

**Omar Ahmed Bamaga (PhD)**

Associate Professor

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**Education**

Ph.D. Farm Machinery and Power Engineering (Major), Irrigation and Drainage Engineering (Minor), G. B. Pant University of Agriculture and Technology, India, 2001

M. Tech. Agricultural Engineering (Farm Machinery and Power Engineering), G. B. Pant University of Agriculture and Technology, India, 1997

B. Eng. Mechanical Engineering (Agricultural Machinery Engineering), Rouse Technical University “Angel Kanchev”, Rouse, Bulgaria, 1990

**Academic Experience**

2012- present Associate Professor, Center of Excellence in Desalination Technology, King Abdulaziz University, Jeddah, Saudi Arabia.

2010- 2012 Associate Professor (on leave), Department of Agricultural Engineering, Faculty of Agriculture, Sana’a University, Sana’a

2007- 2008 Visiting Scholar, School of Chemical, Biological and Environmental Engineering, Oregon State University, Corvallis, Oregon, U.S.A.

2001- 2010 Assistant Professor, Department of Agricultural Engineering, Faculty of Agriculture, Sana’a University, Sana’a

1991-1994 Teaching Assistant, Department of Agricultural Engineering, Faculty of Agriculture, Sana’a University, Sana’a

**Professional Assignments**

2011- 2012 Project Manager, Higher Professional Education Project (Phase 2), Ministry of Technical Education and Vocational Training, Yemen

2010-2012 Head, Department of Agricultural Engineering, Faculty of Agriculture, Sana’a University, Sana’a

2010- 2012 In-charge, Planning and Development Unit, Water and Environment Centre, Sana’a University, Sana’a

2006- 2007 Project Manager, Higher Professional Education Project(Phase 1), Ministry of Technical Education and Vocational Training, Yemen

2002- 2006 Vice Dean for Academic Affairs, Sana’a Community College, Sana’a.

**Scholarships and Awards**

2007 J. William Fulbright Visiting Scholar Scholarship from the Bureau of Education and Cultural Affairs United States Department of State

2006 International Visitors Leadership Program Award from the Bureau of Education and Cultural Affairs United States Department of State

**Training Workshops and Short Courses Attended**

i) Desalination, water resources engineering and management

- Training course on “Polymeric and Inorganic Membranes Preparation and Characterization”, September 8- 2, 2013, Center of Excellence in Desalination Technology, King Abdulaziz University.
- Middle East School on Membrane Technology for Sustainable Water Desalination and Reuse, April 28 - May 3, 2012, organized by European Membrane Society, King Abdullah University of Science and Technology (KAUST), Water Desalination and Reuse Center (WDRC), Kingdom of Saudi Arabia.
- Training workshop on “Seawater Desalination and the Environment: Impact of brine and chemical discharges on the marine environment”, December 1-3, 2008, Amman Jordan.
- International Summer School 2008 “Environment and Resource Protection: Water, waste water, solid waste and landfill”, November 22 – 30, 2008, Aden, Yemen.

- Postdoctoral Research on Desalination and Renewable Energy Technologies under Fulbright Visiting Scholar Program 2007/2008, Aug 2007- July 2008, School of Chemical, Biological and Environmental Engineering, Oregon State University, Corvallis, Oregon, U.S.A.
- Desalination and Renewable Energy Training Course and Workshop organized by the Ministry of Water and Environment and IHE-UNESCO, Delft, The Netherlands, April, 23-28, 2005, Aden, Yemen

#### ii) Higher education and technical training issues

- Training workshop on “Higher Professional Education: Curriculum development, program implementation and institutional management”, July 16-23, 2006, South Africa and Botswana
- Training workshop on “Higher Professional Education: Curriculum development, program implementation and institutional management”, May 7–13, 2006, Fontys University of Applied Sciences, Eindhoven, The Netherlands
- International Visitors Leadership Program “Higher Education Issues”. Washington DC and few other States, Feb 22-March 16, 2006, U.S.A.
- Training Program for the Yemen Community Colleges Administrators, August 11-25, 2001, Texas and New Mexico, U.S.A.
- Training Course on Accreditation for Institutions of Higher Education in Yemen, June 28 –July 5, 2002, Sana’a.

#### Projects

- **Co-Investigator**, Investigations on the potential use of membrane distillation to increase the recovery ratio and overall efficiency of desalination plants, CEDT in collaboration with Saline Water Conversion Corporation (SWCC).
- **Principal Investigator**, Exploring the possibilities of improving Jeddah urban water cycle through application of advanced and emerging membrane technologies for desalination of contaminated brackish groundwater, CEDT.
- **Co-Investigator**, Studying the performance of PVDF membrane in water purification using MD technique, Deanship of Scientific Research, King Abdulaziz University.
- **Co-Investigator**, Studying the effects of blending and concentration on characteristics of PVDF membrane for water purification using MD technique, Deanship of Scientific Research, King Abdulaziz University.
- **Project Team Member**, Strengthening research capacity in Yemen’s water sector for policy formulation, education and awareness raising, Dec 2010-Feb 2012, Water and Environment Center, Sana’a University. (Grant provider: The Dutch organisation for internationalisation in education- Nuffic)
- **Senior Researcher**, Groundwater in the Political Domain Project, Dec 2010- Feb 2012 , Water and Environment Center, Sana’a University. (Grant Provider: Netherlands Organisation for Scientific Research )
- **Co-investigator**, Policy Video/Document on Accountability in Local Groundwater Management Yemen, August 2010- May 2011, Water and Environment Center, Sana’a University. (Grant provider: The Netherlands Embassy, Yemen)
- **Project Manager**, Strengthening the Ministry of Vocational Training & Technical Education (MTEVT) and the Sana’a Community College and the Industrial Technical Institute, Muala, Aden, Jan 2006- Aug 2007, Ministry of Technical Education and Vocational Training, Yemen (Grant provider: The Dutch organisation for internationalisation in education- Nuffic)
- **Project Manager**, Strengthening the Higher Professional Education (HPE) Sector in Yemen under the responsibility of the Ministry of Technical Education & Vocational Training (MTEVT), Jan 2011-Feb 2012, Ministry of Technical Education and Vocational Training, Yemen, (Grant provider: The Dutch organisation for internationalisation in education- Nuffic)

#### Publications (*Refereed Journals, h-index=4*)

1. Imtiaz Ali ID , **Omar A. Bamaga**, Lassaad Gzara, M. Bassyouni, M. H. Abdel-Aziz, M. F. Soliman , Enrico Drioli and Mohammed Albeirutty, Assessment of Blend PVDF Membranes, and the Effect of Polymer Concentration and Blend Composition, *Membranes* 2018, 8, 13; doi:10.3390/membranes8010013. **CiteScore 2016: 2.19**
2. Hatem E. Mohamed, Sharaf Al-Sharif, **Omar Bamaga** and Mohammed H. Albeirutty. Potential biofoulants in open-ocean SWRO desalination station in Jeddah, KSA, *Water Science & Technology: Water Supply*, doi: 10.2166/ws.2017.246. **(IF 2016: 0.573)**

3. M. F. Soliman, M. H. Abdel-Aziz, **Omar A. Bamaga**, Lassaad Gzara, Sharaf F. Al-Sharif, M. Bassyouni, Iqbal Ahmed, Rehan Zulfiqar Ahmad, Enrico Drioli, Mohammad Albeirutty, Imtiaz Ali, H. Bake, Performance evaluation of blended PVDF membranes for desalination of seawater RO brine using direct contact membrane distillation, *Desalination and Water Treatment*, 63 (2017) 6–14. **(I F 2016: 1.631)**
4. Al-Weshali, A.; **Bamaga, O.**; Borgia, C.; van Steenberg, F.; Al-Aulaqi, N. and Babaqi, A. Diesel subsidies and Yemen politics: Post-2011 crises and their impact on groundwater use and agriculture. *Water Alternatives* (2015) 8(2): 215-236. **(IF 2016: 2.5)**
5. **Omar A. Bamaga**, Sharaf F. Al-Sharif, Khalid S. Balkhair, Lassaad Gzara, Mohammad Albeirutty, Improvement of urban water cycle and mitigation of groundwater table rise through advanced membrane desalination of shallow urban brackish groundwater of Jeddah basin, *Desalination and water Treatment*, (2015) 1–12. **(IF 2016: 1.631)**
6. Taher T, Bruns B, **Bamaga O**, Al-Weshali A, van Steenberg F (2012) Local groundwater governance in Yemen: building on traditions and enabling communities to craft new rules. *Hydrogeology Journal* (2012) 20:1177-1188. **(IF 2016: 2.109)**
7. **Bamaga O.A.**, A. Yokochi, B. Zabara, A.S. Babaqi, Hybrid FO/RO desalination system: Preliminary assessment of osmotic energy recovery and designs of new FO membrane module configurations, *Desalination* 268 (2011) 163-169. **(IF 2016: 5.517)**
8. **Bamaga O. A.**, Yokochi A., Beaudry E.G. 2009. Application of Forward Osmosis in Pretreatment of Seawater for Small Reverse Osmosis Desalination Units. *Desalination and Water Treatment*, 5 (2009) 183–191, ([www.deswater.com](http://www.deswater.com)). **(IF 2016: 1.631)**