Dr. Islam Sabry Al Zayed WRRI – Water Resources Research Institute National Water Research Center (NWRC) Ministry of Water Resources and Irrigation (MWRI) 13621 Delta Barrage Egypt Mobile: +201062008998



#### eng\_islam\_sabry@yahoo.com

#### Career Objective

I am motivated to succeed in water sciences field, because of its challenging technological nature and its contribution to research, economy and lifestyle. I am capable of working independently or in a group to meet deadlines and enjoy working under pressure, and striving to achieve high standards in my work.

### **Education Information**

September 2010 to June 2015 (Cologne University of Applied sciences and Leipzig University, Germany) PhD degree in Irrigation Water Management

Thesis's title:

Performance of Large-Scale Gezira Irrigation Scheme and its Implications for Downstream River Nile Flow

Thesis Grade: Excellent.

July 2008 to January 2010

(Cologne University of Applied sciences, Germany and Jordan University, Jordan)

**M.Sc. double degree** in Integrated Water Resources Management (IWRM) from IWRM biculture programme.

General Grade: Excellent

#### Thesis's title:

Water Harvesting and Flash Flood Mitigation in Wadi Watier, South Sinai, Egypt

Thesis Grade: Excellent.

#### September 2007 to May 2008

(Faculty Of Engineering, Menofia University)

Premaster programme in Irrigation and Hydraulics Engineering.

• General Grade: Very Good.

#### September 2001 to May 2006

(Shoubra Faculty Of Engineering, Benha University) **B.Sc.** in Civil Engineering (General works)

- General Grade: Very Good.
- Graduation Project: Bed configuration on sandy bed channel.
- Project Grade: Excellent.

#### Work Experience

#### September 2006 till now

*Research Assistant* (Civil Engineer) at Water Resources Research Institute (WRRI), National Water Research Center (NWRC), Ministry of Water Resources and Irrigation (MWRI), Egypt.

#### September 2013 to January 2014

*Research Assistant* at Institute for Technology and Resources Management in the Tropics and Subtropics (ITT), Cologne University of Applied Sciences, Germany.

July 2007 to July 2008

Theme Researcher in Eco- hydrology component at FRIEND/Nile Project (Managed by UNESCO and Include Six Nile Basin Countries).

## ➢ Work experience (WRRI):

- Update the hydrogeological map of Sinai Peninsula, Egypt by using GIS technique (Groundwater project, 2015).

- Remote sensing and GIS for mapping and monitoring land use/cover in the North-western coastal zone of Egypt for the national plan (North-western coastal of Egypt project, 2015).

- Identify flash flood hazard and risk areas in Luxor governorate, Egypt by using GIS and Remote Sensing techniques (Atlas Project, 2014).

- Identification of flash flood hazard and risk areas in Sinai Peninsula, Egypt (Atlas Project, 2010).

- Hydrologic analysis of flash flood protection works in arid and semi-arid region of Wadi Watier, Egypt (Wadi Watier protection works, 2008) supervised by Prof. Dr. Ahmed Hassan Fahmy.

- Hydraulic study for floodplain in Delta Wadi Watier (Wadi Watier protection works, 2008) supervised by Prof. Dr. Ahmed Hassan Fahmy.

- Groundwater modeling for Groundwater Management in Sahl al Qah, Sinai, Egypt (Groundwater Management, 2007)

- Simulating river flow to establish and predict flow phenomena such as sediment transport, velocity distribution, water levels and flow quantities for Lake Nasser, Egypt and define the most critical sediment deposition places (Lake Nasser storage capacity project, 2007) supervised by Dr. Mahmoud Bakr and Dr. Moustafa EL-Sammany.

- Great understanding of principles of flood analysis, model calibration and validation, and surface water monitoring,

- Hydrographic Field Survey from Helfa to Abusimple on Lake Nasser.

## **Work experience (ITT):**

- Drought monitoring of Lam Pa Chi River Basin in Thailand using GIS and MODIS FAPAR remotely sensed data for the period of 2000-2014.

- Develop the open source database for better management.

### **Work experience (FRIEND/Nile):**

- Assess the water quality for Rosseta Branch at River Nile in Egypt using Soil and Water Assessment Tool (SWAT) (ArcView version) (FRIEND/NILE, 2007).

- Hydrologic analysis of the Blue Nile river (FRIEND/NILE, 2007).

## **Teaching Experience**

- **2015**: Special training course on "<u>Application of remote sensing and GIS on rainwater</u> <u>harvesting</u>" at League of Arab Sates Arab Organization for Agricultural Development (AOAD), Khartoum, Sudan.

- **2015**: The 35<sup>th</sup> complementary course on: "International Post-Graduate Training Course on: Environmental Hydrology for Arid and Semi-Arid Regions" a subject of "Application of GIS on Wadi Hydrology" at Hydraulic Research Institute, The National Water Research Center, Delta Barrage, Egypt.

- **2014**: The 2<sup>nd</sup> training on: "Capacity Development Water Management for Africans" Special training on "On- and off-farm Management tools to improve water productivity" at Regional Training Sector for Water Resources and Irrigation, 6 October city, Egypt.

- **2014**: The 6<sup>th</sup> complementary course on: "Appropriate Management of Land and Water Resources for Sustainable Agriculture in Arid & Semi-arid Regions" a subject of "GIS for Land & Water Resources Management" at Hydraulic Research Institute, The National Water Research Center, Delta Barrage, Egypt.

- **2014**: The 35<sup>th</sup> complementary course on: "International Post-Graduate Training Course on: Environmental Hydrology for Arid and Semi-Arid Regions" a subject of "Application of GIS on Wadi Hydrology" at Hydraulic Research Institute, The National Water Research Center, Delta Barrage, Egypt.

- **2010-2013**: Teaching postgraduate students at ITT under the supervision of Prof. Lars Ribbe (supervisor);

- **2010**: Regional Training Center of the Hydraulics Research Institute (HRI), Cairo-Egypt. Teaching and training a subject of "Geographic Information System (GIS)" in the course titled "Environmental Hydrology For Arid and Semi-Arid Regions";

- **2009**: Regional Training Center of the Hydraulics Research Institute (HRI), Cairo-Egypt. Teaching and training a subject of "Application of GIS in Hydrology" in the course titled "Appropriate Management of Land and Water Resources for effective utilization in Arid and Semi-Arid Region";

- **2008**: Regional Training Center of the Hydraulics Research Institute (HRI), Cairo-Egypt. Teaching and training a subject of "Geographic Information System (GIS)" in the course titled "Environmental Hydrology For Arid and Semi-Arid Regions".

## **List of Publications**

- Al Zayed, I. S. (2015). Performance of Large-Scale Gezira Irrigation Scheme and its Implications for Downstream River Nile Flow. PhD thesis, Leipzig University.
- Al Zayed, I.S., Elagib, N.A., Ribbe, L., Heinrich, J. (2015). Spatio-temporal performance of large-scale Gezira Irrigation Scheme, Sudan. Agricultural Systems 133, 131-142.
- Al Zayed, I.S., Attia, K. (2015). Water level variations in Lake Nasser from operational satellite data. Mapping water bodies from space, European Space Agency (ESA), Frascati Italy, 18 19 of March 2015.
- Al Zayed, I.S. Elagib, N.A., Ribbe, L. (2014). Dynamics in lake area at Er Roseires Dam as extracted from satellite images. The Second New Nile Conference "New Nile Opportunities: Scientific advances towards Prosperity in the Eastern Nile Basin" December 8 -9, Addis Ababa, Ethiopia.
- Al Zayed, I.S. (2013). *Irrigation and Food Security: a case study of Gezira Scheme, Sudan*. Power point presentation at Special session: The Nexus of Water, Energy and Food Security in the Eastern Nile Basin. Water in the Anthropocene: Challenges for Science and Governance. May 21-24, 2013. Bonn, Germany.
- Al Zayed, I.S. Elagib, N.A., Ribbe, L., Heinrich, J. (2013). Analysis of irrigation efficiency using comparative performance indicators: a case study of Gezira scheme, Sudan. International conference on: New Nile Perspectives - Scientific advances in the Eastern Nile Basin 6-8 May 2013 Grand Holiday Villa Hotel, Khartoum, Sudan. UNESCO-IHE publishing.
- Al Zayed, I.S., Ribbe, L., Al Salhi, A. (2013). Water Harvesting and Flashflood Mitigation-Wadi Watier Case Study (South Sinai, Egypt). International Journal of Water Resources and Arid Environments 3(2): 102-109, 2013. ISSN 2079-7079.
- Al Zayed, I. S. (2010). Water harvesting and flash flood mitigation in Wadi Watier, South Sinai, Egypt. Master dissertation, Cologne University of Applied Sciences and the University of Jordan.

## **Computer Skills**

Expert in the following models and software:

- Mike Basin (2009 to 2011) DHI package.
- ERDAS imagine (v. 8, 9.3 and 11) software.
- ENVI 4.5 software.
- ArcGIS (8.3 to 10) software and its different applications.
- WMS 10.0 (Watershed Modeling System) with several hydrological and hydrolics models (HEC-1, HEC-HMS, GSSHA and HEC-RAS).
- SWAT model under both (ArcView and ArcGIS) in hydrologic modeling.
- Global Mapper (v. 16)
- AutoCAD Release 2008.
- SMS 8.1 (Surface-Water Modeling System).
- FAO software such as (CLIMWAT 2.0, CROPWAT 8.0 and EToCalc).
- Microsoft Office (1998 to 2010)
- Mendeley Desktop.

Basic knowledge with the following software:

• **RIBASIM 6.33.21**(River Basin Simulation Model).

- Visual MODFLOW 4.2
- Matlab 7.0.

### Languages

Name	Read	Write	Talking / Understanding
Arabic	Native		
English	Excellent		
German/Deutsch	Good/Gut		

### **Personal Information**

Name	Islam Sabry Khalil Mohamed Al Zayed	
Nationality	Egyptian	
Date of Birth	25 September 1984	
Marital Status	Married (one daughter)	
Military Status	Exempted	
Telephone	+201062008998 (Egypt)	
Email	eng_islam_sabry@yahoo.com	

## References

- Prof. Lars Ribbe: Director of Institute for Technology and Resources Management in the Tropics and Subtropics (ITT), Germany lars.ribbe@fh-koeln.de

- Prof. Jürgen Heinrich: Professor at Leipzig University, Germany jhein@rz.uni-leipzig.de

- Prof. Mohamed Abdel Motaleb: Head of National Water Research Center (NWRC), Egypt motaleb@mwri.gov.eg

- Prof. Karima Attia: Director of Water Resources Research Institute (WRRI), Egypt karima\_attia@yahoo.com

- Prof. Gamal Kotb: Deputy Manager in WRRI, Egypt <u>msammany@hotmail.com</u>

- Dr. Mahmoud Bakr: Deltares, Soil and groundwater systems, Utrecht, the Netherlands mahmoud.bakr@tno.nl

- Dr. Abdel Aziz Zaki: Project Manager -FRIEND/NILE, UNESCO, Cairo Office, Egypt aa.zaki@unesco.org

- Assistant Prof. Emad Habib: Lecturer at faculty of Civil Engineer, Louisiana University, USA habib@louisiana.edu

Other References available upon request