



## **Prof. Dr. AHMED MOHAMED YOUSSEF**

**Geological/Geotechnical Engineering and RS/GIS application**  
Consultant and Professor of Geological hazards and Engineering  
**Ph.D.** Geological Engineering (Uni. of Missouri-Rolla) 2004 USA  
**MS.** Geotechnical Engineering ((University of Missouri-Rolla) 2004, USA  
**MS.** Geology (South Valley University) 1998, Egypt  
**BS.** Geology 1992, Egypt



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## **PROFILE**

Energetic, entrepreneurial, results-oriented professional with extensive experience in academia and consulting, currently employed as a Consultant at Saudi Geological Survey (I am on loan to SGS from Sohag University). Demonstrated excellence in teaching, researching, and management. Good communicator, likes to work with people. Seeking challenging senior level opportunity. Management style – team oriented, believes creating win-win situations, in equal authority and responsibility.

## **PROFESSIONAL CHRONOLOGY**

Dr. Youssef has more than 20 years of teaching and research at Sohag University, 10 years of consultation of geological hazards and geological engineering at Saudi Geological Survey. He is specialized in geological hazards/geological engineering and GIS/Remote sensing application in natural hazard and environmental problems. Dr. Youssef has B.S. and MS. in geology from South Valley University (Sohag Branch), Egypt in 1992 and 1998, respectively. He also got a second MS. in Civil Engineering (Geotechnical Engineering) and a Ph.D. Geological Engineering from University of Missouri-Rolla (Currently Missouri University of Science and Technology), USA, in 2004.

## **RESEARCH INTERESTS**

My research interests focus on two major areas: 1) Geological, environmental, and Geotechnical engineering, 2) Remote sensing and GIS application. As a Geological Engineer, I am interested in all aspects regarding application of engineering theory to solve geological, geotechnical, environmental, and geomorphological problems. As well as, the application of Remote Sensing and GIS in geological and structural mapping; environmental engineering; landslides; rock slope stability; database management systems; sustainable development; geo-environmental hazards, water resources and climate changes.

I enjoy geological and geotechnical engineering because I am curious about geological, environmental, and geotechnical problems and using engineering theories with the help of remote sensing and GIS to solve them. It gives me a good chance to apply new techniques (RS and GIS), using new and up to date data (satellite images) and travel to remote places and examine the Earth. I have extensive experience in the application of remote sensing and GIS in site investigation, geological hazards, environmental problems, water resources and climate changes. I have conducted many projects related to these subjects.

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## EDUCATION

### Ph.D., Geological Engineering, University of Missouri-Rolla, July 2004.

#### **Geological and Mining Engineering Courses (Ph. D. Thesis)**

Engineering Geology and Geotechnics, Geological Engineering Design, Rock Engineering, Fundamental and advanced Geographic Information System, Discontinuous Rock, Well Logging I, Aggregate and Quarries, Advanced GIS (USGS), Fundamental and Advanced Remote Sensing (USGS). Rock Mechanics I, Advanced Rock Mechanics, Rock Slope Stability

### M.S., Civil Engineering, University of Missouri-Rolla, May 2004.

#### **Civil Engineering Courses**

Elementary Soil Mechanics, Elementary Foundation and Pavement Engineering, Intermediate Soil Mechanics, Soil Stabilization, Foundation Engineering II, Geosynthetics Design In Engineering, Geotechnics Earthquake Engineering, Construction Materials, Properties and Testing, Reinforced Concrete Design, Advanced Soil Mechanics, Earth Dams and Related Problems.

### MS., Geology, South Valley University, April 1998.

#### **MS. Course Curriculum: Geology Courses**

Advanced Igneous Petrology, Advanced Metamorphic Petrology, Geochemistry of Hard Rocks, Mineralogy, Structural Geology, Applied Geology, Statistics and Computer

### B.S., Geology, Assiut University, May 1992 (Excellent With Honor).

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## EMPLOYMENT EXPERIENCES

<b>2008-Present:</b>	<b><u>Consultant:</u></b>	Geological Hazards and Geological Engineering at Saudi Geological Survey, Jeddah, Saudi Arabia
<b>September 2016 – Present:</b>	<b><u>Professor:</u></b>	Sohag University, Faculty of Science, Geology Department Egypt
<b>January 2010- September 2016:</b>	<b><u>Associate Professor:</u></b>	Sohag University, Faculty of Science, Geology Department Egypt
<b>2004-2010:</b>	<b><u>Assistant Professor:</u></b>	Sohag University, Faculty of Science, Geology Department, Egypt
<b>2000-2004:</b>	<b><u>Research Assistant:</u></b>	Missouri University of Science and Technology, Geological Engineering, USA
<b>1998-2000:</b>	<b><u>Demonstrator:</u></b>	South Valley University, Geology Department, Sohag, Egypt

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## ACADEMIC EXPERIENCES

### A- Teaching courses

#### ■ Practical Courses

- Applied Geology; Basin Analysis; Geochemistry; Petrology; Mineralogy and Crystallography; Geological Engineering Mapping; Applied Sedimentology;

#### ■ Undergraduate Courses

- Environmental Geology; Engineering Geology; Geology for Engineers; Introduction to GIS; Introduction to Remote sensing; Soil and Rock Mechanics; Applied Geology.

#### ■ Graduate Courses

- Application of GIS and RS in Geological Engineering; Geological Hazards; Slope Stability and Rock Engineering.

#### ■ Short Courses

- Flash Floods Analysis and Mitigation Strategies; Slope Stability Analysis; Karst Detection and their Impacts; Environmental Impact Assessment; Geological Hazards, their Impacts on the Community Centers, and Remediation/Mitigation methodologies; Geological Engineering Field course; Rockfall Hazard Rating Systems Course; Rock Mass Classification Course

### B- Computer Skills

- ArcGIS, ArcView, ArcPad (Mobile GIS), and Global Mapper.
- ENVI and ERDAS (Remote sensing programs).
- AutoCAD software
- WMS software, FlowMaster, and CulvertMaster
- Slope Stability Programs; Phase 2, Slide, RocPlane, Swedge, Dips, RocData, RocFall,.
- Rock Mass Classification, RockFall Analysis (CRSP), and RockSee
- RockWorks,
- MS office, PowerPoint, Corel draws 11.0, and Surfer 8.0.
- Statistical Programs (Statistica, SPSS).

### C- Personal Skills

- Ability to integrate and function productively in a project teams.
- High verbal, reading writing and communication skills.
- Ability to excel under stressful conditions and meet set deadlines.

### D- Supervisor of Graduate Students

- ❖ Ali Mahdi MS. Graduate student, South Valley University: Thesis Title: "Application of remote sensing, geographic information systems, and magnetic techniques at Gebel Al-Hadid area, Central Eastern Desert, Egypt". Awarded 2007.
- ❖ Sherif A. Abu El-Maged MS. Graduate student, Sohag University: Thesis Title: "Evaluation of the aquifer potentiality and land suitability map for development in the desert area surrounding Sohag Governorate, Egypt; using geographic information systems". Awarded 2008.
- ❖ Shaymaa M. Rezk MS. Graduate student, Sohag University: Thesis Title: "Evaluation of water quality in the flood plain area, Sohag Governorate"; Environmental Geochemistry. Awarded 2010.

- ❖ Ahmed M. Masoud MS. Graduate student, Sohag University: Thesis Title: "Assessment of the geo-environmental resources surround the new proposed highway from Sohag to Aswan Governorates, Egypt; Using GIS". Awarded 2010.
- ❖ Bosa A. El-Haddad MS. Graduate student, Sohag University: Thesis Title: "Application of remote sensing and field reconnaissance to help in understanding the history of the Egyptian Nile between Sohag - Qena. Awarded 2014.
- ❖ Marwa M. Abu Omera. Graduate student, Sohag University: Thesis Title: "Assessment of the geo-environmental hazards and their impacts on the development activities on the area west of Sohag, Egypt. Awarded 2015.
- ❖ Bosa A. El-Haddad PhD. Thesis Title: "Application of remote sensing and GIS in assessment of the geological hazards on the area between Sohag governorate and Red Sea coast, Graduate student, Sohag University: Under Preparation.

## **E- Conferences, Scholarship, Training activities and Workshops Attended**

- ❖ Ninth international conference on the geology of Africa, November 2017, Assiut, Egypt.
- ❖ Workshop in karst sinkhole investigation and mitigation, July 21 – 30, 2017, Zaragoza, Spain.
- ❖ GeoMEast conference "sustainable civil infrastructures: Innovative infrastructure geotechnology", July 15-19, 2017, Sharm El- Sheikh, Egypt.
- ❖ Fourth landslide forum field trip to investigate different types of mass movement problems, June 3-5, 2017, Slovenia-Italy-Austria.
- ❖ Fourth world landslide forum (WLF4), May 29 -June 2, 2017, Ljubljana, Slovenia.
- ❖ The soil and water assessment tool (SWAT) training course 27- Oct. 2013 to 8-Nov. 2013, WMU, Kalamazoo, USA.
- ❖ Workshop in Jeddah storm water drainage program, interface workshop, A stakeholder engagement event hosted by JSDP and AECOM, NO. 7, Jeddah, 30 Sept. - 2 October. 2012.
- ❖ 46th US rock mechanics / geomechanics symposium 24-27 June 2012, Chicago, USA.
- ❖ Visitor scholar at Missouri University of Science and Technology, Geological engineering program, June 2012– July 2012.
- ❖ Workshop in Jeddah storm water drainage program, global interface workshop, A stakeholder engagement event hosted by JSDP and AECOM, NO. 2, Jeddah, 25-27 July, 2011.
- ❖ Flood hazards workshop 5-April/ 2010, King Saud University, THE SGS RC on Natural Hazards.
- ❖ Lieca geosystems HDS (LIDAR) training course 24-27 July 2010, Saudi Geological Survey, Jeddah, KSA.
- ❖ Scientific forum "modern systems for flood water drainage" under the auspices of the Saudi Council of Engineers, the hall of Islamic economics at King Abdulaziz university in Jeddah, 27-28 of March, 2010.
- ❖ Panel discussion: Overview of the drainage and flood protection from dangers, (Municipalities of the Kingdom of Saudi Arabia, forum successful experiences – Holy city of Makkah) February 24, 2010 Hotel of the martyrs – Makkah city.

- ❖ Workshop on geological hazards in Jeddah and the preparation of a comprehensive master plan for the region east of the Haramine highway, February 3-6, 2010 Hilton Hotel Jeddah
- ❖ Field trip in southern Spain (Andalosiya region) to investigate different geological and environmental phenomena. With Granada university (Geography, Geodynamic, and Hydrogeology departments), Granada, Spain, January 20/2008 to February 1/2008.
- ❖ First international conference on environmental studies & research, 7 – 9, April, 2008, Minufiya university, EGYPT.
- ❖ 9th international conference on the geology of the Arab World "GAW9", 24 – 27., March, 2008, Cairo, EGYPT.
- ❖ The third international conference on the geology of the Tethys, 8 – 11 January, 2008, Aswan, EGYPT
- ❖ Staff training course in different topics of environmental impact assessment at Department of Hydrogeology and Environmental Geology, Institute of Geo-Sciences, Martin Luther University, Halle-Wittenberg, Germany August 1-31, 2007.
- ❖ Visiting scholar “developing a geo-environmental information system for the geo-environmental hazard, Egypt, using remote sensing and GIS” University of Missouri Rolla, USA, Geological Science and Engineering April 2007– June 2007.
- ❖ Fifth international conference on the geology of Africa, Oct. 2007, Assiut, Egypt.
- ❖ The second international conference on the geology of the Tethys, 19 – 23 March, 2007, Cairo, Egypt.
- ❖ The 10th international mining, petroleum, and metallurgical engineering conference, March 6 – 8, 2007, Assiut, Egypt.
- ❖ Remote sensing and GIS and their applications in environmental, land, and water resources at Department of Hydrology and Hydraulic Engineering, Vrije University Brussels, Belgium, August 1-31, 2006.
- ❖ The international conference of development and urbanization, 20–21 December, 2006, Alexandria, Egypt.
- ❖ The sixth international conference on earth observation and geoinformation sciences in support of Africa’s development, 30 October – 2 November, 2006, Cairo, Egypt..
- ❖ The third international conference of environment and development in the Arab World 2006, Assiut, Egypt.
- ❖ 6th International conference on the geology of the Middle East, March 20-23, 2006, Al AIN University, United Arab Emirates.
- ❖ The fourth international conference on the geology of Africa, NOV. 2005, Assiut, Egypt.
- ❖ Symposium on development and environment in the Egyptian deserts, April 5, 2005, Cairo, Egypt.
- ❖ 16th Symposium on Quaternary geology and development in Egypt, April 2nd, 2005, Mansoura, Egypt.
- ❖ AEG 47th annual meeting, Sept. 26-Oct. 2, 2004, Dearborn, Michigan, USA.
- ❖ 55th Highway geology symposium, Sep. 7-10, 2004, Kansas City, Missouri, USA.

- ❖ Transportation engineers association of Missouri 94th annual conference, April 1st, 2004, Branson, Missouri, USA.
- ❖ Advanced GIS, fundamental and advanced remote sensing, United State Geological Survey (USGS) from March 2003 to March 2004.
- ❖ 54th Highway geology symposium, Sep. 24-26, 2003, Burlington, Vermont, USA.
- ❖ AEG 46th annual meeting, Sept. 15-21, 2003, Vail, Colorado, USA.
- ❖ Transportation research board, 82nd annual meeting, Jan. 12-16, 2003, Washington, D.C., USA.
- ❖ AEG field trip September 2003 (geological engineering problems in Colorado State, USA).
- ❖ Short course in geotechnical modeling using FLAC program (Civil Engineering, University of Missouri-Rolla, 2003).
- ❖ Rock slope stability course, Mining Engineering, University of Missouri-Rolla 2003 with Dr. Priest (Dr. Priest is a well known faculty in slope stability and rock mechanics field; he has many published books as well as papers. UMR invited him for one semester to teach this course).
- ❖ AEG 45th annual meeting, Sept. 23-29, 2002, Reno, Nevada, USA.
- ❖ Research assistant at University of Missouri Rolla Dec. 2002 – August 2004.
- ❖ World laboratory scholarship (Switzerland) One-year Jan. 2001- Dec. 2002.
- ❖ Egyptian government scholarship, August 2000 – August 2004 (Ph. D. USA).

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## PROJECTS

In this section I put different projects that I work in some of them are private projects (external) and others are governmental projects (internal). Some external projects I was the Principal Investigator (PI), others I was one of the team, where as in the internal projects I lead the work as a consultant.

### A- Slope Stability Projects

- 1- Mobile vision system for highway rock cut stability, UM Research Board, (Aug. 2001-July 2002).  
**(External project as a Ph. D. student.)**
- 2- Development of a highway rock cut rating system for Missouri highways, Missouri Department of Transportation (Aug.2002 - July 2003). **(External project as a Ph. D. student.)**
- 3- Rock slope instability analysis along Jabal Fayfa main roads, Jazan region, KSA, (SGS-TR-2009-1).  
**(Internal project)**
- 4- Stability of rock slopes along the Samma escarpment road, Asir region, KSA, (SGS-TR-2009-3). **(Internal project)**

- 5- Stability of rock slopes along the Raidah escarpment road, Asir region, KSA (SGS-TR-2009-8). **(Internal project)**
- 6- Investigation and evaluation of the rock cuts along the El-Hada – Kra road (between station 3+620 and 4+000), Department of Transportation and Bin-Laden Company, Makkah region, KSA (April 2009 – July 2009). **(External project (PI))**
- 7- Detailed study of landslides and rockfalls in Jazan Region, (Phase I: Fayfa Mountain), Jazan region, KSA (2011-2012). **(External project (PI))**
- 8- Detailed study of landslides and rockfalls in Jazan Region, (Phase II: Edabi road and Dair governorate), Jazan region, KSA (2013). **(External project (PI))**
- 9- Investigate and evaluate of rockfalls hazard affected Al-Tahlawi area Taif, Makkah region, KSA (2013). **(External project (PI))**
- 10- Detailed study of landslides and rockfalls in Jazan Region, (Phase III: Ardah and Raith governorates), Jazan region, KSA (2014). **(External project (PI))**
- 11- Investigation and evaluation of the rock hazard and landslide susceptibility mapping for the Shear escarpment road and wadi Tayyah, Asir region, KSA (SGS-TR-2015-5). **(Internal project)**
- 12- Investigation and evaluation of the rock hazard and landslide susceptibility mapping for the Delaa escarpment road and wadi Etweid, Asir region, KSA (2015). **(Internal project)**
- 13- Investigation and evaluation of the rock hazard for the Al Khyreta escarpment road, Tabuk region, KSA (2016). **(Internal project)**
- 14- Investigation and evaluation of the rock hazard for the Al Ola area, Al Madinah region, KSA (2016). **(Internal project)**

## **B- Geotechnical and Geophysical Investigation Projects**

- 15- Mechanical and physical properties of rocks – project with Mining Department, (UMR), USA (2003). **(External project)**
- 16- Geotechnical and geological hazards in the new location of Sohag University, Egypt (2006 – 2008). **(Internal project)**
- 17- Evaluation of the engineering properties of unstable soil in Moderag and Botein, Qasim region, KSA (SGS-TR-2009-4). **(Internal project)**
- 18- Geotechnical report to investigate soil and rock at Darb Al Hegra, Makkah city, KSA (2009). **(External project (PI))**
- 19- Studying the urgent solutions to mitigate the flood risk at wadi Qus (geological, geotechnical and dam design) Jeddah, KSA (2010). **(External project (PI))**
- 20- Studying the urgent solutions to mitigate the flood risk at wadi Methweib and wadi Gholil (geological, geotechnical and dam design) Jeddah, KSA (2010). **(External project (PI))**
- 21- The Jadmah Gold Project, Kingdom of Saudi Arabia: Geotechnical Evaluation for Open Pit Mining Upgrading Purposes, Ma'aden Gold & Base Metals Co. Asir region, KSA (Jan. 2010 – June 2010). **(External project (PI))**
- 22- Geotechnical, surveying and geophysical studies of new Jeddah Dams, KSA (Ecom Company) (phase I & II- January – June 2012). **(External project)**

23- Geotechnical investigations for Al Asla project, Jeddah, Makkah region, KSA (SGS-CR-2016). **(External project)**

## **C- Flash Flood Projects**

24- Flood Potential Affecting the Umm Al Qurra University, Makkah city, KSA (April 2010 – October 2010). **(External project)**

25- Qualitative and quantitative study of the hydraulic response and flood probability of wadis El-Shaqa El-Yamaniyah and El-Shamiyah, KSA, (SGS-TR-2010-1). **(Internal project)**

26- Studying the urgent solutions to mitigate the flood risk at wadi Qus (Hydrological study), Jeddah, KSA (2010). **(External project (PI))**

27- Studying the urgent solutions to mitigate the flood risk at wadi Methweib and wadi Gholil, (Hydrological study) Jeddah, KSA (2010). **(External project (PI))**

28- Hydrological study for Al Mamlaka project, north Ubhor bay- Jeddah- Makkah province, KSA (SGS-DF-2010-12). **(External project (PI))**

29- Hydrological study and engineering solution for flood problems at Taief University Branch in Al Khormah city, Taif, KSA, (SGS-CR-2011-2). **(External project (PI))**

30- Qualitative and quantitative study of the hydraulic response and flood probability of wadi Khulyas, KSA, (SGS-TR-2012-8). **(Internal project)**

31- Qualitative and quantitative study of the hydraulic response and flood probability of wadi Rabigh, KSA, (SGS-TR-2012-9). **(Internal project)**

32- Hydrological efficiency of Wadi Lekeita new and old dams, Makkah region, KSA (2013). **(External project (PI))**

33- Hydrological study for the Al Madinah Region, KSA (SGS-TR-2013-9). **(Internal project)**

34- Hydrological study for the Makkah Gate Project, Makkah City, KSA (SGS-TR-2013-10). **(External project (PI))**

35- Hydrological study for the Al Baydah area, Makkah region, KSA (SGS-TR-2013-12). **(Internal project)**

36- Hydrological study for the Al Mamlaka project, north Ubhor bay- Jeddah- Makkah region, KSA (2014). **(External project (PI))**

37- Hydrological studies for the Sabar and Kolaia area. Makkah region, KSA (SGS-CR-2014-4). **(Internal project)**

38- Hydrological report of Channel 6 of wadi Gholil. Makkah region, KSA (SGS-CR-2015). **(External project (PI))**

39- Report of the rainfall precipitation on Jeddah governorate on Tuesday 5/2/1437H and evaluate the efficiency of the dams and channels of wadis Qus and Methweib that suggested by the Saudi Geological Survey. Jeddah, Makkah region, KSA (SGS-DR-2015-3). **(Internal project)**

40- Hydrological study for the Ain Shams area, KSA (SGS-CR-2015-5). **(Internal project)**

41- Hydrological investigation of the Haras El-Watani area, Jeddah, Makkah Region, KSA (SGS-CR-2015-6). **(External project (PI))**

42- Hydrological study for the Jazan Region, KSA (SGS-TR-2015-14). **(Internal project)**



- 43- Determine the outlines and directions of the wadis and their buffer zones and the flood susceptible areas for the KSA (2015 – 2018). **(External project)**
- 44- Hydrological study of the Abwa and Mastora centers, Makkah region, KSA (SGS-TR-2016-1). **(Internal project)**
- 45- Hydrological studies for the Al Iskan projects, KSA (2016). **(External project (PI))**
- 46- Investigation and evaluation of the dams spillways of wadi Qus and wadi Methweib, Jeddah, KSA (2016). **(External project (PI))**
- 47- Hydrological report of the Morowj Jeddah project, Wadi Al Asla, Jeddah, Makkah region. KSA. (2017). **(External project (PI))**
- 48- Hydrological study for workshops and light industry project, Jeddah, Makkah region, KSA (SGS-TR-2017-7). **(External project (PI))**

#### **D- Earth Fissures, Subsidence, Karst, and Sinkholes Projects**

- 49- Studying and surveying to determine the causes of karstification in El-Eziziyah area, Riyadh city. Riyadh Municipality, KSA (SGS-CR-2009-3). **(External project)**
- 50- Earthquake activities at the Harret El Shaqa area (Lownieer), KSA, (SGS-CR-2009-4). **(Internal project)**
- 51- Karst investigation and analysis in the An Nu'ayriyah area, KSA (SGS-TR-2009-6). **(Internal project)**
- 52- Analysis and evaluation of earth fissures in Wadi Najran, Najran region, KSA, (SGS-TR-2009-12). **(Internal project)**
- 53- Investigation and evaluation of the karst problems along the Al Atailiyah road, Riyadh region, KSA, (SGS-TR-2011-1). **(External project (PI))**
- 54- Analysis and evaluation of earth fissures in Wadi Al-Dawasser, KSA, (SGS-TR-2012-12). **(Internal project)**
- 55- Investigate and evaluate of the karst problems at the Essawiyah area, Al-Jouf region, KSA (SGS-TR-2015-11). **(Internal project)**
- 56- Studying and evaluation of earth fissures in the Hail, Qasim, and Al-Jouf Regions, KSA (Second phase, Al Jouf Region), (SGS-TR-2016-2). **(External project (PI))**
- 57- Studying and evaluation of earth fissures in the Hail, Qasim, and Al-Jouf Regions, KSA (First phase, Hail Region), (SGS-TR-2016-3). **(External project (PI))**
- 58- Studying and evaluation of earth fissures in the Hail, Qasim, and Al-Jouf Regions, KSA (Third phase, Qasim region), (SGS-TR-2016-4). **(External project (PI))**

#### **E- Geological Engineering Maps and Site Investigation Projects**

- 59- Groundwater exploration and well design in the Upper Egypt and Red Sea areas, Egypt (2004-2007). **(External project)**
- 60- Site investigation, characterization, and assessment for selection of a suitable area for cement factory, Sohag Governorate, Egypt (2006). **(External project)**
- 61- Site investigation for selection a suitable landfill sites for the Qena Governorate, Egypt (2006). **(External project)**

- 62- Environmental impact assessment for the new tourism area surrounding Nasser Lake, Egypt (2007). **(External project)**
- 63- Reconstructing the geological history of the Egyptian Nile, NSF Project, (June 2009 - December 2011). **(External project)**
- 64- Engineering geological map of Jazan City, Jazan region, KSA (SGS-TR-2011-2). **(Internal project)**
- 65- Site investigation of the Younba Industrial Zone, Al Madinah region, KSA (Jan. 2011 – Dec. 2012). **(Internal project)**
- 66- Evaluation of engineering properties and geological hazards in the Hail Economic City area, Hail region, KSA (SGS-TR-2012-11). **(Internal project)**
- 67- Efficiency of the Batehan divergence dam and the divergence channel, Al Madinah region, KSA (SGS-CR-2015-1). **(External project)**
- 68- Initiative project of preparing geological hazard maps for Makkah region, KSA (2017 – 2020). **(External project (PI))**

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## PUBLICATIONS – REFEREED JOURNALS

- 1- [Youssef, A. M.,](#) El-Shater, A., El-Khashab, M. H., El-Haddad\*, B. A., (2017): Coupling of field investigations and remote sensing data for karst hazards in Egypt: Case study around the Sohag city. Arab J Geosci.10 (11): 235. [Doi:10.1007/s12517-017-3029-6.](#)
- 2- Bathrellos, G. D., Skilodimou, H. D., Chousianitis, K., [Youssef, A. M.,](#) Pradhan, B., (2017): Suitability estimation for urban development using multi-hazard assessment map. Science of The Total Environment (575):119–134. [Doi:10.1016/j.scitotenv.2016.10.025.](#)
- 3- Hong, H., Chen, W., Xu, C., [Youssef, A. M.,](#) Pradhan, B., Bui D. T., (2017): Rainfall-induced landslide susceptibility assessment at the Chongren area (China) using frequency ratio, certainty factor, and index of entropy. Geocarto International 32(2):139-154. [Doi:10.1080/10106049.2015.1130086.](#)
- 4- Hong, H., Chen, W., Xu, C., [Youssef, AM.,](#) Pradhan, B., Tien Bui, D., (2016): Comparison of Four Kernel Functions Used in Support Vector Machines for Landslide Susceptibility Mapping: A Case Study at Suichuan area (China). Geomatics, Natural Hazards and Risk, 8(2):544-569. [Doi:10.1080/19475705.2016.1250112.](#)
- 5- [Youssef, A. M.,](#) Pradhan, B., Sefry, S. A., (2016): Flash flood Susceptibility mapping in Jeddah city (Kingdom of Saudi Arabia) using bivariate and multivariate statistical models. Environ Earth Sci, 75(12). [Doi:10.1007/s12665-015-4830-8.](#)
- 6- [Youssef, A. M.,](#) El-Haddad, B. A\*., Pourghasemi, H. R., Dhahry, B. K., (2016): Landslide susceptibility maps using different probabilistic and bivariate statistical models and comparison of their performance at Wadi Itwad Basin, Asir region, Saudi Arabia. Bull Eng Geol Environ. 75(1): 63-87. [Doi:10.1007/s10064-015-0734-9.](#)
- 7- [Youssef, A. M.,](#) Al-Harbi, H. M., Gutiérrez, F., Zabramwi, Y. A., Bulkhi, A. B., Zahrani, S. A., Bahamil, A. M., Zahrani, A. J., Otaibi, Z. A., El-Haddad, B. A\*., (2016): Natural and human-induced sinkhole hazards in Saudi Arabia: distribution, investigation, causes and impacts. Hydrogeology Journal 24(3):625–644. [Doi: 11/2015; Doi:10.1007/s10040-015-1336-0.](#)

- 8- [Youssef, A. M.](#), Pourghasemi, H. R., Pourtaghi, Z. S., Al-Katheeri, M. M., (2016): Landslide susceptibility mapping using random forest, boosted regression tree, classification and regression tree and general linear models and comparison of their performance at Wadi Tayyah Basin, Asir Region, Saudi Arabia. *Landslides* 13(5): 839-856. [Doi:10.1007/s10346-015-0614-1.](#)
- 9- [Youssef, A. M.](#), Sefry, S. A., Pradhan, B., Abu Al Fadail, E., (2016): Analysis on causes of flash flood in Jeddah city (Kingdom of Saudi Arabia) of 2009 and 2011 using multi-sensor remote sensing data and GIS. *Geomatics, Natural Hazards and Risk* 7(3):1018-1042. [Doi:10.1080/19475705.2015.1012750.](#)
- 10- [Youssef, A. M.](#), Al-Kathery, M. M., Pradhan, B., El-Sahly, T., (2016): Debris flow impact assessment along the Al-Raith Road, Kingdom of Saudi Arabia, using remote sensing data and field investigations. *Geomatics, Natural Hazards and Risk* 7(2):620-638. [Doi: 10.1080/19475705.2014.933130.](#)
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