Curriculum Vitae

PERSONAL DATA

Name: Fikry Halim Ghobrial Farag

Date and Place of Birth: October 26th, 1945, Cairo, Egypt

Citizenship: Egyptian

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Nozha, Heliopolis, Cairo, Egypt

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fghobrial@hotmail.com

Candidate degree in Environmental Engineering, Hungarian

EDUCATION

1978

1070	Academy of Science, Budapest, Hungary.
1978	Doctorate degree in Environmental Engineering Technical University, Budapest, Hungary.
1971	M. Sc. degree in sanitary engineering, Ain Shams University, Cairo, Egypt.
1967	B. Sc. degree in Civil Engineering,

LANGUAGES

1968

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Arabic	Mothor	language
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English Speaking, reading, and writing (fluent)

German Speaking and reading (fluent); writing (good) Hungarian Speaking and reading (very good); writing (fair)

Ain Shams University, Cairo, Egypt.

French Speaking, reading, and writing (fair)

FORMAL TRAINING

- CMS-IBM "Conventional Monitoring System"
- Project Management
- Management by Objectives
- Marketing Contract Research
- Program of Managerial Effectiveness

EMPLOYMENT RECORD

Year		Position	Employer
From	То		
March, 2013	July, 2016	Chairman, Promotion Committee of Staff Members, Public Works Sector.	Universities Supreme Council, Ministry of High Education, Egypt
July, 2006	Now	Professor Emeritus of Sanitary Engineering	Faculty of Engineering, Ain Shams University, Cairo.
Dec. 1991	July, 2006	Professor of Sanitary Engineering.	Faculty of Engineering, Ain Shams University, Cairo.
Sept. 1994	June, 1999	Environmental consultant	Schueffl & Forsthuber Consulting, Austria.
April., 1993	April, 1995	Guest professor	Technical University, Vienna, Austria.
Nov., 1987	Dec., 1991	Associate Professor of Sanitary Engineering.	Faculty of Engineering, Ain Shams University, Cairo.
July, 1982	Nov., 1987	Leader of the Environmental Control Engineering Group	Kuwait Institute for Scientific Research, Kuwait.
Oct., 1967	July, 1982	Demonstrator and then Assistant Professor in 1978.	Faculty of Engineering, Ain Shams University, Cairo, Egypt.

Honors, Awards, Grants, and Membership

- Member of the Austrian Society of Environmental Technology (ÖGUT).
- Member of the Fulbright Alumni in Egypt
- Executive member for Northern Africa and Middle East for the International Environmental Negotiation Network (IENN).

- Registered consulting engineer in Egypt.
- Member of the Egyptian Society of Engineers and the Engineering Syndicate in Egypt.
- Member of the Environmental Protection Society in Kuwait.
- Consultant to the General Organization for Urban Planning in Egypt.
- First prize for "best selected publication in 1978" by the Hungarian Academy of Science, shared with Farkas P. and Benedek Pal.
- Recognized for outstanding contribution in the third International Symposium of Hazardous waste Control, June 1995 held in Alexandria, Egypt, from the American Society of Testing and Materials.

MAIN CONSULTING SERVICES IN EGYPT

Year		Affiliation / Position	Key Projects
From	То	_	(See details under consulting works)
2003	2011	Consultant to Chemonics Egypt	Pre investment study for Banias, Syria; Master plan for water supply system of Behaira, Egypt; Master plan for wastewater system of Tripoly, Libya (4 phases).
Dec. 2006	June 2007	Consultant to UNDP through GOPP	A model project for developing water & wastewater Master plan for a random growing small community in Fayoum, Egypt.
June,1999	Dec., 2003	Director of Sanitary & Environmental Engineering Consulting unit, Faculty of Engineering, Ain Shams University, Cairo.	Master plan of the water supply and wastewater system for Aswan, Damanhour, Mout (New Valley), Bajadhiya (Qena), and Armant cities in addition to more than 25 villages in rural Egypt.
March, 1990 July 2003	Dec., 1992 (18 M/D)	Chemonics International Chemonics Egypt	 Local Development II (for all Egyptian Governorates). Assisting MBW of Germany in the assessment of Kafr El Sheikh Water and Wastewater Projects, KFW financing.
Dec.,1987 and Nov., 1978	Feb., 1990 June, 1982	Dr. A.A. Warith Consulting Engineers in association with American Consortiums.	 Water and Wastewater Institutional Support (USAID funding). Rehabilitation works for the sewage system of Alexandria

			city, Egypt (USAID funding). Rehabilitation works for water supply and sewage systems of Assiut city, (USAID funding). Rehabilitation and upgrading Works for the sewage system of Beni Suef city, (USAID funding). Design of pilot project treatment plants for rural Egypt (WHO funding). Derna and Shahat WWTPs in Libya.
June, 1968	Sept., 1973	Sanitary and Plumbing Consulting Office, Cairo	 Design of plumping system of Basra hospital, Iraq. Design of plumping system of Sheraton and Palestine Hotels, Egypt. Design of the sewage system for Kafr El-Dawar dye-factory, Egypt.

ROFESSIONAL EXPERIENCE

- Teaching and conducting scientific applied research for more than 40 years at Ain Shams University, Faculty of Engineering, Cairo.
- Engineering consulting expertise affiliated with engineering consulting firms in Egypt since 1968.
- Research development and contract research in Kuwait Institute for Scientific Research (KISR), Kuwait, during the period from 1982 to 1987.
- Consultant to several joint venture engineering companies, performing USAID projects in Egypt in the field of water supply and wastewater treatment.
- Scientific and applied research in the Technical University, Vienna, Austria, during a scientific mission, as guest professor, from 1993 to 1994.
- Consultant to different consulting firms in Austria for international projects financed by the World Bank and the European Bank for Investment, Reconstruction and Development since 1994.

Consulting Services for Chemonics International

Developing of training materials and design manuals for sanitary engineers in the field of wastewater treatment and control.

Conducting training workshops using materials specially tailored for engineers and technicians operating wastewater treatment plants.

Providing technical assistance to Egyptian Governorates with respect to the selection of qualified engineers / consultants for preparing required designs; revision of feasibility studies, preliminary designs, and tender design documents; and supervision of construction of needed investments in the wastewater sector.

Reporting on "Pilot program assessment of different Wastewater treatment technologies applications in rural Egypt"

Outstanding Consulting Services for Chemonics Egypt

Assisting German delegations from MBW to assess the institutional and technical progress for water supply and wastewater projects in Kafr El Sheikh Governorate, which are financed by the German Government through KFW.

A report was submitted as part of the requirements of the evaluation mission. This report included the following three section's topics:

- Background Information on the Egyptian Water Supply and Sanitation Sector
- II- Data and Reports on KES and KWSC
- III- Quality Assessment and Impact of Water Supply Project in KES on Target Groups

For other projects, see table above.

Contract Research Projects for Kuwait Institute for Scientific Research

As the leader of the Control Engineering Group of the Environmental Sciences Department, I was responsible for managing, training and developing the capabilities of the local staff to perform professional research and consulting services to the clients of the institute. The following projects were performed under my supervision at Kuwait Institute for Scientific Research (KISR):

- Appropriate technology for sludge dewatering in Kuwait 2 phase project phase 1 (1986) & phase 2 (1987).
- Environmental and hydraulic feasibility studies of the proposed navigation channel close to Shuwaikh port (1985).
- Feasibility study of sanitary waste treatment system for the Enlarged Shuaiba Industrial Area (ESIA) (1983).
- Preliminary assessment of chemical hazards in Kuwait (1985).
- Preliminary assessment of the environmental impact of development projects in and around Sulaibikhat bay (1984).

- Solid waste reuse, treatment and disposal in the ESIA (1986).
- Optimization of the sewage collection system in Kuwait 3 phase project phase 1 (1984), phase 2 (1985) & phase 3 (1987).
- Assessment of water quality and hydrographic properties for Ras Kathemah marine area in Kuwait (1985).
- Study of the coastal zone of Kuwait for aquacultural purposes (1987).
- Characteristics of raw sewage and treated effluent in the main treatment plants in Kuwait (1986).
- Environmental assessment of industrial and warfare chemical hazards (1985).
- Hydraulic studies and environmental impact assessment for Subiya power stations (1987).
- Assessment of the potential property damage by the release of hydrogen sulfide gas from the sewage system in Kuwait (1987).
- Impact assessment of PIC effluent on groundwater quality at Sabahiya (1986).

Research and Development at Vienna Technical University

- Reduction of phosphorus and nitrogen loads in the recycled supernatant as a by-product of sludge treatment.
- Upgrading of existing wastewater treatment plants through pilot testing.
- Assessment of new emerging wastewater treatment technologies.

Consulting Services in Europe

In association with the Technical Univ. of Vienna and several consulting firms, the following projects/ studies were conducted under my leadership:

 Design of the upgrading works for the wastewater treatment plant of Nant, France (5000 PE) – 1994.

- Design of wastewater/stormwater collection systems and treatment facility for Hat Yai Municipality, Songkbla province, Thailand (170 000 m3/d) – 1994.
- Design of the upgrading works for the wastewater treatment plant of Prerau, Czech Republic (145 000 PE) 1994.
- Design of the upgrading works for the wastewater treatment plant of Zlin,
 Czech Republic (170 000 PE) 1994.
- Institutional development program and investment plan for water and wastewater services in Opole, Poland (World Bank financed project) – 1995.
- Preliminary design of wastewater treatment facility using Cyclic Activated Sludge Technology (CAST) for Dublin, Ireland – 1995.
- Design of the upgrading works for the wastewater treatment plant of Bruen,
 Czech Republic (640 000 PE) 1995.
- Preparation of wastewater treatment project and concession for the Municipality of Maribor, Republic of Slovene (EBRD financed project, 1995).
- Design of the CAST wastewater treatment plant project of Talgau, Austria (1995).
- Design of the CAST wastewater treatment plant for the Coca-Cola factory in Solin, Croat (25 000 PE).
- Preparatory studies for a water and wastewater project in Odessa, Ukraine (World Bank financed project, 1996).
- Conducting of training workshop for OVK- Odessa personnel in association with Wiener Wasserwerke and Salzburg Stadtwerk Wasserwerke (1996).
- Development of wastewater treatment plants and sewage systems for the towns Bovec and Kobarid, Republic of Slovene as part of the sustainable development of the upper Soca valley (PHARE financed project, 1998).
- Preliminary and final design of Cotiere Nord wastewater treatment plan, Republic of Tunis. "Etude d'Execution de la Rehabilitation de la Station d'Epuration Cotiere Nord et du Systeme de Transfere des Eaux". (World Bank financed project, 2000).
- Assisting in the training program for ONAS engineers in the field of wastewater treatment and technology in Austria, 2001).

SELECTED PUBLICATIONS

- Farkas, P., Ghobrial, F.H., Benedek, P. (1977). "Application of the Fermentation Kinetics in Modelling the Activated Sludge Treatment plants". Magyar Kemikusok Lapja, Vol. XXXII, No. 3, pp. 118-1218.
- 2. Ghobrial, F.H. (1977). "Cell Yield and Bacterial Growth Kinetics in Activated Sludge Systems". Hydrologiai Koezloeny, Vol, 37, No. 5, pp. 193 198.
- 3. Ghobrial, F.H. "Assessment of Three Wastewater Treatment Plants Producing Effluents for Irrigation". Proceedings of the First Middle East IAWPRC conference, Cairo, Egypt, Feb. 23-25, 1992 in Wat. Sci. Tech. Vol. 27, No. 9, pp 139-146, 1993.
- 4. Ghobrial, F.H. (1978), "Importance of Clarification Phase in the Biological Process Control". Water Research, Vol. 12, No. 11, pp. 1009-1016.
- 5. Ghobrial, F.H. (1979), Process Dynamics and Control of Activated Sludge; Part I, Dynamic Modelling and Control Strategies; VITUKI Kozlemenyek Proceedings, Vol, 14, pp. 111-127.
- 6. Ghobrial, F.H. (1979), "Process Dynamics and Control of Activated Sludge; Part II Compatible Systems of Data Collection and Control Processors." VITUKI Kozlemenyek Proceedings, Vol. 14, pp. 127-144.
- 7. Ghobrial, F., El-Baroudi, H., and Aliman, A. (1984). "Considerations in Developing Master Plan Alternatives for ESIA."

 Symposium on Environmental Management for Developing Countries organized by Environmental Technology, Research and Development Center ENVITEK A.S., Istanbul, Turkey.
- 8. Nesaratnam, S., and Ghobrial, F. (1984) "Biological Treatment of Mixed Industrial and Sanitary Wastewaters". Third International Waste Treatment and Utilization Symposium, Frauenfeld, Switzerland.
- 9. Ghobrial, F.H. "Management Concepts of Hazardous Wastes in Developing Countries: International Symposium of Industrial and Hazardous Wastes, Alexandria, Egypt, June 1985.
- 10. Nesaratnam, S.T; and F.H., Ghobrial. "Activated Sludge Versus "Captor" for the treatment of Mixed Wastewaters in the ESIA. International Symposium on Industrial and Hazardous Wastes, Alexandria, Egypt, June 1985.
- 11. Ghobrial, F.H. "Kinetics of Glucose Degradation Relying on COD and TOC Measurements". Faculty of Engineering Proceedings, Volume 16, September, 1985, Ain Shams University, Cairo, pp. 385-397.
- 12. Ghobrial, F.H. "Assessment of Water Quality for an SCB Harbor in the Gulf." Faculty of Engineering Proceedings, Volume 16, September 1985, Ain Shams University, Cairo, pp. 367-384.
- 13. Al-Ajmi, D; and Ghobrial, F.H. "Review of Environmental Research Development Related to Air Pollution in Kuwait. Proceedings of the Symposium on the Environment and its Protection from Pollution in the Arabian Gulf Area, Kuwait, October 25-28, 1986.

- 14. Ghobrial, F.H. "Hazardous chemical substances and their environmental effect in Arabic. The Environment Journal, Vol. 52, October 1986, Environmental Protection Society, Kuwait.
- 15. Ghobrial, F.H. "Environmental Impact Assessment of Dredging a Navigation Channel in Kuwait Waters". Proceedings of the Second International Conference on Coastal and Port Engineering in Developing Countries, Beijing, China, September 7-11, 1987.
- 16. El-Nawawi, A.S.; Ghobrial, F.H.; and Eliman, A., "Feasibility Study on Disposal of Oily Sludge in Kuwait. Proceedings of the Second International Conference on New Frontiers for Hazardous Waste Management sponsored by U.S. Environmental Protection Agency, NUS Corporation, and National Science Foundation, American Academy of Environmental Engineers. The Western William Penn. Pittsburgh, Pennsylvania, USA. September 27-30, 1987.
- 17. Eliman, A., Charalambus, C., and Ghobrial, F., "Optimum Design of Large Sewer Networks". Journal of Environmental Engineering, Vol. 115, No.6, December 1989. ASCE.
- 18. Samhan O. and Ghobrial F.H. Trace Metals and Chlorinated Hydrocarbons in Sewage Sludge of Kuwait. Journal of Water, Air and Soil Pollution, Vol. 36, 1987, pp. 239 246.
- 19. Samhan O., Ghobrial F.H., Al-Muzaini S., and Hamoda F. Wastewater Sludge Characteristics in Relation to Potential Dewatering Technologies A Case Study. Journal of Environmental Science and Health, A 25 (4), 1990, pp. 367 379.
- 20. Al-Ajmi D., Ghobrial F.H., and Aziz M. Implications of Sutton and Pasquill Coefficients in Modeling Accidental Releases of Hazardous Chemicals. Journal of Kuwait University vol. 18, 1991, pp. 53 66.
- 21. Sabry T. and Ghobrial F. Cost Optimization of Wastewater Systems in Rural Egypt. Faculty of Engineering Bulletin, Volume 36, June 30, 2001, Ain Shams University, Cairo, pp 137-146.
- 22. Sabry T. and Ghobrial F. Cost Comparison of Treating Wastewater in Rural Egypt. Faculty of Engineering Bulletin, Volume 36, June 30, 2001, Ain Shams University, Cairo, pp 125-135.
- 23. Ismail M., Ghobrial F., and Abdel Ghany U. Upgrading of Drinking Water Quality to Comply with Recent Environmental Regulations. Proceedings of the 11th International Conference on Environmental Protection, Alexandria University, May 8-10, 2001, Alexandria, Egypt.
- 24. El Agroudi S., Ghobrial F., and Abdel Razik M. Modeling and cost optimization of sewerage networks. Scientific Bulletin-Faculty of Engineering, Part I, Vol. 38, No.3, Sept. 30, 2003, Ain Shams University, Cairo.
- 25. Ghobrial, F. "Planning scenarios of treating wastewater in rural Egypt". Fifth Int. Conference RETBE 04. Fifth Int. Conference RETBE 04 on Foresighting Future Scenarios in Environmental & Resources Management, Alexandria 11-13 Dec., 2004.
- 26. Ghobrial, F. and Sabry, T. "Applicability of chemically enhanced primary treatment in developing countries". International Water Association (IWA) Conference, Krakow, Poland, 18-21 Sept., 2005.
- 27. Ghobrial F., El Nadi M., Refaat A. and Ahmed S. Use of PVC corrugated pipes as

- biological filtration media for dual biological aerated filter (DBAF). Scientific Bulletin of Al Azhar University (AUEJ), July 2006, Vol. 9, No.3, pp 671-683.
- 28. Ghobrial F., El Nadi M., Refaat A. and Ahmed S. Selection Of Various Locally Produced Filtration Media Used For Wastewater Treatment. Scientific Bulletin-Faculty of Engineering Ain Shams University, Cairo, March 2006, Vol. 41, No.1, pp 345-356.
- 29. Elagroudy, S., Abdel-Razik, M., Warith, M., Ghobrial, F. "Solid Waste Settlement in Bioreactor Landfill Models". Second Ain Shams University International Conference on Environmental Engineering (ASCEE 2), Cairo, Egypt, 10 12 April, 2007.
- 30. Elagroudy, S., Ghobrial, F.H., Abdel Razik, M.H., and Warith, M. A. (2007) "Effect of Solid Waste Composition on the Biodegradation of Municipal Solid Waste in Bioreactor Landfills" Proc. 60th Canadian Geotechnical Conference, Ottawa, Canada, 22-24 October pp. 1383-1389.
- 31. Elagroudy, S., Abdel Razik, M.H., Abdel El-Azeem, M. M. Ghobrial, F.H. and Warith, M. A. (2008) "Effect of Waste Composition and Load Application on the Biodegradation of Municipal Solid Waste in Bioreactor Landfills" International Conference on Engineering and Waste Management, Hong Kong, China, 28-30 May 2008.
- 32. Elagroudy, S., Abdel-Razik, M., Warith, M., Ghobrial, F. "Waste Settlement in Bioreactor Landfill Models. Journal of Waste Management, Vol. 28, 10 January, 2008, pp 2366 2374.
- 33. Sherien A. Elagroudy, Mohamed H. Abdel-Razik, Mahmoud M. Abd El-Azeem, Fikry H. Ghobrial, and Mostafa A. Warith "Effect of Waste Composition and Load Application On Biodegradation of MSW in Bioreactor Landfills". Journal of Waste Management and Research, accepted for publication.
- 34. Ghobrial F.H., Sabry T.I, Wahb I.S. and Osman M. "Establishing Design Criteria for the Up Flow Septic Tank/ Baffled Reactor (USBR) for Use in Rural Egypt". Civil Engineering Research Magazine, Al-Azhar University, October 2008, Vol. (30) N0. 3, pp1123-1133.
- 35. S. A. Elagroudy, M. A. Warith, and F. H. Ghobrial (2008). "Solid Waste Settlement in Landfills/Bioreactor Landfills". In "Waste Management Research Trends", Chapter 3, Ed. by Toma V. Golush, Nova Publishers.
- 36. Elagroudy, S., Abdel-Razik, M., Warith M., and Ghobrial, F. (2008). "Waste Settlement in Biorecator Landfill Models", Journal of Waste Management, 28(11), 2366–2374.
- 37. Elagroudy, S., Abdel Razik, M.H., Abdel El-Azeem, M. M. Ghobrial, F.H. and Warith, M. A. (2008) "Effect of Waste Composition and Load Application on the Biodegradation of Municipal Solid Waste in Bioreactor Landfills" International Conference on Engineering and Waste Management, Hong Kong, China, 28-30 May 2008.
- 38. Elagroudy, S., Abdel Razik, M., Abd El-Azeem, M., Ghobrial, F., and Warith, M. (2009). "Effect of Biological Degradation on Settlement of Bioreactor Landfills" Proceedings Sardinia 2009, Twelfth International Waste Management and Landfill Symposium S. Margherita di Pula, Cagliari, Italy; 5 9 October 2009.
- 39. Elagroudy, S., Elkady, T., Sherif, H., and Ghobrial, F. (2009). "Comparative Cost-Benefit Analysis of Different SWM Scenarios in Basrah, Iraq" Proceedings Sardinia 2009, Twelfth International Waste Management and Landfill Symposium S. Margherita di Pula, Cagliari, Italy; 5 9 October 2009.

- 40. Elagroudy, **S. A.,** Abdel Razik, M.H., Abdel El-Azeem, M. M., Ghobrial, F.H. and Warith, M. A. (2009). "Effect of Waste Composition and Load Application on the Biodegradation of Municipal Solid Waste in Bioreactor Landfills" ASCE Practice Periodical of Hazardous, Toxic, and Radioactive Waste Management, July 2009, Vol.13 (3) pp. 165-173.
- 41. Elagroudy, S., Abdel Razik, M., Abd El-Azeem, M., Ghobrial, F., and Warith, M. (2009). "Effect of Biological Degradation on Settlement of Bioreactor Landfills" Proceedings Sardinia 2009, Twelfth International Waste Management and Landfill Symposium S. Margherita di Pula, Cagliari, Italy; 5 9 October 2009.
- 42. Elagroudy, S., Elkady, T., Sherif, H., and Ghobrial, F. (2009). "Comparative Cost-Benefit Analysis of Different SWM Scenarios in Basrah, Iraq" Proceedings Sardinia 2009, Twelfth International Waste Management and Landfill Symposium S. Margherita di Pula, Cagliari, Italy; 5 9 October 2009.
- 43. Elagroudy, S., Abdel Razik, M.H., Abdel El-Azeem, M. M. Ghobrial, F.H. and Warith, M. A. (2009). "Dual Role of Hydrolysis Coefficient in Modeling of Bioreactors", Ain Shams University 3rd Int. Conference on Environmental Engineering ASCEE-3, 14-16 April 2009 pp. 217-228.
- 44. Elagroudy, S., Abdel Razik, M.H., Abd El-Azeem, M. M. Ghobrial, F.H. and Warith, M. A. (2010). "Dual Role of Hydrolysis Coefficient in Modeling of Bioreactors", *Int. J. Environmental Technology and Management, Special Issue on Advances in Waste Engineering and Management*, Vol. 13, Nos. 3/4, pp. 322-335.
- 45. Elagroudy, S., El-Gohary, F., Ghobrial, F.H. and Warith, M. A.(2011) "Enhancement in biogas production from waste activated sludge after microwave pretreatment', 16th European Biosolids & Organic Resources Conference, The Royal Armouries, Leeds, UK, 14-16 November, 2011.
- 46. Elagroudy, S., Elkady, T., Sherif, H., and Ghobrial, F. (2011). "Comparative Cost-Benefit Analysis of Different Solid Waste Management Scenarios in Basrah, Iraq" Journal of Environmental Protection, July, Vol. 2(5), pp. 555-563.
- 47. Mohamed Sh. Negm; Fikry H. Ghobrial; M'd Hamdy El-Awady; and Sobhy S. AbEl-Kader (2012) "Effect of Retention Time Modification on Capacity and Performance of Existing Wastewater Treatment plants", Institute of Environmental Studies and Research Journal, Ain Shams University, accepted for publication.
- 48. Fikry H. Ghobrial; Enas S. Wahb; Maggy F. Labib (2015)."Technical and Economic Assessment of Pretreatment Alternative Systems Associated with RO Desalination Plants". Scientific Bulletin of Al Azhar University (AUEJ).
- 49. Fikry H. Ghobrial, Mahmoud M. Abd El azeem, Nany A. Hasan, and Mai M. Afifi (2015). "Assessment of Low Cost Aerobic Treatment Technologies in Rural Egypt". Scientific Bulletin of Al Azhar University (AUEJ).
- 50. Elia Nabil, Mahmoud Roushdi, and Fikry Ghobrial (2017). "Enhancing Nitrogen Removal from Wastewater Using Two Step Cascade". Water-Society-Climate Conference, 2-4 October 2017, Hammamet, Tunisia.