# ABDELRAHMAN MOHAMED ABDELGAWAD

abdelgawad@aun.edu.eg, abdo\_gawad2003@yahoo.com, +20 10 2066 9997

AREA OF SPECIALISATION	Water and Wastewater Networks, Water and Wastewater Treatment, Solid Waste Management, and Groundwater Contamination.			
Current Appointment	Assistant Professor, Environmental and Sanitary Engineering, Civil Engineering Department, Faculty of Engineering, Assiut University.			
EDUCATION	<ul> <li>Ph.D. in Environmental Engineering, Saitama University, Japan, 2009.</li> <li>M.Sc. in Environmental and Sanitary Engineering, Assiut University, Egypt, 2005.</li> <li>B.Sc. in Civil Engineering, (Undergraduate Project, Water supply and Wastewater Management),2002.</li> </ul>			
KEY QUALIFICATIONS	<ul> <li>14 years' experience in teaching, research, management, design in the field of Environmental and Water Engineering.</li> <li>Teaching courses to undergraduate students and development of academic programmes and curriculum.</li> <li>Transferable skills: dissemination skills (presentation and writing skills), supervision and mentoring of the undergraduate and postgraduate students, and training skills.</li> <li>Excellent research skills: collection and analysis of qualitative data, detecting complex information, results dissemination, writing research project grant, and leading research team.</li> <li>Delivering training courses to engineers and technicians to design, supervision, and operation of water and wastewater works.</li> <li>Preparation of tender documents including design drawings, technical specifications, bills of quantities, technical reports, Environmental Impact Assessment, and feasibility studies for water and wastewater projects.</li> <li>Design water and wastewater networks, water and wastewater treatment plants, Pumping stations, Irrigation networks, municipal solid waste collection system.</li> <li>Application of WaterGEMS, SewerGEMS, and Autodesk Civil 3D and other related software for water and wastewater networks analysis and design.</li> <li>Preparing analytical laboratory reports: sampling, chemical analysis and mineralogical analysis for water and soil samples.</li> <li>Member of several professional societies in Egypt, KSA, and Europe.</li> </ul>			

- Author of several publications in high impact International Journals on Environmental Engineering, solid waste management, and water supply.
- Attending and organising several international conferences around the world.

EMPLOYMENTAssistant Professor, Environmental Engineering, Faculty of<br/>Engineering, Assiut University, Egypt, 2011– current.<br/>Post-doctoral Researcher, Saitama University, Japan, 2009 – 2011.<br/>Design Engineer, Consultant Office Group, Assiut, Egypt, 2003-2005.<br/>Site Civil Engineer, Galal Construction Co. ltd. Assiut, Egypt, 2002-<br/>2003.<br/>CAD Designer, IbnSina Center for computer service, Assiut, Egypt,<br/>2002-2003.

### **RESEARCH & ACADEMICS**

Interests	Networks: Water, Sewage and storm water. Treatment: Water, wastewater and sludge. Groundwater: hydrology, contamination and risk assessment. Modeling: Finite Element, Genetic Algorithms and Fuzzy Logic.
Research Projects	Environmental Impact Assessment of human activity on El Ibrahimia Canal, upper Egypt,2014. Evaluation of Municipal solid waste practices at Assiut city, Egypt, 2013.
Achievements	<ul> <li>Ph.D., thesis title: A Synthesis of hydrogeochemical studies on the fluoride-rich groundwater in Mizunami area, Japan.</li> <li>Master, thesis title: Experimental investigations of some factors affecting the direct upflow filtration for potable water</li> <li>Published 7 International papers with high Impact Factors.</li> <li>Participated in 8 International conferences with oral presentations.</li> <li>Supervising five master theses.</li> <li>Organised and leaded several seminars and workshops in Environmental Engineering at Assiut University.</li> </ul>
Courses	Sewerage and Water Distribution system. Water and waste water treatment. Water Resources and Groundwater Hydrology. Plumbing Engineering (plumbing fixtures and

	piping design system.			
	Environmental Engineering.			
	Numerical analysis and computer applications on water.			
	Advanced studies in sludge treatment.			
	Supervisory undergraduate dissertation projects:			
	• Water Distribution system and water treatment plant.			
	• Sewerage and Sewage treatment			
	Surveying Fundamentals, Maps and Topographic Drawings			
<b>Major Collaborations</b>	Japan Atomic Energy Agency in collaboration with, Geosphere			
	Research Institute, Saitama University, Japan. 2005-2011			
Commissions of trust	Reviewer, Engineering Geology, Elsevier, 2009 – current.			
	Reviewer, Environmental Earth Science. Springer, 2009 – current.			
ROFESSIONAL	Current Project: Rehabilitation and Renovation water and wastewater			
<b>XPERIENCE</b>	networks of handicrafts area of New Taiba City, Luxor, Egypt.			
2015-current	rrent Trainer at capital experts, Sultante of Oman, Muscat			
2012-current	Engineering Consultant Center of Assiut University:			
	• Rehabilitation and Renovation water and wastewater networks of			
	handicrafts area of New Taiba City, Luxor, Egypt: tender			
	documents, technical specifications, bill of quantities and project			
	supervising.			
	• Fath water treatment plant: Chemical analysis for the water treatment plant effluent, Asyut prefecture.			
	• Ramad Hospital, Assiut: Plumbing system renovation.			
2012-2013	Consultant Environmental Committee, Asyut Governorate:			
	• Asyut governorate five years plan for Water Supply and Sanitary			
	Systems: Evaluation, follow up and developing.			
	• Badary Oxidation Ponds for sewage treatment: Operational check.			
	• Asyut City Rapid Planning project: Sustainable infrastructure,			
	environmental and resource management for high dynamic			
	metropolises.			
	• Ghanayem Sewage lifting / pumping station: Operational check.			
	• Evaluation of Municipal solid waste practices at Asyut city, Egypt			

2003-2005	<ul> <li>Junior Design Engineer, Consultant Office Group (COG) Design, cad drawing and preparation bill of quantities:</li> <li>Khargah sewer system, New Valley.</li> <li>Assalam Oxidation Ponds treatment plant, Sohag.</li> <li>Arabs villages' sewer system, Sohag.</li> </ul> Site Civil Engineer, Galal Construction Co. Itd.: Southern Egyptian Military Region: Maintenance and renovation infrastructure system of the region (water supply, sewer system and road pavements).			
2002-2003.				
LICENSES AND CERTIFICATIONS	<ul> <li>Strategic Planning Course, Faculty and leadership Development Center, Assiut University, Egypt, 2014.</li> <li>Effective Leadership course, Qudratt for Human Development, KSA, 2010.</li> <li>TOEIC (Test of English for International Communication), Saitama University, Japan, 2008.</li> <li>Project Management Course, 30 hours, CEMEX (building materials Industry) Assiut, Egypt, 2004.</li> <li>ICDL, Sohag University, Egypt, 2004.</li> <li>SAP 2000, Cairo University, Egypt, 2001.</li> <li>AutoCAD, IbnSina Center for computer service, Egypt, 2001.</li> </ul>			
COMPUTER SKILLS	<ul> <li>Bently: WaterCAD, SewerCAD and StormCAD. WaterGEMS, SewerGEMS</li> <li>Autodesk: Civil 3D 2013 AutoCAD 2013.</li> <li>Microsoft Office 2013: Word, Excel, Power point, Access, One note and outlook.</li> <li>Project Management: Primavera and MS project.</li> <li>MODFLOW, ARCGIS, Surfer and Canvas</li> <li>Latex and EndNote</li> </ul>			

## FELLOWSHIPS AND AWARDS

10/2008 - 03/2009	Research Assistance, Geosphere Research Institute, Saitama University, Japan.
10/2005 - 09/2008	Japanese Government (Monbukagakusho: MEXT) scholarship / Ministry of Education, Culture, Sports, Science & Technology, Japan.
09/1997 - 07/2002	Ranked second in B.Sc./ Civil Engineering Department "270 student", Faculty of Engineering, Assiut University.
09/1998 - 07/1999	The First Exemplary Student prize, Faculty of Engineering, Assiut University.
09/1997 - 07/2002	Merit Scholarship in every academic year while studying B.Sc. /Civil Engineering, Assiut University.

# ORGANISATION OF SCIENTIFIC MEETINGS

April, 2013	Secretary general, Workshop on solid waste management at Assiut
September, 2009	Program Committee member, International Symposium on Environmental Issues of Bangladesh & Japan, Japan.
June8-10, 2008	Steering committee member, The 1st Egypt Japan International Symposium of Science and Technology, Waseda University, Tokyo, Japan.
October 10, 2008	Secretary general, the 1st International Seminar on Muslim Culture and World Peace, Tokyo, Japan.

#### INSTITUTIONAL RESPONSIBILITIES

01/2012 - 06/2013		Member of the Assiut Univers	0	ality assurance, Faculty of
09/2013 - 01/2014	Research an Assiut Unive		fairs Committe	ee, Faculty of Engineering,
01/2012 - Current	Engineering Assiut Unive		enter Member	, Faculty of Engineering,
09/2012 - 01/2013	Election com University, E		n Students, Fac	culty of Engineering, Assiut
LANGUAGE		Speak	Read	Write
ABILITY	Arabic	Excellent	Excellent	Excellent
	English	Excellent	Excellent	Excellent

Very good

Good

Japanese

Fair

#### MEMBERSHIP

International Water Association. Membership No.01066153 Japan Society of Civil Engineering. Saudi Council of Engineers. Egyptian Engineering Syndication. Membership No.02775/25 Eastern Nile community of Modelers.

#### PERSONAL

Date of birth	12 December 1980
Nationality	Egyptian
Address	701 Al-Ansar tower, Gomhorya st., Assiut, Egypt, Postal code: 71511
URL	www.aun.edu.eg/membercv.php?M_ID=4806
Google Scholar	Citations: 31, h-index: 2, i10-index: 1
ORCID	Research ID: J-4048-2014
Research Gate	https://www.researchgate.net/profile/Abdelrahman_Abdelgawad2

I, the undersigned, certify that, to the best of my knowledge and belief, these data correctly described my qualification, my experience and me.

Signature: Abde

#### PUBLICATIONS

- **REFEREED JOURNAL PAPERS** Total IF: 4.02 Total citation: 31
  - 1. Abdelgawad, A. M., Watanabe, K., Mizuno, Mineralogical and Morphological features of fractured granitic rock tested under water-rock interaction, *International Water Technology Journal*,2015. **IF: 0.5** (Accepted)
  - 2. Abdelgawad, A. M., Watanabe, K., Mebruk. M. N., and Takeuchi, S., Estimating groundwater residence time using Multiple Regression Model based on fluoride leaching test:- an exploration of possibilities, *Environmental Earth Science*, Vol. 60, No 3, pp. 449-462, 2010.**IF:1.77**, **Cited: 3**
  - 3. Abdelgawad, A. M., Watanabe, K., Takeuchi, S., and Mizuno, T., The origin of fluoride-rich groundwater in Mizunami area, Japan mineralogy and geochemistry implications. *Engineering Geology*, Vol. 108, No. 1-2, pp. 76-85, 2009. **IF:1.76**, **Cited: 23**
  - Abdelgawad, A. M., Watanabe, K., Takeuchi, S., Water-rock interaction study on the occurrence of fluoride-rich groundwater at Mizunami area, Japan, *EnvironmentAsia*, Vol. 2, No. 2, pp. 20-29, 2009. Cited: 4
  - Abdelgawad, A. M., Watanabe, K., and Takeuchi, S., Laboratory tests on the occurrence of fluoride rich groundwater of Tono area, Japan, *Annual Journal of Hydraulic Engineering*, Vol. 52, pp. 25-30, 2008. Cited: 2

#### • INTERNATIONAL CONFERENCES

- 1. Abdelgawad, A. M. Assessment of municipal solid waste system in Asyut governorate, Egypt, 15th International Waste Management and Landfill Symposium- Sardinia15, Italy, October 2015.
- 2. Abdelgawad, A. M., Watanabe, K., Mizuno, Mineralogical and Morphological features of fractured granitic rock tested under water-rock interaction, 18th International Water Technology Conference, Sharm El Sheikh– Egypt, March 2015.
- 3. Abdelgawad, Municipal solid waste Management at Assiut, Egypt: public vs. private collection, The 23rd International Conference on (Environmental Protection is A Must), Alexandria, Egypt, May 2013.
- 4. Abdelgawad, A. M., Chinone, T., Mebruk M. N., and Watanabe, K. Analytical Study on the Origin of High Fluoride Concentration in Groundwater in the Mizunami Area, Japan. International Symposium on Environmental Management, Thailand, September, 2009.
- 5. Abdelgawad, A. M., and Watanabe, K. Laboratory tests on the occurrence of fluoride rich groundwater of Mizunami area, Japan. The First Egypt-Japan. International Symposium on Science and Technology, Tokyo, Japan, June, 2008.
- 6. Abdelgawad, A. M., Watanabe, K., Takeuchi, S, and Mizuno, T. Geochemical studies on the occurrence of the fluoride-rich groundwater in Mizunami area, Japan. The 8th International Conference on Hydro-Science and Engineering, Nagoya, Japan, ICHE September, 2008.
- 7. Abdelgawad, A. M., Watanabe, K., and Takeuchi, S. (2008) Laboratory tests on the occurrence of fluoride rich groundwater of Tono area. 52nd Conference on Hydraulic Engineering, Hiroshima, Japan, March, 2008.
- 8. Abdelgawad, A. M., Watanabe, K., and Takeuchi, S. Experimental investigation of fluoride leaching by water from granite rock of Tono area, Japan. The Ninth International summer symposium, Conference proceeding Yokohama, Japan, JSCE, September, 2007.

#### • OTHER PAPERS

- 1. Abdelgawad, A. M., Watanabe, K., Takeuchi, S and Mizuno, T., Geochemical studies on the occurrence of the fluoride-rich groundwater in Mizunami area, Japan. Proceedings of the International Conference on Hydro-Science and Engineering, ICHE08, 2008.
- 2. Abdelgawad, A. M., Watanabe, K. and Takeuchi, S., Experimental investigation of fluoride leaching by

water from granite rock of Tono area, Japan. Proceeding of the 9th International summer symposium, JSCE, pp. 99-102, 2007.

3. Ali, A. N., Eldardir, M. S. and Abdelgawad, A. M., Experimental investigations of some factors affecting the direct upflow filtration for potable water. Journal of Engineering Sciences, Vol. 33, No. 5, pp.1769-1784, 2005.