CURRICULUM VITAE



Nuri AZBAR, Ph.D.Professor of Bioengineering Ege University, Turkey

Founding Head of Bioenergy and Environmental Biotechnology Research Group

Editorial Board Member of Journal of Renewable Energy

Editorial Board Member of Journal of Biomed Research International (Biotechnology)

Editorial Board Member of Journal of Chemical Engineering and Research Update

Editorial Board Member of Journal PeerJ

Editorial Board Member of Journal Bioengineering International

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RESEARCH AREAS & EXPERTISE

- Water and wastewater treatment.
- Advanced oxidation systems for water and wastewater treatment and enhancement of biodegradation of organic compounds.
- Separation and purification & analysis and enhancement of water purification processes
- Environmental management systems, sustainable production methods in industry.
- Industrial ecology, sustainable production and green chemistry.
- Biochemical valorization of organic waste materials and production of value-added chemicals.
- Biopolymer production from organic waste materials via biotechnology.
- Biofuel production from organic waste materials (bio-hydrogen, bio-methane), use of novel bioprocess configurations.

EDUCATION

Ph.D. in Environmental Engineering, Vanderbilt University, School of Engineering, Civil and Environmental Engineering Department, Nashville, TN, United States, May 1999.

Dissertation: Effect of Process Configuration and Environmental Conditions on the Performance of the

Anaerobic Processes.

Advisor: Richard D. Speece

M.Sc. in Environmental Engineering, Dokuz Eylul University, Engineering Faculty, Environmental Engineering Department, Izmir-Turkey, January 1994.

Focus: Selective Defluoridation in Drinking and Mineral Waters.

Advisor: Aysen Turkman

B.Sc. in Environmental Engineering, Dokuz Eylul University, Engineering Faculty, Environmental Engineering Department, Izmir-Turkey, June 1990.

Focus: Design Approaches for Sedimentation Basins

Advisor: Adem Ozer

ACADEMIC EXPERIENCE

Full Professor	Ege University, Bioengineering Department, Izmir-Turkey	Spring 2010 to present
Associate Professor	Ege University, Bioengineering Department, Izmir-Turkey	Spring 2004-Spring 2010
Assistant Professor	Ege University, Bioengineering Department, Izmir-Turkey	Spring 2004- Spring 2004
Assistant Professor	Balikesir University, Environmental Engineering Department, Balikesir, Turkey	Summer 2000 to Fall 2004
Teaching Assistant	Vanderbilt University, Civil & Environmental Engineering Department, TN, USA	Fall 1997 to Summer 1999
Research Assistant	Balikesir University, Environmental Engineering Department, Balikesir, Turkey	Summer 1995 to Fall 1995
Research Assistant	Dokuz Eylul University, Environmental Engineering Department, Izmir-Turkey	Summer 1991- Fall 1995

ADMINISTRATIVE EXPERIENCE

Department Chair of Bioengineering	Summer 2018 - Summer 2019
Associate Department Chair of Bioengineering Department	Fall 2017 to Spring 2018
Director of Center for Environmental Research	Fall 2012 to present
Founding Head of Bioenergy and Environmental Bioenergy Research Laboratory	Fall 2004 to present
Head of Hazardous Waste Management Team, Ege University	Fall 2010 to 2019
Board Member of Research Committee, Ege University	Fall 2012 to present
Board Member of Engineering School, Ege University	Fall 2009 - Fall 2012
European Union FP7-Environmental Committee Member and Delegate for Turkey	2007 - 2011
Board Member of Center for Environmental Research	Fall 2000 - Spring 2004
Board Member of Balikesir Governor Environmental Fund	Fall 2000 - Spring 2004
Founding Board Member of Chamber of Environmental Engineering	2003 - 2004

AWARDS, PROFESSIONAL AFFILIATIONS, LISTINGS

- TUBITAK (Turkish Scientific Research Council) Project Performance Award, 2016
- Visiting professorship, Hohenheim University, Agricultural Faculty and Bioenergy Institute, 2012 Summer (3 months), Hohenheim-Stuttgart, Germany.
- IAHE-Award of High Achievement in Hydrogen Economy, 2009
- Teaching Assistantship, Vanderbilt University, Civil and Environmental Engineering Department, 1997–1999, TN.
- Turkish Higher Education Council (YÖK) scholarship given to top students of Turkey to study abroad, 1995-1999.
- TUBITAK (Turkish Scientific Research Council) Paper Awards, 2000 to present

PUBLICATIONS

Book and book chapters:

1. Keskin, T. Nalakath, H., Arslan, K., and **Azbar, N.** (2019), Biomass, Biofuels, Biochemicals: Biohydrogen (2nd Edition), Biohydrogen Production from Solid Wastes, Chapter 12; p.323-345, Editors: Ashok Pandey, S. Venkata Mohan, Jo-Shu Chang, Patrick C. Hallenbeck, Christian Larroche, ISBN: 9780444642035, eBook ISBN: 9780444642042

- **2. Azbar, N.,** Fundamentals of Hydrogen Production via Biotechnology (Bio-H₂), Phytoremediation for Green Energy (2015),149-173, Editors: Münir Öztürk, Muhammad Ashraf, Ahmet Aksoy, Muhammad Sajid Aqeel Ahmad ISBN: 978-94-007-7886-3, 978-94-007-7887-0 (Online)
- **3. Azbar N.**, and Levin D.B. (Editors) (2012). State of the Art and Progress in Production of Biohydrogen. Bentham eBooks. (Bentham Science Publishers) ISBN: 978-1-60805-411-4; eISBN:978-1-60805-224-0.
- **4. Azbar N**., Levin D.B. 2010. Biohydrogen production from agricultural and agro-food wastes. In Comprehensive Biotechnology, 2nd Edition. Elsevier. (Comprehensive Biotechnology (Second Edition), Volume 6, 2011, Pages 629-641-Elsevier 2011).
- **5.** Kranert, M., Erdin, E., **Azbar, N.**, Akıncı, G., Sarptas, H. (2010): IV. Turkish-German Solid Waste Days: Sustainable Solid Waste Management for Resource Preservation (Türkisch-Deutsche Abfalltage: Ressourcenschutz durch Umsetzung nachaltiger Abfallwirtharth), 25-27 November 2010, EBSO.
- **6.** Çınar, Ö., Merdun, H., **Azbar, N.,** Sofuoglu, S.C., General Ecology (in Turkish) (2007) (Editor: Prof.Dr. Sabri Gokmen), Nobel publishing, Chapter 9: Environmental Pollution and Control, pp. 403-465, Nobel No: 1160
- 7. Erdin, E., Azbar, N., Sarptas, H., Baycan, N. (Editors): "Turkish-German Solid Wastes Days-2006: Biological Processes for Solid Wastes", Izmir, Turkey, December 2006
- **8. Azbar, N.,** Speece, R., Boonyakitsombut, S., Ursillo, P., Kim, M. (2006). 'Effect of Process Configuration, Substrate Complexity and Environmental Factors on the Biomethane Production via Anaerobic Bioprocesses' Chapter in 'Production of Fuels, Specialty Chemicals and Biobased Products from Agro-Industrial Wastes and Surplus', p.113-128, Bologna, Italy.ISBN:88-88214-18-6
- **9.** Muezzinoglu, A., **Azbar, N**. and Sengul, F., "Chapter 20: Application of Lifecycle Analysis Techniques For Cotton Textile Products: From The Cotton Fields To Final Waste Disposal", Risk Reduction-Chemicals And Energy Into The 21st Century, Taylor-Francis Publishers, (Editors:Mervyn L. Richardson), Hertfordshirek, UK. 1996.
- 10. 1st International Workshop on Environmental Problems in Olive Oil Production and Solutions, Editors: N. Azbar, N. Vardar, M. Akın, I. Cevilan., 07-09 June 2002.
- **11.** Bioenergy-2004 (in Turkish): Symposium on Biological Renewable Energy Resources Editor: **Azbar, N**, 20-22 October, 2004, Ege University.
- **12. Azbar, N**., Yonar T., Kestioglu, K. (2005) Invited Chapter in "Water Pollution: New Research:" The "Advanced Oxidation Processes (AOPs) to Wastewater Treatment. Case Studies: Decolorization of Textile Effluents, Detoxification of Olive Mill Effluent, Treatment of Domestic Wastewater", Nova Science Publishers, Inc. ISBN #: 1-59454-393-3.

Refereed journal articles

- Saygili, B., Alpay, T., Azbar, N., Özdemir, G. (2020) Purified terephthalic acid wastewater treatment using Modified Two-stage UASB bioreactor systems, Current Microbiology (in Press: DOI: 10.1007/s00284-020-01913-8)
- **2.** Akarsu, K., Duman, G., Yilmazer, A., Keskin, T., **Azbar, N.**, Yanik, J (2019) Sustainable valorization of food wastes into solid fuel by hydrothermal carbonization", Bioresource Technology Volume 292, https://doi.org/10.1016/j.biortech.2019.121959
- **3.** Karabey, B., Daglioglu, S.T., **Azbar, N.**, Ozdemir, G (2019) Bacterial and archeal dynamics of a labscale HYBRID gas fermentation bioreactor fed with CO₂ and H₂, Journal of Environmental Science and Health Part A Toxic/Hazardous Substances and Environmental Engineering, Volume 54, Issue 13, 10 November 2019, Pages 1348-1355.
- **4.** Keskin, T., Arslan, K., Karaalp, D., **Azbar, N.** (2019) The Determination of the Trace Element Effects on Basal Medium by Using the Statistical Optimization Approach for Biogas Production from Chicken Manure, Waste and Biomass Valorization, Volume 10, Issue 9, 1 September 2019, Pages 2497-2506.
- **5.** Keskin, T., Abubackar, H.N, Yazgin, O., Gunay, B., **Azbar, N**. (2019) Effect of percolation frequency on biohydrogen production from fruit and vegetable wastes by dry fermentation, International Journal of Hydrogen Energy, Volume 44, Issue 34, 12 July 2019, Pages 18767-18775.
- **6.** Abubackar, H.N., Keskin, T., Yazgin, O., Gunay, B., Arslan, K., **Azbar, N** (2019) Biohydrogen production from autoclaved fruit and vegetable wastes by dry fermentation under thermophilic condition, International Journal of Hydrogen Energy, Volume 44, Issue 34, 12 July 2019, Pages 18776-18784.

- 7. Abubackar, H.N., Keskin, T., Arslan, K., Vural, C., Aksu, D., Yavuzyılmaz, D.K., Ozdemir, G., **Azbar, N** (2019) Effects of size and autoclavation of fruit and vegetable wastes on biohydrogen production by dark dry anaerobic fermentation under mesophilic condition, International Journal of Hydrogen Energy, Volume 44, Issue 33, 5 July 2019, Pages 17767-17780.
- **8.** Daglioglu, S.T., Karabey, B., Ozdemir, G., **Azbar**, **N** (2019) CO₂ utilization via a novel anaerobic bioprocess configuration with simulated gas mixture and real stack gas samples, Environmental Technology (United Kingdom), Volume 40, Issue 6, 8 March 2019, Pages 742-748.
- Keskin, T., Arslan, K., Nalakath Abubackar, H., Vural, C., Eroglu, D., Karaalp, D., Yanik, J., Ozdemir, G., and Azbar, N. (2018) Determining the effect of trace elements on biohydrogen production from fruit and vegetable wastes, International Journal of Hydrogen Energy, Volume 43, Issue 23, 7 June 2018, Pages 10666-10677.
- **10.** Duman, G., Akarsu, K., Yilmazer, A., Keskin Gundogdu, T., **Azbar, N**., and Yanik, J. (2018) Sustainable hydrogen production options from food wastes, International Journal of Hydrogen Energy, Volume 43, Issue 23, 7 June 2018, Pages 10595-10604.
- **11.** Karaalp, D., Arslan, K., Keskin, T. and **Azbar, N** (2017) Performance Characteristics of a Pilot Anaerobic Digester Fed by Farmer's Market Wastes, Journal of Fundamentals of Renewable Energy and Applications, Volume 7, Issue 5, ISSN: 2090-4541, DOI: 10.4172/2090-4541.1000236.
- **12.** Çalışkan, G., and **Azbar, N**. (2017) Energy Recovery from Conventional Biogas Digester Effluent with a Novel Bioreactor Configuration, Waste and Biomass Valorization, Volume 8, Issue 7, Pages 2371-2381
- **13.** Gundormusler Yilmaz, M., Cicek, N., Levin, D., and **Azbar, N.** (2016)"Cell immobilization for microbial production of 1, 3-propanediol", Critical reviews in biotechnology, 1-13
- **14.** Keskin Gundogdu, T., Deniz, I., Caliskan, G., Sahin, E.S., and **Azbar, N** (2016) "Experimental Design Methods for Bioengineering Applications", Critical Reviews in Biotechnology, 36(2):368-88.
- **15.** Gungormusler Yılmaz, M., and **Azbar, N**. (2015)" Comparison of Two Natural 1,3 Propanediol Producers in Regards to the Effect of Glucose Usage as a Co-substrate, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 37:16, 1797-1804.
- **16.** Karaalp,D., Aksoyek Pekgüzel, E., and **Azbar, N**. (2015) "Evaluation of Performance of Sequential Membranes Used in Pilot Scale Biogas Plant: A Case Study for Laying Hen Manure", International Journal of Degradation, 2(1), 29.
- **17.** Karaalp, D., Doruk, N., Dizge, N., Keskinler, B., and **Azbar**, N. (2015)"A Novel Solution for Biogas Applications in Poultry Industry: CLAMBS approach" Journal of Bioprocessing & Biotechniques 5 (2), 1.
- **18.** Keskin Gundogdu, T., Deniz, I., Caliskan, G., Sahin, E.S., and **Azbar, N.** (2014) "Experimental design methods for bioengineering applications" Critical reviews in biotechnology, 1-21.
- **19.** Caliskan, G., Giray, G., Keskin Gundogdu, T., and **Azbar**, N. (2014)"Anaerobic Biodegradation of Beer Production Wastewater at a Field Scale and Explotation of Bioenergy Potential of Other Solid Wastes from Beer Production" International Journal of Renewable Energy and Biofuels 2014, p1-15.
- **20.** Avci, F.G., Huccetogullari, D., and **Azbar**, **N.** (2013): "The effects of cell recycling on the production of 1,3-propanediol by Klebsiella pneumoniae", Bioprocess Biosyst Eng, 37 (3), 513-519.
- **21.** Karaalp, D., Arslan, K., and **Azbar, N.** (2013)," Enhancement of Biogas Production from Laying Hen Manure via Sonolysis as Pretreatment", Journal of Bioprocessing & Biotechniques 4 (6), 1.
- **22.** Keskin Gundogdu, T., Akboncuk, M.B., and **Azbar, N.** (2013). "Biohydrogen production via a novel immobilized cell bioreactor", Biofuels 4 (6), 595-603.
- **23.** Keskin Gundogdu, T., **Azbar**, N., and Patrick Hallenbeck (2013), "The Optimization Studies on Selection of Carbon Sources for Photofermentative Hydrogen Production By Four New Isolates", Journal of Selcuk University Natural and Applied Science, 379-388.
- **24.** Karaalp, D., Caliskan, G., and **Azbar,N**. (2013),"Performance Evaluation of a Biogas Reactor Processing Chicken Manure with High Solids Content"Journal of Selcuk University Natural and Applied Science, 768-773.
- **25.** Gonen, C., Gungormusler, M., and **Azbar, N.** (2013): "Continuous Production of 1,3-Propanediol Using Waste Glycerol with Clostridium beijerinckii NRRL B-593 Immobilized on Glass Beads an Glass Rushing Rings", Chem. Biochem.Eng. Q.27
- **26.** Gungormusler,M, Gonen,C., **Azbar, N** (2013): "Effect of cell immobilization on the production of 1,3-propanediol", New Biotechnology, Volume 30, Issue 6, Pages: 623–628

- **27.** Keskin, T., Tutuk, F. and **Azbar**, **N** (2012): "Effect of Pretreatment on the Enhancement of Biodegradation of Olive Mill Effluent for Treatment in an Anaerobic Cross-Flow Filter Reactor", Chem. Biochem. Eng. Q, 26(1), 23-29.
- **28.** Keskin, T., and Guisti, L., and **Azbar, N** (2012): "Continuous biohydrogen production in immobilized biofilm system versus suspended cell culture system versus suspended cell culture", Int. Journal of Hydrogen Energy, 37(2), 1418-1424.
- **29.** Casalia, S., Gungormusler, M., Bertina, L., Fava, F., and **Azbar, N.** (2012):"Development of a biofilm technology for the production of 1,3-propanediol (1,3-PDO) from crude glycerol", Biochemical Engineering Journal, 64, 84-90.
- **30.** Gonen, C, Gungormusler, M, **Azbar**, N. (2012): "Comparative Evaluation of Pumice Stone as an Alternative Immobilization Material for 1,3-Propanediol Production from Waste Glycerol by Immobilized Klebsiella pneumoniae", Appl. Biochem. Biotechnol. DOI 10.1007/s12010-012-9923-1
- **31.** Gungormusler, M., Gonen, C., and **Azbar**, N. (2011): 'Continuous production of 1,3-Propanediol using raw glycerol with immobilized Clostridium beijerinckii NRRL B-593 in comparison to suspended culture' Bioprocess and Biosystems Engineering (BPBSE), DOI: 10.1007/s00449-011-0522-
- **32.** Gungomusler, M., Gonen, C., and **Azbar, N**. (2011): "Use of ceramic-based cell immobilization to produce 1,3-propanediol from biodiesel-derived waste glycerol with Klepsiella pneumoniae", Journal of Applied Microbiology, Vol.11, pages: 1138-1147.
- **33.** Gungomusler, M., Gonen, C., and **Azbar, N.** (2011):1,3-Propanediol Production Potential by a Locally Isolated Strain of Klebsiella Pneumoniae in Comparison to Clostridium Beijerinckii NRRL B593 from Waste Glycerol, Journal of Polymers and Environment, In Press (DOI 10.1007/s10924-011-0326-0).
- **34.** Keskin, T., Aksöyek, E., and **Azbar, N.** (2011): "Comparative analysis of thermophilic immobilized biohydrogen production using packed materials of ceramic ring and pumice stone", Int. Journal of Hydrogen Energy- 36:15160-15167.
- **35.** Gungomusler, M., Gonen, C., and **Azbar, N.** (2011): "Comparison of two natural 1,3-propanediol producers in regards to the effect of glucose usage as a co-substrate", Energy Sources, Part A: Recovery, Utilization, and Environmental Effects. UESO-2011-1106.R3
- **36. Azbar**, **N**., and Cetinkaya Dokgoz, F.T. (2010): 'The effect of dilution and 1-malic acid addition on biohydrogen production with Rhodopseudomonas palustris from effluent of an acidogenic anaerobic reactor' Int. Journal of Hydrogen Energy, 35: 5028-5033
- 37. Pekin, G., Haskok, S., Sargın, S., Gezgin, Y.,, Eltem, R., Ikizoglu, E., Azbar, N., and Vardar Sukan, F. (2010): 'Anaerobic digestion of Aegean olive mill effluents with and without pretreatment', J Chem Technol Biotechnol, 85:976-982
- **38.** Gungormusler, M., Gonen, C., Ozdemir, G. and **Azbar, N.** (2010). 'Fermentation Medium Optimization for 1,3 Propanediol Production Using Taguchi', Fresen. Environ. Bull.Vol.19: No. 12 Vol:19 pages2840-2847.
- **39.** Gungormusler, M., Gonen, C., Ozdemir, G. and A**zbar, N.** (2010):'1,3 Propanediol production potential of *Clostridium saccharobutylicum* NRRL B-643', New Biotechnology, Vol:27, No:6, page:782-788
- **40.** Keskin, T., and Azbar, N. (2010): 'A screening methodology for AOP selection as pre-treatment in the anaerobic degradation of olive mill effluent', Fresenius Environmental Bulletin, Vol.19 No:12b, pages:3209-3216
- **41. Azbar, N.**, Tutuk, F., Keskin, T (2009). 'Effect of Organic Loading Rate on the Performance of an Up-Flow Anaerobic Sludge Blanket Reactor Treating Olive Mill Effluent' Biotech. Bioprocess. Eng. Journal, 14:99-104
- **42. Azbar**, **N.**, Dokgöz, F.T., Keskin,T., Eltem,R., Korkmaz,K.S., Gezgin,Y., Akbal,Z., Oncel,A., and Dalay,M.C. (2009): 'Comparative Evaluation of Bio-Hydrogen Production From Cheese Whey Wastewater Under Thermophilic and Mesophilic Anaerobic Conditions' International Journal of Green Energy, 6: 192-200.
- **43.** Kalmis, E., Kalyoncu, F., and **Azbar, N.** (2009): Evaluation of wild and commercial types of Pleurotus strains for their ability to decolorize Cibacron Black W-NN textile dye' African Journal of Microbiology Research, Vol.3(6), p.325-329, June 2009.
- **44. Azbar**, **N**., Cetinkaya Dokgoz, F.T and Peker, Z. (2009) Optimization of basal medium for fermentative hydrogen production from cheese whey wastewater Int. Journal of Green Energy, 6:371-380.
- **45. Azbar**, N., Cetinkaya Dokgoz,F.T., Keskin,T., Korkmaz,K.S., and Syed,H.M. (2009):'Continuous fermentative hydrogen production from cheese whey wastewater under thermophilic anaerobic conditions', International journal of hydrogen energy, 34:7441-7447.

- **46. Azbar**, **N**., Tutuk,F., and Keskin,T. (2009): 'Biodegradation performance of an anaerobic hybrid reactor treating olive mill effluent under various organic loading rates'. International Biodeterioration & Biodegradation, 63:690-698.
- **47.** Kalmis, E., **Azbar**, N., Yıldız, H., and Kalyoncu, F. (2008). 'Feasibility of using olive mill effluent (OME) as a wetting agent during the cultivation of oyster mushroom, Pleurotus ostreatus, on wheat straw, Bioresource Technology, 99, p.164-169.
- **48. Azbar, N.**, Keskin, T., and Cokay Catalkaya, E. (2008).'Improvement in anaerobic degradation of olive mill effluent (OME) by chemical pretreatment using batch systems', Biochemical Engineering Journal, 38:379-383.
- **49.** Kalmis, E., **Azbar**, **N.**, and Kalyoncu, F. (2008): Evaluation of two wild types of Pleurotus ostreatus (MCC07 and MCC20) isolated from nature for their ability to decolorize Benazol Black ZN textile dye in comparison to some commercial types of white rot fungi: P. ostreatus, P. djamor, P. citrinopileatus, Canadian Journal of Microbiolgy, Volume 54, Number 5, p.366-370.
- **50. Azbar, N.,** Keskin, T., and Catalkaya, E. (2008) Improvement in anaerobic degradation of olive mill effluent (OME) by pre-treatment using H2O2, UV-H2O2 and Fenton's Process, Int. J. of Green Energy, Vol.5, Issue 3, p.189-198.
- **51. Azbar, N.,** Keskin, T., and Yuruyen, A. (2008) 'Enhancement of Biogas Production from Olive Mill Effluent (OME) by Co-Digestion, Biomass & Bionergy, (32), p.1195-1201.
- **52.** Dolgen, D., Alpaslan, M.N., **Azbar, N.,** and Unlu, B. (2007): 'Comparative Evaluation of The Nutrient and Cod Removal Performances of Various Sequentially Operated Biofilm Reactors', Environmental Technology, Vol.28. No:8. p.921.
- **53.** Erbil Kalmış, **Nuri Azbar**, Fatih Kalyoncu (2007). 'Agar-plate screening for textile dye decolorisation by white rot fungi Pleurotus species:Pleurotus cornucopiae var citiniopileatus, P.djamor, P.eryngii, P.ostreatus and P.sajor-caju' Fresenius Environmental Bulletin, Vol.16. No.10, p.1309-1319.
- **54.** Yonar, T, Kadir Kestioglu, **Azbar**, **N** (2006). Treatability studies on domestic wastewater using UV/H₂O₂ process. Applied Catalysis B: Environmental, 67:223-228.
- **55.** Speec, R.E., Boonyakitsombut, S., Kim, M., and **Azbar, N.** Ursillo, P. (2006). Overview of Anaerobic Treatment: Thermophilic and propionate Implications. Wat.Env.Reseach. Vol 78. No 5. pp460-473.
- **56.** Kestioglu, K., Yonar, T., and **Azbar**, **N**. (2004). Feasibility of physico-chemical treatment and advanced oxidation processes (AOPs) as a means of pretreatment of olive mill effluent (OME). Process Biochemistry, 40, p.2409-2416.
- 57. İrtem, E., Kapdaşlı, S., and Azbar, N. (2004)"Coastal Zone Problems and Environmental Strategies" Environmental Management Vol. 35, No. 2, pp. 1–12.
- **58.** Yonar, T., Kaplan Yonar, G., Kestioglu, K. and **Azbar, N**. (2005). Decolorisation of Textile Effluent Using Homogeneous Photchemical Oxidation Processes. Coloration technology, V.121, No.5, p.258-264.
- **59. Azbar**, **N**. and Yonar, T. (2004). Comparative evaluation of a laboratory and full-scale treatment alternatives for the vegetable oil refining industry wastewater (VORW), Process Biochemistry, Volume 39, Issue 7, 31 March 2004, Pages 869-875.
- **60. Azbar, N.,** Yonar, T. and Kestioglu, K. (2004). Comparison of various advanced oxidation processes and chemical treatment methods for COD and color removal from a polyester and acetate fiber dyeing effluent. Chemosphere. 55: pp 35-43.
- **61. Azbar, N** (2004). Upgrading an existing treatment system to adopt cleaner production principals, Journal of Cleaner Production.Vol.12, pp 789-795.
- **62. Azbar**, **N**., Bayram, A., Filibeli, A., Müezzinoğlu, A., Sengul, F., and Ozer, A. (2004). A review of waste management options in olive oil production. Critical Reviews in Environmental Science and Technology. Vol.34. pp 1-39.
- **63. Azbar**, **N**., Ursillo, P., and Speece, R.E (2001). Two-phase, two-stage and single-stage anaerobic process comparison. Journal of Environmental engineering ASCE. Vol.127.No:3, pp 240-248.
- **64. Azbar**, **N**., Ursıllo, P., and Speece, R.E. (2001). Effect of process configuration and substrate complexity on the performance of anaerobic processes, Water Research, Volume 35, Issue 3, February 2001, Pages 817-829.
- **65. Azbar**, **N.**, and Turkman. A (2000). Defluoridation in drinking waters. Water Science and Technology Vol 42. No:1, pp 403-407.
- **66. Azbar**, **N.**, Senel, H., and Speece, R.E. (2000). Simultaneous computer control of pH in multiple environmental laboratory bioreactors. Environmental Technology. Vol. 21. pp 1007-1011.

Refereed International Conference Proceedings

- **1. Azbar, N.** and Rossow, N. (2019) "Boosting of methane production via CO₂ capture in biogas plants and biobattery concept as a new business model", International Conference "Progress in Biomethane-Mobility", October 15th to 17th 2019 Schwäbisch Hall, Germany.
- **2. Azbar, N.**, and Karaalp Duygu (2019) "Waste to Energy Potential and a New Market in Turkey", IRRC-Waste to Energy Congress, Vien, Austria, 14-15 October 2019.
- **3. Azbar, N.**, and Karaalp, D. (2019) "Waste Values: Case Studies", 1st International Conference On Environment, Technology and Management (ICETEM), Nigde, Turkey, 27-29 June 2019.
- **4.** Daglioglu, T., and **Azbar**, **N.** (2019) "Comparative Analysis of the Effect of Cell Immobilization on the Hydrogenothrophic Biomethanation of CO₂", International Design and Engineering Congress: Sustainability, Innovation and Production, Izmir Democracy University, 10-12 October 2019, Izmir, Turkey.
- 5. Kalkan Daglioglu,T., Saygili,B., Ozdemir, G., and Azbar, N. (2018) "Methane Production via CO₂ Utilization with A Novel Anaerobic Bioprocess Configuration using Simulated Gas Mixture and Real Stack Gas Samples", International Spring School on Water Reclamation, and Reuse, 19-20 April 2018, Izmir, Turkey.
- **6.** Daglioglu T., and **Azbar**, **N.** (2018) "Sustainable Campus Strategy-Ege University", "Ecology 2018 International Symposium, 19-23 June 2018, Kastamonu, Turkey
- 7. Karaalp Yavuzyilmaz, D., Keskin, T., and **Azbar, N**. (2018) "Thermophilic Digestion Of Organic Fraction Of Solid Wastes And Some Agro Based Organic" Wastes" ICOEST 4th International Conference on Environmental Science and Technology, Kiev, Ukraine, 19-23 September 2018.
- **8.** Nalakath Abubackar, H., Yazgin,O., Gunay,B., Arslan, K., Keskin Gundogdu, T., and **Azbar, N**. (2018) Biohydrogen Production From Fruit And Vegetable Wastes Through Dark Dry Anaerobic Fermentation Under Thermophilic Condition", 3rd International Hydrogen Technologies Congress (IHTEC-2018), March 15-18, 2018, Alanya/Antalya, Turkey.
- 9. Gunay, B., Yazgin, O., Arslan, K., Nalakath Abubackar, H., Keskin Gundogdu, T., and **Azbar, N.** (2018) "Optimization of Thermal Pre-treatment Conditions By Box-Wilson Method For Dark Fermentative Biohydrogen Production From Fruit and Vegetable Wastes", 3rd International Hydrogen Technologies Congress (IHTEC-2018), March 15-18, 2018, Alanya/Antalya, Turkey.
- 10. Nalakath Abubackar, H., Arslan, K., Keskin Gundogdu, T., Karaalp Yavuzyilmaz, D., Akarsu, K., Duman, G., Yilmazer, A., Dogan, C., Eroglu, D., Ozdemir, G. Yanik, J., and Azbar, N. (2018) "Biohydrogen and Biochar production from fruits and vegetables by dry fermentation and hydrothermal carbonization, respectively: Effect of inoculum to substrate ratio", Biotecnique-2017, Spain.
- **11. Azbar, N**. (2017), "CO₂ Utilisation via a Novel Anaerobic Bioprocess Configuration with Simulated Gas Mixture and Real Stack Gas Samples", C1net Conference II, East Midlands Conference Centre, University of Nottingham, Nottingham, UK, 5-7 November 2017.
- 12. Nalakath Abubackar, H., Yazgin, O., Gunay, B., Arslan, K., Keskin Gundogdu, T., Karaalp Yavuzyilmaz, D., Azbar, N. (2017) "Improved Biohydrogen Production from Fruit And Vegetable Wastes Through Dark Dry Anaerobic Fermentation", International Conference on Engineering Tecnologies (ICENTE'17), Konya, Turkey, 07-09 December 2017.
- 13. Nalakath Abubackar, H., Yazgin, O., Gunay, B., Arslan, K., Keskin Gundogdu, T., Karaalp Yavuzyilmaz, D., Azbar, N. (2017) "Optimization of the Hydraulic Retention Time For A Successful Operation of Biohydrogen Production From Fruit And Vegetable Wastes by Dry Fermentation System", International Conference on Engineering Tecnologies (ICENTE'17), Konya, Turkey, 07-09 December 2017.
- **14.** Arslan, K., Gunay, B., Keskin, T., Nalakath Abubackar, H., and **Azbar, N**. (2017) "Effect of Chemical Pretreatment Methods", International Conference on Engineering Tecnologies (ICENTE'17), Konya, Turkey, 07-09 December 2017.
- **15.** Keskin Gündoğdu, T. Arslan, K., Nalakath Abubackar, H., Duman, G., Akarsu, K. Yanik, J., and **Azbar, N**. (2017) "Determining the Effect of Trace Elements on Biohydrogen Production from Fruit and Vegetable Wastes", 2nd International Hydrogen Technologies Congress, 15-18 March 2017, Adana, Turkey.

- **16.** Akarsu, K., Keskin, T., **Azbar, N**., and Yanik. J. (2017) "Hydrogen Production from Municipal Solid Wastes by Hydrothermal Gasification", 2nd International Hydrogen Technologies Congress, 15-18 March 2017, Adana, Turkey.
- **17.** Daglioglu, T., Erdogan, N., and **Azbar, N**. (2017) "Carbon Footprint Analysis of Ege University In The Frame of Sustainability", 3rd International Conference on Environmental Science and Technology (ICOEST-2017), 19-23 October 2017, Budapest, Hungary.
- **18.** Erdogan, N., Daglioglu, T., Sengur, S. and **Azbar, N**. (2017) "Mapping the Spatial Distribution of Poultry Farms to Support Environmental Decision Making: A Case Study of Izmir City, Turkey", 3rd International Conference on Environmental Science and Technology (ICOEST-2017), 19-23 October 2017, Budapest, Hungary.
- **19.** Akarsu, K., Duman, G., Yilmazer, A., Ucar, S., **Azbar, N** and Yanik, J. (2017) "Valorization of Food Wastes Through Hydrothermal Carbonization" 3rd International Conference on Environmental Science and Technology (ICOEST-2017), 19-23 October 2017, Budapest, Hungary.
- **20.** Eroğlu, D. Vural, C., Keskin, K. Arslan, K. Karaalp Yavuzyilmaz, D., Nalakath Abubackar, H. Ozdemir, G., **Azbar, N.** (2017) "Determination of microbial composition of hydrogen production from food wastes", 3rd International Conference on Environmental Science and Technology (ICOEST-2017), 19-23 October 2017, Budapest, Hungary.
- 21. Arslan, K., Keskin Gundogdu, T., Taban, B., Karaalp Yavuzyilmaz, D., and Azbar, N. (2017) "Use of Dry Fermentation for Co-digestion of Organic Fraction of Municipal Solid Waste (OFMSW) with Chicken manure (CM) (effect of trace elements)", International Conference Progress in Biogas IV (IBBK), 8-11 March, Stuttgart, Germany.
- **22. Azbar, N**. (2017) "Trends in Global Biogas Production: Europe and Turkey", Turkey-UK International Workshop No1: Biobased Approaches On Renewable Energy Technologies, 6-7 April, 2017, Izmir, Turkey.
- 23. Keskin Gundogdu, T., Arslan, K. Karaalp,D., and Azbar, N (2016) "Optimization of Basal Medium Composition for Biogas Production from Organic Fraction of Municipal Solid Wastes (OFMSW) by Placket-Burman Statistical Method", International Conference on Engineering and Science (ICENS-2016), 24-28 May 2016, Sarajevo, Bosnia and Herzegovina.
- **24.** Arslan, K., Keskin Gundogdu, T., Karaalp, D., and **Azbar, N** (2016) "Use of A Novel Bioreactor Configuration In The Form Of High Solid Digestion For Municipal Organic Wastes At Pilot Scale", International Conference on Engineering and Science (ICENS-2016), 24-28 May 2016, Sarajevo, Bosnia and Herzegovina.
- **25.** Karaalp, D., Arslan, K., Keskin Gundogdu, T., and **Azbar, N** (2016) "Long Term Performance Of An Pilot Anaerobic Digester Fed By Municipal Solid Waste & Effect Of Trace Metal Addition" International Conference on Engineering and Science (ICENS-2016), 24-28 May 2016, Sarajevo, Bosnia and Herzegovina.
- **26.** Sahin, E.S., Aksöyek-Pekgüzel, E., Karaalp-Yavuzyilmaz, D., Arslan, D., Keskin-Gundogdu, T., **Azbar, N.** (2015) "Designing the Optimum Basal Medium Composition for Biogas Production from Chicken Manure by Taguchi OA Statistical Method", 7th International Bioengineering Congress, 19-21 November 2015, Izmir, Turkey.
- **27.** Gundogdu T.K., **Azbar N.** and Hallenbeck P.C. (2013)" The Optimization Studies on Selection of Carbon Sources for Photofermentative Hydrogen Production by Four New Isolates"ICOEST 2013, Cappadocia, Turkey
- **28.** Gonen, C., Gungormusler, M., **Azbar**, **N** (2013)"Enhancement of Biological Process with Immobilized Cell Bioreactor for Valorization of Crude Glycerol Came from Biodiesel Production "Istanbul International Solid Waste, Water and Wastewater Congress, 22-24 May 2013, Istanbul, Turkey.
- **29.** Karaalp,D.,and **Azbar, N** (2013) "Influence of Operational Parameters on the Sonolysis of Oxytetracycline(OTC) Degradation " Istanbul International Solid Waste, Water and Wastewater Congress, 22-24 May 2013, Istanbul, Turkey.
- **30.** Aksoyek,E., Gundogdu Keskin, T, **Azbar,N** (2013) "Enhancement of Biohydrogen Production via Thermophilic Cell Culture Immobilized on Glass Beads and Raschig Rings with Different Sizes" Istanbul International Solid Waste, Water and Wastewater Congress, 22-24 May 2013, Istanbul, Turkey
- **31. Azbar, N.**, Keskin, T, Tutuk, F. (2012): "Anaerobic Bioremediation of Raw and Pretreated Olive Mill Effluent (OME) in high rate Bioreactor Configuration", Symposium on "Olive Oil Wastes and Environmental Protection, 16-18 Ovtober 2012, Chania, Greece. p.216-226.

- **32.** Keskin, T., Tutuk, F., **Azbar, N.** (2010): 'Effect of pretreatment on the enhancement of biodegradation of olive mill effluent (OME) and evaluation of an anaerobic cros-flow filter (ACF) reactor treating olive mill effluent (OME)', The 2nd Int. Congress of IAMAW, 17-19 Jun 2010, Izmir, Turkey
- **33.** Sargin, S. Pekin, G., Haskök, S., Gezgin, Y., Eltem R, Ikizoğlu, E., **Azbar, N.**, Vardar Sukan, F. (2010):'Anaerobic digestion of Aegean olive mill effluents with and without pretreatment. The 2nd Int. Conference of IAMAW, 17-19 June 2010, Izmir, Turkey
- **34.** Gönen, Ç., Güngörmüşler, M., Özdemir, G., **Azbar, N.** (2010): Recovery of a value added product from biodiesel production waste as renewable raw material for biopolymer sector.' The 2nd Int. Conference of IAMAW, 17-19 June 2010, Izmir, Turkey
- **35.** Dokgöz Çetinkaya, F.T., **Azbar, N.** (2010):'Hydrogen production potential of Klepsiella pneumonia from various sugars in comparison to mixed anaerobic culture.' The 5th Int. Bioengineering Congress, 16-19 June 2010, Izmir, Turkey
- **36.** Gungormusler, M., Gonen, C., Özdemir, G., **Azbar, N.** (2010): 'Fermentation medium optimization for 1,3 propanediol production usig Taguchi and Box-Behnken experimental designs.' The 5th Int. Bioengineering Congress, 16-19 June 2010, Izmir, Turkey
- **37.** F. Tuba Cetinkaya Dokgöz, **N. Azbar** (2010): 'Correlation between Biohydrogen Production and Formation of Some By-Products (PHB and Carotenoid) During Photofermentative Hydrogen Production.' 5th International Ege Energy Symposium and Exhibition, June 27-30, 2010, Denizli, Turkey
- **38.** Tugba Keskin, Laura Giusti, **N. Azbar** (2010): 'Continuous Biohydrogen Production from Sucrose in an Anaerobic Immobilized Reactor Packed with Ceramic Balls.' 5th International Ege Energy Symposium and Exhibition, June 27-30, 2010, Denizli, Turkey
- **39. Azbar**, **N.,** Tuba Dokgöz, T., Keskin, T., Korkmaz, K.S., Syed, H.M. (2008). Continuous Fermentative Hydrogen Production from Cheese Whey Wastewater under Thermophilic Anaerobic Conditions. IWBT-2008: International Workshop on Biohydrogen Production Technology, 07-08 February 2008. Indian Institute of Technology, Kharagpur, India
- **40. Azbar,** N., Tuba Dokgöz, T., Keskin, T., Eltem, R., Korkmaz, K.S., Gezgin, Y., Akbal, Z., Oncel, S., Conk Dalay, M., Gonen, C., Tutuk, F. (2007). 'Comparative evaluation of bio-hydrogen production from cheese whey wastewater under thermophilic and mesophilic anaerobic conditions', II. International Hydrogen Congress & Exhibition, 13-15 July 2007, Istanbul/Turkey, p. 182
- **41. Azbar, N.**, Keskin, T., Yuruyen, A. (2006). 'Enhancement of Anaerobically Degradable Chemical Oxygen Demand (COD) in Concentrated Industrial Effluents', Biomass for energy: Challenges for Agriculture Congress, 25-26 September, 2006, Brugge, Belgium Poster presentation
- **42. Azbar, N.**, Ursillo, P., Speece, R.E. (2005)."Effect Of Substrate And Bioreactor Type On Biomethane Production As A Renewable Energy Resource", Proceedings of the 1st International Symposium and Exhibition on Environment-Friendly Energy Sources and Technologies,5-7 September 2005, Altınyunus-Çeşme, İzmir-Turkey.
- **43.** Speece, R.E., S. Boonyakitsombut, M. Kim. **Azbar, N.** P. Ursillo., (2005)."Overview of Anaerobic Biotechnology: Thermophilic and Propianate Implications", Annual Water Environment Federation meeting, Washington D.C, USA.
- **44. Azbar, N.** (2005):" Pollution Prevention and Remediation in Olive Mills" Sustainable Solid Waste Management Congress Through Turkey's EU Accession Process, , 25-27 May 2005, Izmir, Turkey
- **45.** Speece, R. E., Kim, M., **Azbar**, **N.** (2005): "Overview of anaerobic treatment: Curcial factors in successful anaerobic propionate metabolism". Proceedings of the Water Environment Federation, WEFTEC 2005: Session 1 -Session 10, pp. 1-36(36), Water Environment Federation.
- **46. Azbar, N.**, Cevilan, I, and Turan, I. (2002), "OOMWW on Central Treatment Plant and Evaluation of the Pretreatment Requirements", Proceedings of the 1st International Workshop on Environmental Problems in Olive Oil Production and Solutions, Editors: N.Azbar, N.Vardar, M.Akın.I.Cevilan., p.1-6, 07-09 June, 2002, Edremit-Balıkesir, Turkey.
- **47. Azbar**, **N.** and Yonar, T. (2002), "Evaluation of Modified Recirculating Sand Filters (MRSF) as an Alternative to Conventional Decentralized Wastewater Treatment Systems for Residential Areas with Small Flows", 5th Specialized Conference on Small Water and Wastewater Treatment Systems, Editors:I.Ozturk, A.Tanik, Vol.1, p.277-282, Istanbul, September 2002
- **48. Azbar, N.**, and Dolgen, D., "Waste Minimization Assessment and Pollution Prevention Strategies For A Paint Manufacturing Plant,": Water Environment Federation, Industrial Wastes Technical Conference, March 1-4, Nashville, TN, USA, 329-337, 1998.

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- **50.** Sengul, F. and **Azbar, N.**, "Pollution Prevention Studies In Cotton Textile Industry In Turkey": Cleaner Technologies and Cleaner Products, NATO/ASI Series, Sustainable Development Vol.2, Budapest, Hungary (Editor: H.M,Freeman, Z.Puskas, R.Olbina), 331-350, 1995
- **51. Azbar, N.** and Turkman, A., "An Overview on HCH Application In Turkey": 1st International HCH-Forum, November 25-26, Zwolle, The Netherlands, 1992

Refereed National Conference Proceedings

- 1. Erdogan, N., Daglioglu, T.S., Keskin Gundogdu, T., and Azbar, N. (2018) "Evaluation of Biogas Potential of Poultry Sector Wastes by Geographical Information Systems in the Framework of Natural Threshold Criteria", 9th.National Solid Waste Management Congress (UKAY 2018), Konya, Turkey.
- **2.** Karaalp,D., and **Azbar**, **N**. (2015), "A Novel Proposal for the Conversion of Chicken Manures into Biomethane", UKAY 2015, 14-16 October 2015, Gaziantep, Turkey
- **3.** Keskin-Gundogdu, T., Taban, T., Arslan, K., Karaalp, D. and **Azbar**, N. (2015), "Comparison of Various Pretreatments Applied to Anaerobic Inoculum for Biohydrogen Production" UHTEK-2015 National Hydrogen Technologies Congress, 20-23 December 2015, İstanbul, Turkey
- **4.** Arslan, K., Keskin-Gundogdu, T., Taban, T., Karaalp, D., and **Azbar, N**. (2015) "Comparative Evaluation of Co-Substrate Effect on Biogas Production from Chicken Manure and Organic Fraction of Domestic Solid Wastes" "18th National Biotechnology Congress, 18-19 December 2015, Konya, Turkey
- **5.** Sefa,E.S., Karaalp,D. Aksoyek-Pekguzel,E., Keskin-Gundogdu, T., and A**zbar, N.**, (2015), "Electricity Production from Organic Wastes", 3rd Energy Efficiency Days, 22-23 January, Izmir,Turkey.
- **6.** Sefa,E.S., Karaalp,D. Aksoyek-Pekguzel,E., Keskin-Gundogdu, T., and **Azbar**, **N**, (2014), "Environmental Friendly and Sustainable Energy Production from Organic Wastes: A New and Developing Sector for Turkey-Biomethane Plants", UKAY 2014, 1-4 September, Van, Turkey.
- 7. Doruk, N., Karaalp, D., and Azbar, N. Dizge, N., Keskinler, B. (2012) "Ammonia Removal for Clean Energy Production from Chicken Manure Using Closed Loop Membrane System".
- **8. Azbar, N.** (2012): "Energy Security and Anaerobic Biotechnology Opportunities", Symposium on Environmental Pollution Priorities in Turkey- VII", 22-23 November 2012, Gebze, Turkey.
- **9.** Dokgoz Cetinkaya, F., **Azbar, N.** (2010): "Photo-fermentative Hydrogen Production from Anaerobic Dark Fermentation Effuent fed by Cheese When using *Rhodopseudomonas palustris*". İTÜ XIIth Industrial Pollution Control Symposium", 16-18 June 2010, Süleyman Demirel Cultural Center, İTÜ Ayazağa Campus, Istanbul, Turkey.
- **10.** Gungormusler, M., Gonen, C., Ozdemir, G., **Azbar, N.** (2010): "Environmentally Friendly Bioplastic Raw Material Production from Waste Glycerol via Biotechnological Methods" İTÜ XIIth Industrial Pollution Control Symposium", 16-18 June 2010, Süleyman Demirel Cultural Center, İTÜ Ayazağa Campus, Istanbul, Turkey
- **11. Azbar, N**., Tutuk, F., Keskin, T. (2010): "Effect of Organic Loading Rate (OLR) on Upflow Anaerobic Slduge Blanket Reactor Treating Olive Mill Effluent". XIIth Industrial Pollution Control Symposium", 16-18 June 2010, Süleyman Demirel Cultural Center, ITU Ayazaga Campus, Istanbul, Turkey.
- **12. Azbar, N.**, Ersoy, Y., Keskin, T. and Dogan, F. (2006). "Bioenergy Production from Organic Fraction of Municipal Solid Wastes: Case Study-Izmir City". Symposium on Environmental Pollution Priorities in Turkey" -CEVKOS V- 11-12 May 2006, Gebze-Kocaeli, Turkey
- **13. Azbar**, **N**., Keskin, T., and Yuruyen, A. (2006)."Evaluation of Enhancement of Biodegradation of Olive Mill Effluent via Co-Digestion". Symposium on Environmental Pollution Priorities in Turkey"-CEVKOS V- 11-12 May 2006, Gebze-Kocaeli, Turkey.
- **14. Azbar, N**. (2005). "Environmental Problems in Olive Oil Production and Deadlocks". Chamber of Chemical Engineers-Symposium on Olive Oil and Olive Pomace", 10-12 November 2005, EBSO, İzmir, Turkey.

- **15. Azbar, N**. (2005). "Pollution Prevention and Source Reduction Approaches in Olive Oil Production". Congress on Sustainable Waste Management in Turkey Accessing to EU, İzmir, Turkey.
- **16.** Eltem, R., **Azbar**, **N.**, İkizoglu, E., and Hancıoglu Haskok, S. (2005). "Enhancement of Biodegradation of Oive Mil Effluent via Physical Chemical Pre-Treatment", Biotechnology 2005-14th National Biotechnology Congress, 31August-2 September, 2005, Eskisehir, Turkey.
- **17. Azbar, N**. (2003). "Olive Oil Production Wastes and Critical Review", Symposium on Environmental Pollution Priorities-IV, Gebze Higher Technology Institute, 9-10 October 2003, Gebze, Turkey.
- **18. Azbar, N.** (2003). "Basics in Industrial Wastewater Treatment", Workshop on Sustainable Development and Botechnology, Ege University, Bioengineering Department, 2-24 October 2003, İzmir, Turkey.
- **19. Azbar, N.**, and Cevilan, I. (2002). "Waste Characterization in Small to Medium Size Slaughterhouse and Dispolal". 8th Industrial Pollution Symposium, 18-22 September 2002, İstanbul Technical University, Maslak, İstanbul, Turkey.
- **20. Azbar, N**. (2002). "Characterization and Treatability of Wastewater from Seka Balıkesir Pulp & Paper Industry 8th Industrial Pollution Symposium, 18-22 September 2002, İstanbul Technical University, Maslak, İstanbul, Turkey.
- **21.** Irtem, E. and **Azbar**, **N**. (2002). "Manyas Bird Paradise and Threats". Turkish Shores -2002: Symposium on Management of Shores and Sea Resources and Development. İzmir, Turkey.
- **22. Azbar, N**. (1999). "Anaerobic Biotechnology in Industrial Wastewater Treatment". Symposium on Environmental Pollution Priorities In Turkey- III, Gebze Higher Technology Institute, Gebze-Kocaeli, Turkey 14-15 October 1999.
- **23. Azbar, N.** (1999), "Use of Anaerobic Processes in Diluted Wastewater Treatment". 3rd. National Environmental Engineering Symposium. 25-26 November 1999, Izmir Turkey.
- **24.** Turkman, A. and **Azbar**, N. (1994). "Environmental Effects of Military Activities". Symposium on Gökova Bay Environmental Problems and Environmental Management. DEÜ Engineering Faculty Publications.
- **25.** Muezzinoglu, A., Turkman, A., Sponza, D. Kovancı, N. and **Azbar, N**. (1992). "Blue Flag Practice in Tourism". Datca Peninsula Environmental Symposium. Datca-Turkey.
- **26.** Turkman, A. and **Azbar**, **N**. (1992). "Relationship between Health and Hardness In Water". 1st National Ecology and Environment Congress, Izmir, Turkey.
- **27.** Turkman, A. and **Azbar**, **N**. (1991). "Evaluation of Groundwater Contamination in Kusadasi". Symposium on Groundwater Resources and Environment". Kusadasi, Turkey.

National/International meetings organized by Dr Nuri Azbar:

- 1. ERANET-BIOGAS MENA Workshop on "Demonstration of dry fermentation and optimization of biogas technology for rural communities in the MENA region", April 2019, Izmir, Turkey
- **2.** PYRODIGEST-Workshop on "Conversion of olive oil wastes through combined pyrolysis and anaerobic digestion: energy, value added product and eco-fertilizers production" 25-26 April 2019, Izmir, Turkey.
- 3. LCA 2015 Workshop on Life Cycle Management, 22-23 October 2015, Izmir, Turkey.
- **4.** BEC-2015: VIIth Bioengineering Congress, Izmir, Turkey.
- **5.** TAKAG 2015-Turkish-German Waste Days, 25-28 May 2015, Izmir, Turkey.
- **6.** The International Congress on Green Infrastructure and Sustainable Socities / Cities(GreInSus'14). May 08 10, 2014. Ege University, Izmir, Turkey.
- 7. 1st German-Turkish Biogas Workshop (19-20 October 2011), Izmir, Turkey.
- **8.** TAKAG 2011- Turkish-German Waste Days, 26-30 September 2011, Stuttgart, Germany.
- **9.** 5th International Bioengineering Congress, 16-19 June 2010, Izmir, Turkey.
- **10.** 2nd International Conference of IAMAW, 17-19 June 2008, Izmir, Turkey.
- 11. Turkish-German Solid Waste Days, 27-29 November 2007, Izmir, Turkey.
- **12.** Workshop on Renewable Bioenergy Alternatives for City Transport Applications (04-05 October 2007, Izmir, Turkey
- **13.** Turkish-German Solid Wastes Days-: Biological Processes for Solid Wastes, 14-15 December 2006, Izmir, Turkey.
- 1st International Workshop on Environmental Problems in Olive Oil Production and Solutions, 07-09 June 2002, Edremit-Balikesir, Turkey.

15. BIOENERGY-2004: National Symposium on Bioenergy Alternatives, 20-22 October 2004, Ege University, Izmir, Turkey.

INTERNAL AND EXTERNAL RESEARCH PROJECT & FUNDING ACTIVITIES

Ongoing and completed projects

Scientific Research Projects

- 1. **Project Director: Prof. Dr. Nuri Azbar**, "Biomethane Production from Organic Wastes Using A Novel High Solid Bioreactor Configuration Under Thermophilic Conditions". Funded by TUBITAK 117Y220 (EU Support via ERANET-MED-BIOGASMENA Project) (2017-2020).
- **2. Project Director: Prof. Dr. Nuri Azbar**, "Hydrogen Production via Dry Fermentation from Organic Fraction of Municipal Solid Waste and Bio-char Production". Funded by TUBITAK MAG 215 M 314 (2016-2018).
- **3. Project Director: Prof. Dr. Nuri Azbar**, "Evaluation of Effects of Trace Element Supplementation and Process Configuration on Biogas Production from Organic Fraction of Municipal Solid Waste". Funded by TUBITAK-CAYDAG 113 Y 534 (EU Support- via COST Programme) 2014-2017
- **4. Project Director: Prof. Dr. Nuri Azbar.** "Clean Energy Production from Chicken Manure via Closed Loop Membrane Bioreactor System". Funded by TUBITAK –CAYDAG-111Y019, (2011-2014).
- **5. Project Director: Prof. Dr. Nuri Azbar.** "Scale-Up for Downstream Processes Used for the Removal of Nitrogen During Biogas Production from Chicken Manure". Funded by TUBITAK –CAYDAG-113Y534, (2013-2014).
- **6. Project Director: Prof. Dr. Nuri Azbar**." Enhancement of Photo-Fermentative Hydrogen Production via Novel Cell Immobilization Techniques". Funded by TUBITAK -ÇAYDAG 111 Y 161 (2011-2014).
- **7. Project Director: Prof. Dr. Nuri Azbar**." Evaluation of Hydrogen Production with Immobilized Cell Bioreactor". Funded by TUBİTAK -ÇAYDAG 109 Y 004 (2009-2010).
- **8. Project Director: Prof. Dr. Nuri Azbar**. "Hydrogen Production from Organic Wastes in Two-Stage Bioreactor Systems". Funded by TUBITAK-CAYDAG-104 Y 298 (2004-2009).
- **9. Project Director: Prof. Dr. Nuri Azbar.** "Enhancement of Biodegradation of Olive Mill wastewater via Physical Chemical and Advanced Oxidation Pre-Treatments". Funded by TUBİTAK-TBAG 104 T 366 (2004-2008).
- **10. Project Director: Prof. Dr. Nuri Azbar.** "Bioenergy Production from Organic Fraction of Municipal Solid Wastes". Ege University Research Fund (BAP) 05 MUH 15(2006-2007).
- **11. Project Director: Prof. Dr. Nuri Azbar.** "Conversion of Biodiesel Production Waste, Glycerin, Into Environment Friendly Biopolymer Raw Material". Funded by TUBITAK and Ege University Research Fund (BAP), TUBITAK-CAYDAG-109Y150, (2009-2012).
- **12. Project Director: Prof. Dr. Nuri Azbar.** "Enhancement of Photo-Fermentative Hydrogen Production via Novel Immobilized Cell Bioreactor". Funded by TUBITAK -CAYDAG 111 Y 161 (2011-2012)
- **13. Project Director: Assoc. Prof. Dr. Nuri Azbar.** "Enhancement of Biodegradation of Olive Mill wastewater via Co-Digestion". Funded by TUBITAK- TOVAG-105O001 and Ege University (BAP) (2005-2007).
- **14. Project Director: Assist. Prof. Dr. Nuri Azbar**. Waste Minimization Potential in Pulp & Paper Industry: Case Study-SEKA Company. Funded by Balikesir Universitty Research Fund. 2001
- **15. Research Assistant Nuri Azbar**, MEDCAMPUS: Wastewater Collection, Treatment And Disposal In The Mediterranean region, Proje No 108, Dokuz Eylül University, Environmental Engineering 1993
- **16. Research Assistant Nuri Azbar**, Project for Inventory and Disposal of Hazardous and Toxic Wastes in Aegean and Mediterranean Regions, Funded by TUBITAK-CAYDAG-KTÇAĞ-123, 1994

Consultancy and Industrial Projects:

17. Project Head Consultant, Prof. Dr. Nuri Azbar, TYH International Textile Company, Establishment of a Green Production System and Green Index System for TYH Textile Production, 2019 (3 months).

- **18. Project Head Consultant, Prof. Dr. Nuri Azbar,** Eskisehir Municipality, Feasibility Study for The Entegrated Management of Animal and Agricultural Wastes in Eskisehir City, (2018-2019).
- **19. Project Head Consultant, Prof. Dr. Nuri Azbar,** Erzincan Municipality, Feasibility Study for The Entegrated Management of Animal Wastes in Erzincan City, (2018-2019).
- **20. Project Head Consultant, Prof. Dr. Nuri Azbar,** PETKIM (Petrochemical Holding Corporation), Feasibility and Treatability Study for PTA Wastewater, Aliaga, Izmir Turkey.
- **21. Project Head Consultant**, **Prof. Dr. Nuri Azbar**, PINAR SUT Dairy Company, Fixing the Operational Problem and Enhancement of Biomethane Production from Cheese Whey and Dairy Wastewater in Pinar Sut Plant in Izmir, (2008-2009)
- **22. Project Director: Assist. Prof. Dr. Nuri Azbar.** "SEKA-Balikesir Pulp & Paper Factory Wastewater and Air Pollution Control Project". Funded by SEKA and Balikesir University Research Fund. (2000 2001).
- **23. Project Director: Assist. Prof. Dr. Nuri Azbar**, Emission Control Report for GÜLTEKİN Dairy Products Corporation. Balikesir University, 2001.
- **24. Project Director: Assist. Prof. Dr. Nuri Azbar**. Emission Control Report for MARMARA CONCORD Mining Company, Balikesir University. 2001.
- **25. Project Director: Assist. Prof. Dr. Nuri Azbar.** Emission Control Report for BOZLAR Chicken and Food Corporation. Balikesir University, 2001.
- **26. Project Director: Assist. Prof. Dr. Nuri Azbar**. Wastewater Characterization and Treatability Study for Balikesir Municipality Slaughterhouse. Balikesir University, 2001.
- **27. Project Management Member: Assist. Prof. Dr. Nuri Azbar**, Assessment of Environmental Impact Reports in the City of Balikesir (60 reports).
- **28. Project Management Member: Assist. Prof. Dr. Nuri Azbar**. Assessment of Environmental Effects of Chicken Farms n Balikesir City, Funded by Balikesir Governor, 1999.
- **29. Project Director: Assist. Prof. Dr. Nuri Azbar.** Wastewater Characterization from ASTOSAN Cheese Whey Powder and Food Company. Balikesir University. 1999
- **30. Research Assistant Nuri AZBAR**. Microbial Evaluation and Toxicity Testing in wastewater from PHILSA-MARLBORO Cigarette Factory. Dokuz Eylül University, Environmental Engineering Department. 1995.
- **31. Research Assistant Nuri AZBAR**, Turkish Technology Development Foundation -TTGV/130/S: Strategies for Ecological Production: Eco-Textile Example for Cotton Textile Sector. Dokuz Eylül University, Environmental Engineering. 1995.
- **32. Research Assistant Nuri AZBAR**, SEKA-Pulp & Paper Factory Wastewater Pollution Project, Dokuz Eylül University, Environmental Engineering, 1994-1995
- **33. Research Assistant Nuri AZBAR**. Preparation of Concept Design for the Treatment of Dalan Chemical Company Wastewater. Dokuz Eylül University, Environmental Engineering .1994
- **34. Research Assistant Nuri AZBAR**, Evaluation of Aegean and Mediterranean Shores for Microbial Pollution and Blue Flag Practice. Funded by the Turkish Ministry of Tourism, Dokuz Eylül University, Environmental Engineering, 1992.

COURSES TAUGHT

Course title Semester taught

Undergraduate level

-	Separation and Purification Industrial Ecology & Recycling	Fall 2018 Fall 2004 –to present
-	Statistics	Fall 2004 –to present
-	Principles of Anaerobic Biotechnology and	Fall 2004 -to present
	Applications	
-	Applied Biostatistics	Fall 2004 –to present
-	Physical Chemistry	Spring 2004- to 2018
-	Biotechnological Applications in Hazardous	Spring 2004- to present
	Waste Disposal	· ·

Graduate level

Statistical Analysis in Bioengineering Fall 2012 - to present Applications Energy Production via Biotechnology Fall 2010 – to present Environmental Biotechnology and Spring 2012- to present **Engineering Applications Advanced Water Treatment** Fall 2012 – to present Principals of Wastewater Treatment Spring 2016-to present Fall 2012-to present Hazardous Waste Management Life Cycle Analysis (LCA) Spring 2016-to present

STUDENT / RESEARCHER SUPERVISING

PhD Students:

- 1. "Life Cycle Assessment of Waste in Olive Oil Industry", PhD Student Aylin Kaynak Duman, Ege University, 2020, Committee Member: **Prof.Dr. Nuri AZBAR**.
- 2. "Evaluation of Soil Contamination and Phytoremediaton in Industrial Zones in Torbali, İzmir, Turkey, PhD Student Demet Elma, Ege University, 2019 (ongoing) Advisor: Prof. Dr. Nuri AZBAR
- **3.** "Ethanol Production from Syngas via Biotechnological Methods", PhD Student Simge Sertkaya, 2019 (ongoing) **Advisor: Prof. Dr. Nuri AZBAR**
- 4. "Clean Energy Production from Chicken Manure via Closed Loop Membrane Bioreactor", PhD Student: Duygu Karaalp, Ege University, Institute of Natural Sciences, Biotechnology Department, 2015, Advisor: Prof. Dr. Nuri AZBAR
- 5. "Comparative Evaluation of Different Immobilized Culture Systems for the Microbial Production of 1,3-Propanediol" PhD Student: Mine Gungormusler, Ege University, Institute of Natural Sciences, Bioengineering Department, 2014. Advisor: Prof. Dr. Nuri AZBAR
- **6.** "Sequential Biohydrogen Production using Dark and Photo-fermentation Methods in Immobilized Bioreactors", PhD Student: Tuğba Keskin Gündoğdu, Ege University, Institute of Natural Sciences, Bioengineering Department. 2013 **Advisor: Prof. Dr. Nuri AZBAR**
- 7. "Evaluation of Downstream Process for the Separation and Purification of 1,3-Propanediol from Fermentation Broth", PhD Student: Seda Öztüre, Ege University, Institute of Natural Sciences, Bioengineerig Department. 2012, Advisor: Prof. Dr. Nuri AZBAR
- **8.** "Development and Evaluation of 1,3-Propanediol Production via Clostridium Beijerinckii in Immobilized Bioreactor" PhD Student: Çağdaş Gönen, Ege University, Institute of Natural Sciences, Bioengineering Department, 2012, **Advisor: Prof. Dr. Nuri AZBAR**
- 9. "Biohydrogen Production in Two-Staged Bioreactors Systems from Cheese Whey", PhD Student: Fatoş Tuba Çetinkaya Dokgöz, Ege University, Institute of Natural Sciences, Biotechnology Department, 2010, Advisor: Prof. Dr. Nuri AZBAR
- **10.** "Advanced Oxidative Treatment of Chlorinated Hydrocarbons", PhD Student: Neval Baycan, Dokuz Eylül University, Environmental Engineering Department, ,2005, (Advisor: Prof.Dr. Füsun Şengül Vice Committee Member: **Assoc. Prof. Dr. Nuri AZBAR**
- 11. "Effects of Treatment Plant Sludges with Fly Ash Mixture on the Sil Properties", PhD Student: Fatma Olcay Kocaer, Uludağ Üniversitesi, Çevre Müh.Böl., 2005, (Advisor: Prof. Dr. Hüseyin S. Başkaya, Committee Member: **Assoc. Prof. Dr. Nuri AZBAR**
- 12. "Treatment of Refractory and Toxic Organic Compounds in Wastewater by Advanced Oxidation Processes (AOPs), PhD Student: Ebru Çokay Çatalkaya Dokuz Eylül University, Environmental Engineering Department, 2005 (Advisor: Prof. Dr. Fikret Kargı, Committee Member: Assoc. Prof. Dr. Nuri AZBAR

- 13. "Phosporus Recovery from Sewage and Sludge', PhD Student: Nazlı Baldan Pakdil, Dokuz Eylül University, Environmental Engineering Department, 2005, (Advisor: Prof. Dr. Ayşe Filibeli; Committee Member: Assoc. Prof. Dr. Nuri AZBAR
- **14.** "Physical-Chemical and Biological Treatment of Olive Oil Mill Wastewaters", PhD Student: Nevzat Tunca, 2004, (Advisor: Prof.Dr. Füsun Şengül, Committee Member: Assoc.Prof. Dr. Nuri AZBAR
- 15. "Effects of Synthetic Organic Compounds on Activated Sludge Systems" PhD Student: Berrak Erol Nalbur, Uludag University, Environmental Engineering Department, 2004 (Advisor: Assoc.Prof. Dr. Ufuk Alkan, Committee Member: Assoc. Prof. Dr. Nuri AZBAR
- 16. "Use of Selectors during the Remediation of Toxic Effects of Synthetic Organic Compounds on Activated Sludge Sytems", PhD Student: Sevil Çalışkan Eleren, Uludag University, Environmental Engineering Department, 2004, (Advisor: Assoc. Prof. Dr. Ufuk Alkan, Committee Member: Assoc. Prof. Dr. Nuri AZBAR
- 17. "Biological Treatment and Toxicity Removal from Wastewaters Containing Chlorinated Aromatic Compounds in Rotating Perforated Tubes and Brush Biofilm Reactor", PhD Student: Serkan Eker, Dokuz Eylül University, Environmental Engineering Department, 2004, (Advisor: Fikret Kargı, Committee Member: Assoc. Prof. Dr. Nuri AZBAR
- 18. "Photo-chemical Treatability of Domestic Wastewater from Small Residence Areas", PhD Student Taner YONAR, Uludağ University, Environmental Engineering Department, 2004, (Advisor: Prof. Dr. Kadir Kestioğlu, Committee Member Assoc. Prof. Dr. Nuri AZBAR
- 19. "Physical-Chemical and Biological Treatment of Olive Oil Mill Wastewaters", PhD Student Nevzat Tunca, Dokuz Eylül University, Environmental Engineering Department, 2004, (Advisor: Prof. Dr. Füsun Şengül, Committee Member: Assoc. Prof. Dr. Nuri AZBAR
- **20.** "Hybrid Reactor Application in Anaerobic Treatment", PhD Student Nurdan BÜYÜKKAMACI (Dokuz Eylül University, Environmental Engineering Department, 2001, (Advisor: Prof. Dr. Ayşe Filibeli, Committee Member: **Assist. Prof. Dr. Nuri AZBAR**
- 21. "Recovery of Phosphorus from Sewage and Sludge", PhD Student. Nazlı Baldan Pakdil, Dokuz University, Environmental Engineering Department (Advisor: Prof. Dr. Ayşe Filibeli; Committee Member; Assoc. Prof. Dr. Nuri AZBAR
- 22. "Sentetik Organik Bileşiklerin Aktif Çamur Sistemine Etkileri", PhD Student. Berrak Erol Nalbur, Uludağ University, Environmental Engineering Department, (Danışman: Doç.Dr. Ufuk Alkan; Committee Member; Assoc. Prof. Dr. Nuri AZBAR
- 23. "Use of Selectors in Remediying the Toxic Effcets of Synthetic Organic On Activated Slduge Systems" PhD Student. Sevil Çalışkan Eleren, Uludağ University, Environmental Engineering Department, (Advisor: Doc. Dr. Ufuk Aklan; Committee Member; Assoc. Prof. Dr. Nuri AZBAR
- **24.** "Advanced Oxidative Treatment of High Strength Wastewater", PhD Student. Ebru Çokay Çatalkaya, Dokuz Eylül University, Environmental Engineering Department, (Advisor: Prof.Dr. Füsun Şengül; Committee Member; **Assoc. Prof. Dr. Nuri AZBAR**
- 25. "Physical-Chemical and Biological Treatment of Olive Mill Wastewaters", PhD Student. Nevzat Tunca, Dokuz Eylül University, Environmental Engineering Department, (Advisor: Prof. Dr. Füsun Şengül; Committee Member; Assoc. Prof. Dr. Nuri AZBAR
- 26. "Effects of Treatment Plant Sludges on Some of the Chemical Properties of Soil After ad Before Stabilization", Fatma Olcay Kocaer, Uludağ University, Environmental Engineering Department, (Advisor: Prof. Dr. Hüseyin Savaş Başkaya, Committee Member; Assoc. Prof. Dr. Nuri AZBAR

Masters Students:

- 1. "Volatile Fatty Acid Production from Waste Glycerol", MSc Student Asli Altuntas, 2019 (ongoing) Advisor: Prof. Dr. Nuri Azbar
- "Purification of Fermentation Broth for VFA, MSc Student, Alpcan Arınç, 2019 (ongoing), Advisor: Prof. Dr. Nuri Azbar
- **3.** "Dry Anaerobic Digesiton of Municipal Soldi Wastes Under Thermophilic Conditions", MSc Student Seda Uslu, 2019 (ongoing), **Advisor: Prof. Dr. Nuri Azbar.**
- **4.** "Biofuel Production from CO₂ Using Novel Bioprocess Configurations", MSc Student Tuba Ceren Ogut, 2019 (ongoing), **Advisor: Prof. Dr. Nuri Azbar**

- **5.** "Evaluation and Feasibility of Waste Market and Industrial Symbiosis in Izmir City", MSc Student Cansu Mayaoglu, 2019 (ongoing), **Advisor: Prof. Dr. Nuri Azbar**
- **6.** "Environment friendly Management of Waste Drugs in Turkey", MSc Student Ceren Kose, 2019, (ongoing), **Advisor: Prof. Dr. Nuri Azbar**
- 7. "Energy Recovery from Anaerobic Digester Effluent via Novel Bioreactor Configuration" MSc Student: Gülizar Çalışkan, Ege University, Institute of Natural Sciences, Biotechnology Department, 2014, Advisor: Prof. Dr. Nuri Azbar
- 8. "Evaluation of 1,3 Propanediol Production in Membrane Supported Bioreactor", MSc student: Fatma Gizem Avcı, Ege University, Institute of Natural Sciences, Bioengineering Department, 2012, Advisor: Prof. Dr. Nuri Azbar
- 9. "Evaluation of Hydrogen Production in an Immobilized Bioreactor" MSc Student: Elif Aksoyek, Ege University, Institute of Natural Sciences, Bioengineering Department, 2011 **Advisor: Prof. Dr. Nuri Azbar**
- 10. "Evaluation of Degradation of Some Pharmaceuticals via Advanced Oxidation" MSc Student: Duygu Karaalp, Ege University, Institute of Natural Sciences, Bioengineering Department, 2010 Advisor: Prof. Dr. Nuri Azbar
- 11. "Evaluation of Microbial Biopolymer Production from Biodiesel Production Waste", MSc Student: Mine Gungormusler, Ege University, Institute of Natural Sciences, Bioengineering Department, 2009, Advisor: Prof. Dr. Nuri Azbar
- 12. "Evaluation of Biological Degradation of Olive Mill Wastewater using various Anaerobic Boprocess Configuration of Different Organic Loading Rates" MSc Student: Fatih Tutuk, Ege University, Institute of Natural Sciences, Bioengineering Department, 2008, Advisor: Associate Prof. Dr. Nuri Azbar
- 13. "Energy Recovery from the Organic Fraction of Izmir Municipality Solid Wastes", MSc Student: Yasemin Ersoy, Ege University, Institute of Natural Sciences, Biotechnology Department, 2007, Advisor: Assoc. Prof. Dr. Nuri Azbar and Prof. Dr. Fethi Doğan
- 14. "Enhancement of Biodegradation of Olive Mill Waste via Co-Digestion" MSc Student: Tugba Keskin, Ege University, Institute of Natural Sciences, Bioengineering Department, 2007, Advisor: Assoc. Prof. Dr. Nuri Azbar
- 15. "Environmental Management Systems (ISO14000 Standards) and Application in Pulp & Paper Industry", MSc Student: Işıl Cevilan, Balıkesir University, Environmental Engineering Department, 2003, Advisor: Assist. Prof. Dr. Nuri Azbar

OTHER PROFESSIONAL ACTIVITIES (Last 3 years) Reviewer for papers submitted for publication to:

- 1. Agricultural Engineering-CIGR Journal
- 2. American Association for Science and Technology
- **3.** Applied Biochemistry and Biotechnology
- 4. Applied Ecology and Environmental Research
- 5. BioEnergy Research-BERE
- **6.** Biomass and Bioenergy
- 7. Biomass conversion and biorefinery
- 8. Biomed Research International-Biotechnology
- **9.** Bioprocess and Biosystems
- **10.** Bioresource Technology
- 11. Biofuels, Bioproducts & Biorefining-Biofbr
- 12. Biotechnology Advances
- 13. The Canadian Journal of Chemical Engineering
- 14. Chemical Engineering Journal
- **15.** Chemical Technology and Biotechnology
- **16.** Environmental Technology
- 17. Environmental Toxicology and Chemistry
- 18. Environmental Science and Pollution
- 19. Environmental Engineering and Science

- **20.** Environmental Research and Technology
- **21.** Heliyon-Elsevier
- 22. International Journal of Chemical Engineering
- 23. International Journal of Hydrogen Energy
- 24. Journal of Chemical Technology and Biotechnology
- 25. Journal of Environmental Management
- **26.** Journal of Green Energy
- 27. Journal of Hazardous Materials
- 28. Journal of Renewable Energy
- 29. Polish Journal of Environmental Studies
- **30.** Renewable Energy-RENE
- **31.** Turkish Journal of Biochemistry
- 32. Waste and Biomass Valorization
- 33. Waste Management