

**Prof. Asher Brenner**



**SHORT PROFESSIONAL INFO**

Asher Brenner is Professor and chairman of the Environmental Engineering (graduate) program at the Ben-Gurion University of the Negev (BGU), Israel. He received the B.Sc. in Civil Engineering (1979), and then M.Sc. (1982) and D.Sc. (1986) from the Technion (Israel Institute of Technology). From 1986-1988 he has been a research associate with the Department of Civil & Environmental Engineering at the University of Notre Dame, USA. In 1988 he joined Ben-Gurion University, first at the J. Blaustein Institutes for Desert Research, and then since 2000, at the Faculty of Engineering Sciences. During his tenure at BGU, he spent a sabbatical at the Department of Civil & Environmental Engineering – UC Davis (1995-96), and at the Department of Civil & Environmental Engineering – Monash University, Australia (2010). Prof. Brenner's research interests include: biological wastewater treatment, nutrients removal process modeling, industrial wastewater management, stormwater biofiltration, and wastewater reclamation and reuse. He has published more than 80 journal papers and presented numerous papers at international conferences. He has also supervised more than 50 Ph.D. and M.Sc. theses.

***ACTUAL POSITION***

Head of the Environmental Engineering Unit, Faculty of Engineering Sciences, Ben-Gurion University of the Negev, Beer-Sheva 8410501, Israel

***ACADEMIC QUALIFICATION***

B.Sc.	1979	Technion - Israel Institute of Technology; Civil Engineering
M.Sc.	1982	Technion - Israel Institute of Technology; Environmental Engineering
D.Sc.	1986	Technion - Israel Institute of Technology; Environmental Engineering

***RESEARCH INTEREST***

Water technology; biological wastewater treatment; effluents reuse; fate of micropollutants; industrial wastewater management; stormwater harvesting and treatment.

## REPRESENTATIVE SCIENTIFIC PUBLICATIONS

1. Sahar, E., Ernst, M., Godehardt, M., Hein, A., Herr, J., Kazner, C., Melin, T., Cikurel, H., Aharoni, A., Messalem, R., **Brenner, A.**, and Jekel, M. (2011). "Comparison of two treatments for the removal of selected organic micropollutants and bulk organic matter: conventional activated sludge (CAS) followed by ultrafiltration (UF) vs. membrane bioreactor (MBR)". Water Science and Technology, 63(4):733-740.
2. Sahar, E., David, I., Gelman, Y., Cikurel, H., Aharoni, A., Messalem, R., and **Brenner, A.** (2011). "The use of RO to remove emerging micropollutants following CAS/UF or MBR treatment of municipal wastewater". Desalination, 273:142-147.
3. Ofir, E., **Brenner, A.**, Muuler, K., and Gitis, V. (2011). "Boron removal from seawater by electro-chemical treatment as part of water desalination". Desalination and Water Treatment, 31:102-106.
4. Sahar, E., Messalem, R., Cikurel, H., Aharoni, A., **Brenner, A.**, Godehardt, M., Jekel, M., and Ernst, M. (2011). "Fate of antibiotics in Activated Sludge followed by ultrafiltration (CAS-UF) and in a membrane bioreactor (MBR)". Water Research, 45:4827-4836.
5. Yang, F., Wang, Y., Bick, A., Gilron, J., **Brenner, A.**, Gillerman, L., Herzberg, M., and Oron, G. (2012). "Performance of different configurations of hybrid growth membrane bioreactor (HG-MBR) for treatment of mixed wastewater". Desalination, 284:261-268.
6. Duek, A., Arkhangelsky, E., Krush, R., **Brenner, A.**, and Gitis, V. (2012). "New and conventional pore size tests in virus-removing membranes". Water Research, 46:2505-2514.
7. Segev, O., Shapiro, O., **Brenner, A.**, and Kushmaro, A. (2013). "Application of a unique miniature MBR for screening the biodegradation of brominated flame retardants". Desalination and Water Treatment, 51(31-33):5909-5917.
8. Ben-shalom, M., Shandalov, S., **Brenner, A.**, and Oron, G. (2014). "The effect of aeration and effluent recycling on domestic wastewater treatment in a pilot-plant system of duckweed ponds". Water Science and Technology, 69(2):350-357.
9. Nedal Massalha, Asher **Brenner**, Chaim Sheindorf, and Isam Sabbah (2014), "The effect of anaerobic biomass drying and exposure to air on its recovery and evolution". Water Research, 63:42-51.
10. Hen Sabbag, Asher **Brenner**, Andrey Nikolski, and Eitan J.C. Borojovich (2015), "Prevention and control of struvite and calcium phosphate precipitation by chelating agents". Desalination and Water Treatment, 55(1):61-69.
11. Nedal Massalha, Asher **Brenner**, Chaim Sheindorf, and Isam Sabbah (2015), "Enriching composite hydrophilic polyurethane foams with PAC to enhance adsorption of phenol from aqueous solutions", Chemical Engineering Journal, 280:282-293.
12. Nedal Massalha, Asher **Brenner**, Chaim Sheindorf, and Isam Sabbah (2015), "Application of immobilized and granular dried anaerobic biomass for stabilizing and increasing anaerobic bio-systems tolerance for high organic loads and phenol shocks", Bioresource Technology, 197:106-112.
13. Liberman, N., Shandalov, S., Forgacs, C., Oron, G., and **Brenner, A.** (2016). "Use of MBR to sustain active biomass for treatment of low organic load grey water". Clean Technologies and Environmental Policy, 18:1219-1224.
14. David Sadovsky, Asher **Brenner**, Boaz Astrachan, Boaz Asaf, Raphael Gonen (2016). Biosorption potential of cerium ions using *Spirulina* biomass, Journal of Rare Earths, 34(6):644-652.
15. Eitan Ben-Dov, Ofir Zisman, Asher **Brenner**, and Ariel Kushmaro (2016). Impact of Biocides on Hydrogen Sulfide Production and Growth of *Desulfovibrio vulgaris*, CLEAN - Soil, Air, Water, 44(9999): 1-5.
16. Bick, A., Yang, F., Gilron, J., Gillerman, L., Herzberg, M., **Brenner, A.** and Oron, G. (2017). Analysis of membrane bio-reactor performance for wastewater treatment using ranking methods, Toxicological & Environmental Chemistry (GTEC); DOI: 10.1080/02772248.2016.1257709.
17. Marina De Leeuw, Maayan Baron, Asher **Brenner**, and Ariel Kushmaro (2017). Genome Analysis of Novel Polyvalent Proteobacteria Phage Isolated from a Bioreactor Treating Industrial Wastewater, Genes, 8(1), 40; DOI: 10.3390/genes8010040.
18. Marina De Leeuw, Asher **Brenner**, and Ariel Kushmaro (2017). Modelling Phage - Bacteria Interaction in Micro Bioreactors, CLEAN - Soil, Air, Water, 45(8): 1-9.
19. Liron Shoshani, Asher **Brenner**, and Chaim Sheindorf (2017). Use of an integrated biophysical process for the treatment of halo- and nitro- organic wastes, AIMS Environmental Science, 4(4): 523-539. DOI: 10.3934/environsci.2017.4.523.
20. Amir Aloni and Asher **Brenner** (2017). Use of cotton as a carbon source for denitrification in biofilters for groundwater remediation, Water, 9, 714; DOI: 10.3390/w9090714.