

## **CURRICULUM VITAE**

### **PERSONAL DATA**

**Name:** Ibrahim Hamouda El Sebaie  
**Nationality:** Egyptian  
King Saud University  
Civil Engineering Department,  
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### **Education**

1998-2002 :**Ph.D.** of Civil Engineering (3 years scholarship "DAAD" in Germany), Thesis entitled "Integrating Remote Sensing and Geographic Information Systems for developing the hydrological system of the Blue Nile River Basin", University of Braunschweig, Germany in coordination with Ain Shams University.

1997-1998 :**M.Sc.** of Engineering Hydrology "The Application of Remote Sensing and Geographic Information Systems in Hydrological Modelling", with grade "First class and honour degree", National University of Ireland, NUI.

1994-1998 :**M.Sc.** (Irrigation and Hydraulics), Department of Civil Engineering, Ain Shams University, Cairo, Egypt.

1981-1986 :**B.Sc.** Degree in Civil Engineering (Faculty of Engineering, Ain Shams University, Cairo). *General appreciation:* Very Good.

### **Posts and Occupations:**

**2008 – till now:** Ass. Professor, at King Saud University, College of Engineering, Civil Engineering Department

- Teaching Hydraulics, Hydraulic Structures, Hydrology, Water Supply & Drainage Systems and Industry & Environment courses for the undergraduate students
- Teaching Water Surface Hydrology and advanced Hydraulic courses for the Postgraduate students
- Supervisor of many Graduation Projects in the field of design storm water drainage networks for different regions in Riyadh, Hydraulic design for some Concrete Gravity Dams located in Saudi Arabia and hydrological modelling for some water sheds in the region
- Supervisor for MSc. in Water Resources and Hydrology.
- Participating in different college committees
- Participating in Dams and Operation Maintenance Program, King Abdullah Institute.

**September 2005 till May 2008:** Senior Engineer in the Hydraulic Laboratory, Faculty of Engineering, Civil Engineering Department, King Saud University.

- Participating in teaching the Hydraulic & Fluid Mechanics courses for the Undergraduate Students, in addition to teaching the practical part of the Hydraulic and Hydrology course.
- Teaching the main course in the Hydraulic Structures “ second Semester 2006-2007”
- Participating in performing a research work in the field of Hydraulic Jumps on Corrugated Beds
- Assisting in some Projects for the graduated Students

**January 2004 till October 2005:** GIS Expert with Dornier Consulting-GTZ “German Consultant Company” (Up-Dating Groundwater Mathematical Model of Umm Er Radhumah and overlying Aquifers) for the Eastern Province (K.S.A).

**Jan. 2003 till Nov. 2003:** A lecturer, Department of Irrigation and Hydraulics, Faculty of Engineering, Ain Shams University. Participating in teaching the hydrology course for the undergraduate students.

**2002 till Nov. 2003:** Water Resources Expert in Dutsch project for developing the hydraulic, morphological and scour modelling for Lake Nasser Flood and Drought Control (LNFDC), in cooperation with the Ministry of Water Resources and Irrigation, Egypt.

**January, 2000– September, 2002:** PhD student “Researcher” University Braunschweig, Germany. The objective was to achieve the major part of the PhD which has been already started in Ain Shams University, Cairo since 1998.

**June 1998 – May 2000:** Team Leader, Water availability Management component, National Water Quality and Availability Management Project (NAWQAM) in cooperation with Canadian government.

**May 1995 –May 1998:** Team Leader, Geographic Information System unit, Ministry of Water Resources and Irrigation. The objective was to study the flash flood using satellite images (Landsat and SPOT) & GIS (ARCGIS) facilities to aid in risk mitigation zones within Egypt.

**Jan. 1990-May 1998:** Water Resources Engineer within NOAA "USA" and FAO staff for developing the Nile Forecasting Research Center, funded by USAID in coordination with the Food Agricultural and Organization (FAO) and Ministry of Water Resources and Irrigation, Egypt. The objective was to develop an operational system for Monitoring, Forecasting and Simulation of the Nile River flows.

**MEMBERSHIP** : Egypt Engineers Syndicate, International Water Resources Association (IWRA), Germany Academic Exchange (DAAD), Saudi Society for Geosciences, and Egyptian Engineers society in KSA.

**Committees** :Civil Engineering Department Committees, KSU (Annual Report, Laboratory Requirements, Plans and Academic Affairs)

## **HONORS AND AWARDS**

1. June 1997-Dec. 1998: M.Sc. Scholarship from National University of Ireland.
2. June 2000 –Dec. 2002: Scholarship from "DAAD" for Graduate Studies abroad (Ph.D.) University of Braunschweig, Germany
3. April 1997-June 1997: Nile Friend Award. Advanced training course in the National

University of Ireland.

4. October 1997: Presidential Award from the Arabic Republic of Egypt for developing the Nile Forecasting Research Center activities, objectives, its products and its usefulness for all the countries participating in the Nile Basin
5. May 1991-March 1992: FAO Award. During this period I have received a professional training in the United States of America

#### **FUNDED RESEARCH PROJECTS**

1. January 2009-present: "Development of IDF curves": Project No. 16/430 " funded by the research center of College of Engineering, KSU.
2. Short Track Project with the research center of College of Engineering, Project No. 10/431 " Formation of Hydraulic Jumps on Corrugated Beds"
3. Participating in short Track Project within KACST programs "Application of Remote Sensing and GIS for Locating Suitable Mangrove Plantation Sites Along the Saudi Arabian Red Sea Coast.
4. Co-Investigator for a research projects within KACST Program Project ID (581): Risk assessment and management of flash floods in Wades Al Laith and Yalamlam, western Saudi Arabia.

#### **INSTITUTIONAL AND PROFESSIONAL SERVICES**

1. May 2008 - Present: Assistant Professor, Civil Engineering Department, college of engineering, King Saud University.
2. Participation in Dams and Operation Maintenance Program, King Abdullah Research and Consulting Institute, King Saud University, Riyadh, Saudi Arabia (10/09–present)
3. Water Resources consultant in project titled: "Developing a Precise Gravimetry System for Mapping Ground Water Table Variation in Saudi Arabia, KACST- NPST.
4. Supervisor for Master Thesis title "Updating Rainfall Intensity-Duration-Frequency Relationship for different Regions in Saudi Arabia
5. A referee on the Preliminary Evaluation Committee for the Water Management & Protection Prize. Prince Sultan Bin Abdulaziz International Prize for Water (Prize's 7th Award ,2016).
6. Reviewer of Research project Title: "Dewatering Schemes and their Effects on the variation of Groundwater Levels and Uplift Pressure under Buildings", Kingdom of Saudi Arabia, Majmaah University, Deanship of Scientific Research, Engineering and Applied Sciences Research Center
7. Reviewer for Journal of King Saud University (Engineering Sciences)
8. Reviewer of three Research papers for the fourth scientific conference, KSA.
9. Reviewer for some papers in the field of Water Resources and Hydrology-Springer & ISI Journals (i.e. Journal of Coastal Conservation, Progress in computational Fluid Dynamics, Theoretical and Applied Climatology.
10. Reviewer for 6th International Conference on Water Resources and Environment Research (ICWRER) Conference, 2013 KOBLENZ GERMANY.

11. Member of different Committees at the Department of Civil Engineering, King Saud University.
12. Giving general lectures for the graduate students, General lectures for the Egyptian Engineers society in Riyadh, Scientific lecture during the workshop held in the Ministry of Municipality, and some Field visits with the students to different Dams and Water Supply & Treatment Plans in Riyadh.
13. Technical Leader/Director for Storm Water Drainage Study and Design course, Projacs International Training, Dubai / UAE.
14. Participating in conducting an assessment of the groundwater conditions at one of the International Airports in KSA.
15. Participating in Up-Dating the Groundwater Mathematical Model of Umm Er Radhumah and overlying Aquifers for the Eastern Province (K.S.A), in the period from January 2004 until December 2005. Working within Dornier Consulting-GTZ "German Consultant Experts" and responsible for the GIS component.
16. *In Ain Shams University:* Participating in teaching the hydrology course for the undergraduate students, Department of Irrigation and Hydraulics, Faculty of Engineering, Ain Shams University
17. Presenting lectures and courses in the field of Hydrology and Water Resources Management, which are organized regularly at the regional training center, Ministry of Water resources and Irrigation, 6 October City, Cairo.
18. Developing the hydrological System of the Blue Nile Basin using remote sensing and GIS technologies, during the PhD study in University Braunschweig, Germany.
19. Developing and operating the Nile Forecasting center, Ministry of Water Resources and Irrigation in Egypt with high technology by using remote sensing applications, GIS, and Mathematical Models (1990-1998).
20. Operating the flash flood center using satellite images & GIS facilities to aid in risk mitigation zones within Egypt (1995-1998).
21. Arrangement one of the International courses for the Nile Basin members (funded by UNESCO and FAO) in Cairo, Egypt. Giving some lectures in the field of remote sensing and satellite estimate techniques and Geographic Information System Applications in that course.

#### **PUBLISHED PAPERS:**

- . **Elsebaie, I.H.**, Elnawawi, O., and Shaker, I., Remote Sensing Applications for Forecasting the Amount of Rainfall over the Blue Nile Basin. Journal of Environmental Hydrology, Paper 7, Volume 5, December 1997
- . **Elsebaie, I.H.**, The Application of Remote Sensing and Geographic Information Systems in Hydrological Modelling, M.Sc. National University of Ireland, 1998.
- . **Elsebaie, I.H.** and Elnawawi, O., Potential Evapotranspiration Estimation for the Blue Nile Basin. The Scientific Magazine of Ain Shams University, Faculty of Engineering, (ISSN) 1110 – 1385, vol. 35, No. 1, pp. 231-246, March 2000.

- Ead, S. A., and **Elsebaie, I. H.**, "Effect of bed corrugations on the characteristics of a hydraulic jump " *Journal of Faculty of Engineering*, Al-Azhar University, CERM, Vol. 31, No. 1, pp. 238-251, Jan. 2009.
- **Elsebaie, I.H.** and Shabayek, S., "Formation of Hydraulic Jumps on Corrugated Beds" *International Journal of Civil & Environmental Engineering*, IJCEE/IJENS, ISSN: 2077-1258, Vol. 10 Issue: 01, pp. 40-54, Feb. 2010.
- **Elsebaie, I.H.** "Rainfall Intensity-Duration-Frequency Relationship for some Regions in Saudi Arabia " *International Journal of Sustainable Water and Environmental Systems (IASKS)*, ISSN: 1923-7537, Vol. 2 Issue: 01, pp. 7-16, 2011.
- **Elsebaie, I.H.** "Developing Rainfall Intensity-Duration-Frequency Relationship for Two regions in Saudi Arabia", *Journal of King Saud University: Engineering Sciences*, JKSUES-D-10-00013, Received 9 November 2010; accepted 21 June, 2011.
- **Elsebaie, I.H.** "The role of Remote Sensing Technology for Developing the Hydrological System of the Blue Nile River Basin", *Canadian Journal on Environmental, Construction and Civil Engineering*, vol. 2, No.8, November, 2011.
- **Elsebaie, I.H.** "Effect of Corrugated Beds Shapes on Hydraulic Jumps Characteristics", Sixteenth International Water Technology Conference (IWTC16), Istanbul, Turkey, 7-10 May 2012.
- Khalid K. Al-anazi1 and **Ibrahim H. El-Sebaie**, 2013: "Development of Intensity-Duration-Frequency Relationships for Abha City in Saudi Arabia", *International Journal of Computational Engineering Research*||Vol, 03||Issue, 10||Issn 2250-3005, October,2013. pp. 58-65.
- **Elsebaie, I.H.**, "An Experimental Study of Local Scour around Circular Bridge Pier in Sand Soil" *International Journal of Civil & Environmental Engineering*, IJCEE/IJENS, and ISSN: 2077-1258, Vol. 13 Issue: 01, February 2013.
- **Elsebaie, I.H.** and Aguib, S. H. "The role of Remote Sensing and GIS for Locating Suitable Mangrove Plantation Sites Along the southern Saudi Arabian Red Sea Coast" *International Journal of Geosciences*, 2013, 4, 471-479.

#### **RESEARCH PAPERS UNDER ISI JOURNAL REVIEW**

- Hesham Fouli\* and **El-Sebaie, I.H.**, Reducing local scour at bridge piers using an upstream subsidiary triangular pillar, *Arabian Journal of Geosciences*.
- **Ibrahim H. Elsebaie\***, Hesham Fouli, Mohab Amin, Evaporation Reduction from Open Water Tanks Using Palm-Frond Covers: Effects of Tank Shape and Coverage Pattern, *KSCE Journal of Civil Engineering*.
- Ayman Aguib; Ahmed Mohamed; **Ibrahim Elsebaie**, Pilot System for Light-Weight Precision Gravimeter, *Arabian Journal of Geosciences*.
- Mohab Kamal, Adham Ragab , **Ibrahim Elsebaie**, Multivariate Statistical Techniques for the Evaluation of Temporal and Spatial Variations in Water Quality of Wadi Henifa (Riyadh-Saudi Arabia) case-study, *KSCE Journal of Civil Engineering*.
- **Ibrahim H ElSebaie**, Ayman S Aguib, Ahmed H Mohamed, Groundwater Detection using Precision Gravimetry in Saudi Arabia, *Water Resources Journal*.

## **CONFERENCES:**

- . **Elsebaie, I.H.**, and Attia, B., Developing the Nile Forecasting Research Center activities for monitoring, forecasting and simulation of the Nile Flows, VIII IWRA World Congress on Water Resources, Cairo (IWRA & NWRC, Egypt), 21-25 Nov. 1994.
- . **Elsebaie, I.H.**, and Attia, B., Applying System Modeling techniques and conceptual rainfall runoff models on the Blue Nile Basin. The seventh International Nile Conference 2002, Cairo, February 1999.
- . **Elsebaie, I.H.**, and El Sayed, T., Improving the water availability Management component within National Water Quality and Availability Management, Canadian Project, (NAWQAM) Conference, Sharm El Sheikh, Egypt, Jan. 2000.
- . **Elsebaie, I.H.** and Attey, M., Improving the outcomes of Monitoring, Forecasting and Simulation of the Nile River Basin, Conference held by USAID in cooperation with FAO, Alex., Egypt, 11-15 May 2000.
- . **Elsebaie, I.H.** Application of the hydraulic, morphological and scour modelling (SOBEK) for Lake Nasser, Flood and Drought Control (LNFDC) Dutsch conference in cooperation with the Ministry of Water Resources and Irrigation, Egypt, 13-16 May 2003.
- . **Elsebaie, I.H.**, 2008: إمكانية الاستفادة من تطبيقات نظم المعلومات الجغرافية في التنبؤ بكمية الامطار المتوقع سقوطها فوق منطقة حوض النيل الازرق. ورشة عمل تصريف السيول... بين النظرية والتطبيق-ورقة رقم 9 - الادارة العامة للدراسات والتصميم-أمانة منطقة الرياض (2008/5/6)
- . Participation at Water Desalination Conference in Arab Countries, Arwadex, 12-15 April 2009, Riyadh, Saudi Arabia.
- . Participation at the 4<sup>th</sup> International Conference on Water Resources and Arid Environments 2010 (ICWRAE 4), 6-8 December 2010.
- . **Elsebaie, I.H.** "Hydraulic Jumps Properties on Corrugated Beds", the fourth International Symposium, Water Resources and Sustainable Development (CIRED '4), 22-23 Feb., 2011, Algiers.
- . **Elsebaie, I.H.** "Rainfall Intensity-Duration- Frequency Relationship for some regions in saudi arabia", Conf. of *International Journal of Arts & Sciences (IJAS)*, CCSU, Germany (10-15 April 2011).
- . Participation at the Water Desalination Conference in the Arab Countries, Arwadex, 17-20 April 2011, Riyadh, Saudi Arabia.
- . Elsebaie, I.H. "Effect of Corrugated Beds Shapes on Hydraulic Jumps Characteristics", Sixteenth International Water Technology Conference (IWTC16), Istanbul, Turkey, 7-10 May 2012.
- . Participation as an Instructor and Chairperson for the Fourth Annual Workshop of the Egyptian Engineers Association in Riyadh, KSA, 31 May-01 June, 2012.

- . Participation at the 10<sup>th</sup> Water Desalination Conference in the Arab Countries, Arwadex, 8-11 April 2012, Riyadh, Saudi Arabia.
- . **Elsebaie, I.H.** " An Experimental Study of Local Scour around Bridge Piers", 6th International Conference on Water Resources and Environment Research 3 – 7 June 2013, Koblenz, Germany.
- . **ملتقى جمعية المهندسين " "أحدث التقنيات المتبعة فى تصريف مياه السيول ودرء أخطارها تقديم ورقة علمية بعنوان كذلك مقرر الجلسة لاحدى محاور الملتقى. 16-18مايو 2013-الرياض.. المصريين الرابع**
- . Participant in the 5<sup>th</sup> International Conference on Water Resources and Arid Environments (ICWRAE 5), KSU, Riyadh, KSA, 7-9 Jan., 2013.
- . Participation and presenting scientific article "the application of recent technology in storm water management" for the Fifth Annual Workshop of the Egyptian Engineers Association in Riyadh, KSA, 16-17 May, 2013.
- . **Elsebaie, I.H.** "Study of Local Scour around Bridge Piers ", **6th International Conference on Water Resources and Environment Research (ICWRER)**, Koblenz, Germany, June 3–7, 2013.
- . **Elsebaie, I.H.** "Evaporation Reduction Based Design of Water Ponds surface Areas Using Palm Fronds", The 7th International Conference on Environmental Science and Technology 2014, The American Academy of Sciences (AAS), Texas, USA, June 9–13, 2014.
- . Participant in the 6<sup>th</sup> International Conference on Water Resources and Arid Environments (ICWRAE 5), KSU, Riyadh, KSA, 15-17 Dec., 2014.

#### **Practical Training and Courses (Abroad):**

- . One-month Intensive Advanced course on Climate Change Impact assessment and PCR raster technique (GIS), held at Delft-Hydraulics and the Department of Geography, Utrecht University, Netherlands from 13 June 2003 to 13 July 2003.
- . 9 months academic courses within the 15 months M.Sc. program (1997/1998) Ireland, National University of Ireland, Galway, in the field of Engineering Hydrology, Water Resources Engineering and GIS applications in Hydrology
- . 3 months International Advanced course on River flow forecasting held at the Department of Engineering Hydrology, National University of Ireland, Galway, Ireland from 14 th April, 1997 to 23 rd June, 1997.
- . Two weeks (December 1996) in Jordan, course in remote sensing applications & GIS and integrating them for developing the hydrological forecasting models.
- . Training abroad - 3 months (April, 1994 till July, 1994) in USA developing grid-based hydrologic models for the Nile Basin using remote sensing technology and Geographic Information System.
- . 8 months in U.S.A., United States Department of Commerce, University of Maryland, and University of California, Davis held in the period May, 1991 to Feb. 1992 studying courses in the field of Hydro meteorological/ Hydrological forecasting & remote sensing and GIS applications
- . One-month advanced course (3 credit) on "Risk Analysis in Water Resources", Colorado State University, January 1991.