination officer, Dept. of Geology, Faculty of Science U. of K.
2012– to date	Head, Dept. of Geology, U of K Member of Senate, U. of K. Member of Faculty Board, Faculty of Science, U. of K.

### **SPECIALISED TRAINING**

<b>Training</b>	<b>Date</b>	<b>Country</b>
A training course on Environmental geology	1991 - 1993	Germany
A training course on groundwater modeling	1997	Italy
A training course on Principles of HSE management	2015	Sudan

### **FIELD OF WORK**

Hydrogeology  
Sedimentology  
Environmental Geology

### **SPECIAL INTEREST**

Environmental Hydrogeology  
Methods of groundwater investigations  
Methods of well drilling  
Environmental problems related to oil industry

### **AWARDS**

<b>Award</b>	<b>Awarding Body</b>	<b>Country</b>	<b>Date</b>
Ph. D. (Geology)	Tsukuba University	Japan	2002
M.Sc.(Geology)	University of Khartoum	Sudan	1993
Advanced Training certificate	Technical Univ. of Berlin	Germany	1993

## PROFESSIONAL COURSES & WORKSHOPS ATTENDED IN EDUCATION

Training Course/ Workshop	Body	Country	Date
Advanced Training course on Environmental geology	Technical University of Berlin	Germany	1991 - 1993
Training course on groundwater modeling	Univ. of Badova	Italy	1997
Training workshop on Isotope Hydrology	Tsukuba University	Japan	1999

## LOCAL CONFERENCES AND WORKSHOPS ATTENDED

ورشة التعدين التقليدي بالسودان	وزارة المعادن	الخرطوم / السودان	4 أغسطس 2010
<i>2<sup>nd</sup> Conference of the Sudanese Association of Petroleum Geoscientists (Sapeg), Friendship Hall, Khartoum</i>	Sapeg	Khartoum, Sudan	26-27 Mar. 2008
<i>3<sup>rd</sup> Conference of the Sudanese Association of Petroleum Geoscientists (Sapeg), Friendship Hall, Khartoum</i>	Sapeg	Khartoum, Sudan	3-4 Feb. 2010
<i>5<sup>th</sup> .Conference of the Sudanese Association of Petroleum Geoscientists (Sapeg), Friendship Hall, Khartoum</i>	Sapeg	Khartoum, Sudan	28 <sup>th</sup> .Feb._ 1 <sup>st</sup> March 2012.

## SCHOLARSHIPS

Awarding Body	Country	Date
MUNBUSHO (Ph.D.)	Japan	1998 -2002
University of Khartoum (M.Sc.)	Sudan	1991 -1993
Carl Duisberg Gesalshaft (CDG- Training course)	Germany	1991- 1993
University of Badova (Training)	Italy	1997

## ACADEMIC, ADMINISTRATIVE & PROFESSIONAL RESPONSIBILITIES & ACTIVITIES

### SERVICE ACTIVITIES

Date	Activity
1991 - 1998	<p>As Teaching Assistant I helped with most laboratory works, assisted in Field works and demonstrating for Undergraduate students.</p> <p>Conducting research for the M.Sc. Degree at Khartoum University.</p> <p>Attended Advanced training courses in Germany and Italy</p>
1998 - 2002	<p>Conducting research for the Ph.D. degree in Japan, presented seminars, attended workshops.</p>
2002-to-date	<p>As a staff member in the Geology Dept., U. of K. I carry up the following activities:</p> <p>Helping students with their graduation and research projects and Providing information to researchers and students.</p> <p>Answering all inquiries about the Field work.</p> <p>Assisting and encouraging cultural associations and schools to establish their exhibitions.</p> <p>Teaching and Supervision in Geology Department, Faculty of Science, Khartoum University.</p> <p>Leading Field Excursions and trips.</p> <p>Conducting research.</p>

### ADMINISTRATIVE RESPONSIBILITIES

Date	Position
2009 -2010	Examination officer, Dept. of Geology, Faculty of Science U. of K.
2012 – to- date	Head, Dept, of Geology , Univ. of Khartoum

### NEW ESTABLISHMENTS

Date	Establishment
2013- up to date	Looking to establish Sedimentology and hydrogeology Laboratories in the Dept of Geology, Faculty of Science, University of Khartoum

### OTHER ACTIVITIES

Date	Activity
2008 - 2013	Chairman, WISAR Charity organisation (NGO)
2005 – up to date	Consultancy services to Oil Companies and other private sectors

### MEMBERSHIP TO LEARNED SOCIETIES

#### LOCAL

Status	Association/ Society	Town//Country	Date
Member	Khartoum University Staff Association	Khartoum, Soudan	1991-to-date
Member	Sudanese Geologists Union	Khartoum, Sudan	1995-to-date
Member	Sudanese Association of Petroleum Geoscientists	Khartoum, Sudan	2007-to-date

#### REGIONAL

Status	Association/ Society	Town/Country	Date
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#### INTERNATIONAL

Status	Association/ Society	Town/Country	Date
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### SCIENTIFIC CONFERENCES, MEETINGS & SYMPOSIA ORGANIZATION

Status	Seminar/ meeting/ conference/ Public Lecture	Country	Date
Participant	Symposium on The International Environnemental Day	Sudan	3/ 6 / 2005
Participant	First Sapeg Seminar on overcoming challenges, maximizing benefits from oil	Soudan	Feb. / 2007
Participant	Second Sapeg Conference& Exhibition on Towards a better understanding of our Petroleum Systems	Friendship Hall	26-27 March 2008
Participant	Third Sapeg Conference& Exhibition on Innovative Geoscience for Optimized Petroleum Resource Management	Khartoum Friendship Hall	3-4/Feb / 2010
Participant	The 5th Sapeg Conference& Exhibition	Khartoum Friendship Hall	28 Feb.-1st March 2012
Participant	Regional Consulting Meeting on the Promotion of the International Geoscience Programme (IGCP) and Enhancement of Earth Sciences Education in the Arab Region	Luxor, Egypt	Feb. 25-26 2015

### ORGANISATION OF PROFESSIONAL TRAINING COURSES

Status	Training course/ Symposium	Country	Date
Organiser and Coordinator	Lectures Training Courses on Environmental awareness (HSE management) - Bright On institute for advanced training - Khartoum	Sudan	2015-2016

**COMMUNICATION TO LEARNED SOCIETIES**  
**LOCAL CONFERENCES & MEETINGS**

<b>Title</b>	<b>Body</b>	<b>Date</b>
Interaction between the academic & oil industry.	Sapeg/ workshop/ Sudan	28/2/2008

**REGIONAL CONFERENCES & MEETINGS**

<b>Title</b>	<b>Body</b>	<b>Town Country</b>	<b>Date</b>
Regional Consulting Meeting on the Promotion of the International Geoscience Programme (IGCP) and Enhancement of Earth Sciences Education in the Arab Region	UNESCO/ Cairo office	Luxor/ Egypt	Feb. 25 – 26. 2015

**INTERNATIONAL CONFERENCES & MEETINGS**

<b>Title</b>	<b>Body</b>	<b>Town Country</b>	<b>Date</b>
The output of SFP 69 Project	Technical University of Berlin	Berlin/ Germany	Jan. 22-26. 1992
Post graduate students research presentations	Tsukuba University	Japan	Feb. 2002.

**TEACHING & EXAMINATION EXPERIENCE**  
**UNDERGRADUATE**

Course Title	Credit hours	Semester/year	Faculty
Introduction to Hydrogeology	2	3 <sup>rd</sup> yr Semester	Science
Environmental Geology	3	4 <sup>th</sup> yr semester	Science
Hydrogeology III	3	5 <sup>th</sup> yr Semester	Science
Well Hydraulics	3	5 <sup>th</sup> yr Semester	Science
Sedimentary Techniques	3	5 <sup>th</sup> yr Semester	Science
Sedimentology I	3	3 <sup>rd</sup> yr Semester	Science

**POSTGRADUATE**

Course Title	Credit hours	Semester/year	Faculty
Source rock, Reservoir & Traps		Semester	Higher Diploma In Geology, Faculty of Science.

**COURSE ORGANISER/SUPERVISION**

Course Title	Credit hours	Semester/year	Faculty

**PROFESSIONAL TRAINING**

Training	Staff Grade	Body	Date



## EXAMINATIONS UNDERGRADUATE

<b>Status</b>	<b>Course Title</b>	<b>Faculty</b>	<b>University</b>	<b>Date</b>
Teacher & examiner	Hydrogeology (I to III)	Science	Khartoum	2002-to-date
Teacher & examiner	Sedimentary Techniques (5th year)	Science	Khartoum	2005- to-date
Teacher & examiner	Sedimentology & (3rd & 4th year)	Science	Khartoum	2002 - 2005
Teacher & examiner	Environmental Geology(4 <sup>th</sup> Year)	Science	Khartoum	2005-to-date
Teacher & examiner	General geology (Preliminary year)	Science	Khartoum	2010 - to-date

## EXAMINATIONS POSTGRADUATE

<b>Status</b>	<b>Course Title</b>	<b>Faculty</b>	<b>University</b>	<b>Date</b>
Teacher & examiner	Source rock, Reservoir & Traps	Science	Khartoum	2004-2005

## EXAMINATION PROFESSIONAL

<b>Status</b>	<b>Course Title</b>	<b>Body</b>	<b>Country</b>	<b>Date</b>
External Examiner	M.Sc. Students	UNISCO Chair for Water Resources Studies, Omdurman Islamic University	Sudan	<b>2004 - 2005</b>
External Examiner	under graduation Projects	El Nielen University	Sudan	2004, 2005 & 2011
External Examiner	2 M.Sc. Thesis	El Nielen University	Sudan	2006 & 2012
Internal Examiner	3 M.Sc. and one Ph.D. Thesis	U of K	Sudan	2004, 2006,2012 & 2016

**SUPERVISION OF RESEARCH  
UNDERGRADUATE**

<b>Student</b>	<b>Thesis Title</b>	<b>Faculty</b>	<b>University</b>	<b>Date</b>
Supervised over 120 graduations Projects both in undergraduate and higher Diploma in geology Dept.	Various Aspects of Hydrogeology, sedimentology & Petroleum Geology	Science	U. of K. .	2002 up to date

**POSTGRADUATE  
MASTER (Awarded)**

<b>Student</b>	<b>Thesis Title</b>	<b>University</b>	<b>Date</b>
Mohamed Abu Agla Eltai	Assessment of Groundwater Resources in Elteti area, south Dongla, Northern State - Sudan	U. of K.	2016

**POSTGRADUATE  
PHD (Awarded)**

<b>Student</b>	<b>Thesis Title</b>	<b>University</b>	<b>Date</b>
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**GRANTS OBTAINED FOR RESEARCH PROJECTS**

<b>Proposal Title</b>	<b>Granting Body/country</b>	<b>Amount</b>	<b>Date</b>

**GENERATION OF FUNDS**

<b>Fund</b>	<b>Body/country</b>	<b>Amount</b>	<b>Date</b>

## COMMUNITY ACTIVITY

Action	Body/country	Date
Chairman	WISAR Charity Organization (NGO)/ Sudan	2008 - 2013
Consultant advisor on environmental protection	White Nile Petroleum Operating Company	2011
Consultant advisor on environmental protection	Greater Nile Petroleum Operating Company	2012
Technical Supervisor for drilling of deep boreholes for agricultural axial irrigation	<ul style="list-style-type: none"> <li>- Irtiga agricultural project</li> <li>- GLB agricultural project</li> <li>- MOB agricultural project</li> </ul>	2007 2009 2013 - 2016

## PUBLICATIONS

### Summary

No of articles	32 (5 published papers + 1 published abstract + 1 paper in preparation + 25 Technical reports)
No of article after Assistant Professor promotion	31
No of article after Associate Professor promotion	-----
International Journal	4
Regional Journal	
Local Journal	2
First Author	3 + 25 Technical reports
Second Author	2
Last Author	1
Original article	4
Review article	
Short communication	
Case report/ Letter	25 (list of technical reports is attached).

## Publications List

Authors, title, journal, date, issue, no, pages, Journal impact	
1. <u>Awad, M. Z. and Bireir. F. A. 1993</u>	<p>Oligo – Miocene to Quaternary Paleoenvironment in Gezira Formation, Central Sudan. Geoscientific Research in Northeast Africa, U. Thorweihe and H. Schandelmeir (eds.), Balkema, Rotterdam.</p>
2. <u>Bireir, F.A., Eissawi, A.A.M., Farah, E.A., Elsayed Zeinelabdin, K.A. 2012</u>	<p>Pleoclimatic reconstruction during the Mid–Cretaceous to Quaternary, Khartoum Basin: Clay mineralogy application, (abstract &amp; Poster). 5<sup>th</sup> Sapeg conference and exhibition, Khartoum Sudan. Feb. 28<sup>th</sup> - March 1st 2012.</p>
3. <u>Bireir, F. A., Farah, F. A. and Eissawi, A. A. M. 2012</u>	<p>Hydrogeophysical Study for the purpose of the placement of Environmental monitoring wells in GNPOC Concession area. 5<sup>th</sup> Sapeg conference and exhibition, Khartoum Sudan. Feb. 28<sup>th</sup> - March 1st 2012.</p>
4. <u>Elsayed Zeinelabdin, K.A., Elsheikh, A. E. M. and Bireir, F. A. 2014</u>	<p>Hydrogeophysical study in Al-Khogalab basement – sedimentary basin transition area Using Vertical Electrical Sounding method, Khartoum State, Central Sudan. Open Transaction on Geoscience, vol. 1, No. 2 PP. 1 -10, DOI: 10.15764/GEOS. 2014.02.001</p>
5. <u>Bireir, F.A., Eisawi, A.A.M., Elsayed Zeinelabdin, K.A. 2015</u>	<p>Paleoecologic and paleoclimatic Reconstruction during Mid-Cretaceous to Quaternary, Khartoum Basin: Geochemical and clay mineralogy implication. American Journal of Earth Science. Vol. 2, No. 5, pp. 92 -105</p>
6. <u>Abdelgafar M. and Bireir. F.A. 2016</u>	<p>Vulnerability of groundwater to contamination with produced water at oil production fields (Tharjath, South Sudan) JNRD Journal of natural resources development. JNRD.info/home-jnrd/ ISSN 0719-2452, Article no. 1521</p>
7. <u>Bireir. F. A. and Farah. E. A. (in preparation)</u>	<p>The role of Aquitard Integrity in the protection of groundwater from oil related contaminants, Heglieg oil field – Sudan.</p>

## **TECHNICAL REPORTS**

1. Hydrogeophysical Investigations in western Omdurman Area (2004): Report submitted to Khartoum State Water Corporation.
2. Hydrogeophysical Investigations in Alawda residential area, Soba/ Khartoum State (2004): Report submitted to Rawaj Company.
3. Geological and Geophysical survey to locate two borehole site in Um Jawasier area, Merawy, supervision of borehole drilling, development and pumping test (2004): Report submitted to Sub Saharan development International organization.
4. Hydrogeophysical investigations and supervision of the drilling & completion of two water yards in Omdurman (2005): Report submitted to the Housing Development Fund, Khartoum State.
5. Hydrgeophysical Investigations in the upstream part of Gash river basin, Kassala State (2005): Report submitted to Water Resources and Environmental Sanitation Project, Kassala State.
6. Hydrogeophysical Investigations to locate 25 shallow wells in Kassala State (2005): Report submitted to UNICEF/ Sudan – Kassala office.
7. Soil Resistivity measurements, Bashayir Harbor (2005): Report submitted to Sudan Pile Company.
8. Geological and hydrogeophysical Investigations in Bayuda desert to locate three sites suitable for borehole drilling (2005): Report submitted to MAM Company for roads and bridges construction.
9. Drilling and Completion of 4 water wells, 650 feet in depth (2005): report submitted to Gineed Sugar Factory through Aquifer drilling Company.

10. Hydrogeophysical investigation to locate borehole site, supervision of drilling and completion of three deep wells in Al Elelafoon village (2005): Report submitted to Sub Saharan Development organization.
11. Hydrological Study for Rehabilitation and maintenance of 20 hand pumps India Mark II, in Mayo area, Khartoum State (2005): Report submitted to Sub-Saharan Development Organization.
12. Hydrogeophysical investigation, drilling, well designs, development, pumping test and pumps installments of 6 boreholes in Atmour Desert- Karima- Dongla proposed road, (2005): Report submitted to Danfodio Company for roads and bridges Lt.d.
13. Hydrogeophysical investigations In Torit, Mulu and Meridi (southern Sudan) to locate suitable sites for drilling in the United Nations Camps (2005): report submitted to Tanseem Company for Water Services Lt.d.
14. Hydrogeophysical investigations in El Wadi El Akhadar area (2006): Report submitted to the Housing and Development Fund, Khartoum State.
15. Hydrogeophysical investigation in West Darfur state (2007) to detect 150 sites suitable for drilling at Al Ginena, Zalenga, fur Brnga and Habela. Report submitted to water and Environmental Sanitation (WES) project in West Darfur.
16. Drilling and Completion of 15 boreholes in northern Kordofan State (2008): Report Submitted to Nabka International Company.
17. Drilling and completion of one water yard in Soba area (2009): Report submitted to the Housing Development Fund, Khartoum State.
18. Water harvesting studies to select 4 suitable artificial recharge facilities in southern and northern Darfur states (2009): Report submitted to UNICEF – Sudan.
19. Hydrogeophysical Investigations in Elsefeera area, SW Omduramn (2010): Report submitted to the Housing Development Fund, Khartoum State.

20. Hydrogeophysical Investigations in Block 5A, Unity State (2011): Report submitted to White Nile Petroleum Operating Company.
21. Placement of Environmental Monitoring wells in GNPOC Concession area as using multi geophysical methods (2012): Report submitted to Greater Nile Petroleum Operating Company.
22. Hydrogeophysical Investigations in at the western part of Omdurman area (2014): Report submitted to Housing and Development Fund – Khartoum State.
23. Technical specifications of 45 deep boreholes (2014 – 2016): Reports submitted to MOB project for agriculture & Livestock.
24. Hydrogeophysical Investigations in the eastern part of Khartoum basin (2015): Report submitted to Housing and Development Fund – Khartoum State.

## **BOOKS**

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## **Textbooks & Journal Referee**

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