Curriculum Vitae

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General Information

Surname: Godini

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Academic Rank: Professor

Address:

1. Environmental health engineering department, school of health, Alborz University of Medical Sciences, Karaj, Iran.

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Educational Background:

Ph.D. in Environmental Health Engineering, Tarbiat Modares University of Medical Sciences, Tehran, Iran. (2008).

M.Sc. in Environmental Health Engineering, Isfahan University of Medical Sciences, Isfahan, Iran. (1995).

B.Sc. in Environmental Health, Iran University of Medical Sciences, Tehran, Iran. (1992).

Thesis:

PhD thesis title: Biological denitrification of effluent using stabilized bacteria on microbial cellulose obtained from *Acetobacter xylenenum* in an up-flow fixed bed reactor (2008)

Master thesis title: Study of the effects of aeration, return compost, humidity and retention time on the stabilization process and quality of compost from municipal solid waste (1995)

Administrative positions:

2021- 2022: Present: Deputy of Research and Technology, Alborz University of Medical Sciences, Karaj, Iran

2016 -2018: Dean of School of Health, Alborz University of Medical Sciences.

1996 -1999: Dean of School of Health, Lorestan University of Medical Sciences.

2009-2014: Head of Department of Environmental Health Engineering, School of Health, Lorestan University of Medical Sciences.

Teaching Experience

Water Treatment plant design, wastewater treatment plant design, Air Pollution, Water and wastewater process, Environmental microbiology, Environmental Ecology, Industrial Wastewater Management, Environmental Health, Environmental Biotechnology, Hospital health, Disinfectants, Fluid mechanic, Hydraulic, School health, ……

Research Interests

Water and waste water treatment, Air pollution, Environmental microbiology and chemistry, Solid wastes.

Research articles:

A. Papers published in English:

1. Assessment of fungal aerosols dispersion from municipal solid waste disposal Site: A case study of Karaj, Iran, **Journal of Environmental Health and Sustainable Development**, 2023, 8(3), 2039-2049.

2. Health and economic impacts of ambient air particulate matter (PM2.5) in Karaj city from 2012 to 2019 using BenMAP-CE, **Environmental Monitoring and Assessment**, 2022, 194(12), 847.

3. Treatment of aquatic medium containing common and emerging contaminants using an aero-electrochemical process based on graphite cathode and three metal oxides alloy as anode: Central composite design and photo/sono-enhancement, **Chemospher**, 2022, 297, 134129.

4. Effectiveness of UV/SO_3^{2-} advanced reduction process for degradation and mineralization of trichlorfon pesticide in water: identification of intermediates and toxicity assessment, **Environmental Science and Pollution**, 2022, 29(14), 20409–20420.

5. Assessment of indoor and outdoor particulate matters in residential areas: the effects of climatic conditions and building characteristics, **Environmental Engineering and Management Journal**, 2021; 5: 853-862.

6. Water and wastewater as potential sources of SARS-CoV-2 transmission: A systematic review, **Reviews on Environmental Health**, 2021, 36(3), 309–317

7. In Vitro Activity of Disinfectants Against Mold Fungi Isolated from Different Environments of the Children's Medical Center Hospital, Tehran, Iran, **Journal of Environmental Health and Sustainable Development**, 2021; 6(2): 1256-1266.

8. Enhanced degradation of polychlorinated biphenyls with simultaneous usage of reductive and oxidative agents over UV/sulfite/TiO2 process as a new approach of advanced oxidation/reduction processes. **Journal of Water Process Engineering**, 2019; 32, 100983.

9. Study on the relationship between the concentration and type of fungal bio-aerosols at indoor and outdoor air in the Children's Medical Center, Tehran, Iran. **Environmental Monitoring and Assessment,** 2019; 191: 48.

10. Enhancement of biogas production from food wastes in a hybrid anaerobic–aerobic bioreactor by manure addition and lime-pretreatment of recycled leachate. **Environmental Engineering and Management Journal**, 2019 18, 12, 2673-2682.

11. Energy consumption and photochemical degradation of Imipenem/Cilastatin antibiotic by process of UVC/ Fe 2+ / H 2O2 through response surface methodology. **Optik;** 2019, 182, 1194-1203.

12. Implementation of continuously electro-generated Fe_3O_4 nanoparticles for activation of persulfate to decompose amoxicillin antibiotic in aquatic media: UV254 and ultrasound intensification. **Journal of environmental management**. 2018 Oct 15;224:315-26.

13. The impact of air pollutants, UV exposure and geographic location on vitamin D deficiency. **Food and Chemical Toxicology**. 2018 Mar 1;113:241-54.

14. A review of the chemical and biological pollutants in indoor air in hospitals and assessing their effects on the health of patients, staff and visitors. **Reviews on environmental health**. 2018 Sep 25;33(3):231-45.

15. Application of Response Surface Methodology for Optimization of Ammonia Nitrogen Removal from Aqueous Solutions Using Powdered Activated Carbon. **Research Journal of Environmental Sciences**. 2017;11(1):36-47.

16. The efficiency of modified powdered activated carbon for removal of ammonia nitrogen from aqueous solution: a process optimization using RSM (Response Surface Methodology), adsorption isotherm and kinetic study. **Journal of Advances in Environmental Health Research**. 2017 Nov 30;5(3):172-82.

17. Elimination of pathogenic bacteria using electrochemical process containing steel mesh electrode. **Journal of Advances in Environmental Health Research. 2017** Feb 1;5(1):23-8.

18. The removal of the cefixime antibiotic from aqueous solution using an advanced oxidation process (UV/H2O2). **Desalination and Water Treatment**. 2015 Jul 24;55(4):1068-75.

19. Artificial Neural Network-Cuckoo Optimization Algorithm (ANN-COA) for Optimal Control of Khorramabad Wastewater Treatment Plant, Iran. **Civil Engineering Journal**. 2016 Dec 4;2(11):555-67.

20. Evaluation of rainwater quality using factor analysis: case study of Khorramabad in western Iran, **Desalination and Water Treatment**, Inpress.2016.

21. Photocatalytic degradation of phenol in water solutions using zno nanoparticles immobilized on glass, **Journal of Advances in Environmental Health Research**, 2015;3(3):204-213.

22. Bio-aerosols concentrations in different wards of Khorramabad Hospital, Iran, **International Journal of Environmental Health Engineering**, 2015;4(1): 23.

23. Water polishing of phenol by walnut green hull as adsorbent: an insight of adsorption isotherm and kinetic, Journal of Water Reuse and Desalination, 2016, 2016 Dec 1;6(4):544-52.

24. Application of Nano-Crystalline Iranian Diatomite in Immobilized Form for Removal of a Textile Dye, **Journal of Dispersion Science and Technology**, 2016 May 3;37(5):723-32.

25. An association between air quality and COPD in Ahvaz, Iran, **Jundishapur J Chronic Dis Care,** 2015 January; 4(1): e26621.

26. Removal of methylene blue from aqueous solutions using modified clay, **J Bas Res Med Sci**. 2015; 2(1):32-41.

27. Performance of wastewater sludge modified with zinc oxide nanoparticles in the removal of methylene blue from aqueous solutions, **Desalination and Water Treatment**, DOI: 10.1080/19443994.2014.977954, 2014.

28. The application of ZnO/SiO_2 nanocomposite for the photocatalytic degradation of a textile dye in aqueous solutions in comparison with pure ZnO nanoparticles, **Desalination and Water Treatment,** doi: 10.1080/19443994.2014.964781.

29. Response surface methodological evaluation of the adsorption of textile dye onto biosilica/alginate nanobiocomposite: thermodynamic, kinetic, and isotherm studies, **Desalination and Water Treatment,** 2015 Oct 30;56(5):1389-402**.**

30. Water Quality Zoning Based on Water Quality Index and Wilcox Index Using Geographic Information System, **Jundishapur J Health Sci**. 2014 August; 6(3): e21724.

31. Evaluation of River Water Quality using NSFWQI and GIS: A case study of Khorramrood River in Khorramabad, Iran, **Archives of Hygiene Sciences,** 2014, 3(3), 101-111.

32. Application of a compound containing silica for removing ammonia in aqueous media, **American Institute of Chemical Engineers journal,** 2015 Jan;34(1):105-11.

33. The removal of the cefixime antibiotic from aqueous solution using an advanced oxidation process (UV/H_2O_2), **Desalination and water treatment, 2014, In press.**

34. Preparation of nano Iron oxide coated activated sludge granules and its adsorption properties for Cd (II) ions in aqueous solutions, **Resarch Journal of Environmental and Earth Sciences, 2014, 6(5): 259-265.**

35. Evaluation of some parameters of water quality in Khorramabad River by the use of Water Quality Index and Zoning with GIS in the summer and autumn of 2012. **Arch of Hygiene Sciences**, accepted paper.

36. Process optimization for fluoride removal from water by *Moringa Oleifera* seed extract, Fluoride, 2014, 47(2)152-160.

37. Optimisation of the operational parameters during a biological nitrification process using response surface methodology, **The Canadian Journal of Chemical Engineering**, Vol 9999, 2013, 1-10.

38. Denitrification of high salinity, high nitrate wastewater using clinoptilite in a packed bed bioreactor, **E3 Journal of Environmental Research and Management** Vol. 3(2). pp. 031-036, March, 2012.

38 Electrochemical generation of hydrogen peroxide using carbon black-, carbon nanotube-, and carbon black/carbon nanotube-coated gas-diffusion cathodes: effect of operational parameters and decolorization study, Res Chem Intermed, (2013) 39:4277–4286.

39. Heterotrophic Biological Denitrification Using Microbial Cellulose as Carbon Source, **Journal of Polymers and the Environment**, (2011), 19(1): 283-287.

40. Organic Matter Removal Under High Loads in a Fixed-Bed Sequencing Batch Reactor with Peach Pit as Carrier, **American Institute of Chemical Engineers journal**, 2013; 32(3): 681-687.

41. Optimization of combined photocatalytic involving immobilized ZnO nanoparticles and electrochemical processes for ammoniacal nitrogen removal from aqueous solutions , ***J. Mater. Environ. Sci****. 3 (5) (2012) 955-966.*

42. COD removal from Synthetic wastewater containing Azithromycin using combined coagulation and a fenton-like process, **Environmental Engineering and Management Journal**, 2012.

43. Photoelectrochemical treatment of ammonium using seawater as a natural supporting electrolyte , **Chemistry and Ecology**, 2013; 29(1): 72–85.

44. Isolation and characterization of a novel denitrifying bacterium with high nitrate removal: *Pseudomonas Stutzeri*, **Iranian Journal of Environmental Health Science and Engineering**, (2010), 7(3): 313-318.

45. Nitrate removal from aqueous solution using $MgCl_2$ impregnated activated carbon, **Environmental Engineering and Management Journal (**2010), 9(3): 449-452.

46. Biological denitrification by *Pseudomonas stutzeri* immobilized on microbial cellulose.**World Journal of Microbiology and Biotechnology** (2008) 24:2397–2402. (ISI)

47. High Nitrate removal in a packed bed bioreactor using microbial cellulose. **Research Journal of Environmental Sciences** (2008) 2(6): 424-432. (ISI)

48. Application of impregnated almond shell activated carbon by zinc and zinc sulfate for nitrate removal from water. **Iranian Journal of Environmental Health Science & Engineering**, 2008;5(2) : 125-130 (ISI)

49. Adsorption of Mercury from Synthetic Solutions by an *Acetobacter xylinum* Biofilm. **Research Journal of Environmental Sciences**, 2008, 2(5): 401-407. (ISI)

50. Photochemical decomposition of gaseous toluene by TIO2 nanoparticles coated on activated carbone, **Iranian Journal of Environmental Health Science & Engineering**, 2008, 5(4): 305-310(ISI)

51. Biological phosphorus removal in a high performance single reactor, **Environmental Engineering and Management Journal**, July 2008, Vol 7, No. 4, 369-372. (ISI)

52. Microbial cellulose as support material for immobilized of denitrifying bacteria, **Environmental Engineering and Management Journal**, 7(5), 589-594.

53. Nitrate Removal by $FeCl_3$ Supported Carbon Active From Aqueous Solution, **Environmental Science**: An Indian Journal, January 2007 Vol. 2(1). 14-19.

B: Papers published in Persian:

1. Evaluating the impacts of environmental factors and compliance with health guidelines on the rate and trend in Covid-19 infection in Alborz province, 2019, **Iranian Journal of Health and Environment**, 2023, 16(1):

15-30.

2. Assessment of surface and groundwater quality of Latian dam catchment using water quality index, **Journal of Environmental Health Engineering,** 2021, 8(4): 391-411.
3. Two-Step Ammonia Nitrogen Removal from Kermanshah Petrochemical Effluent Using Native Bacteria Immobilized on Granular Activated Carbon, **Journal of Environmental Science and Technology**. 2018 Jun 22;20(2):1-5.

4. Behdarvand N, Godini E, Godini H, Khoramabadi GS. Study of Effective Factors on E. coli Removal from Water Using Solar Radiation Disinfection. **Journal of Environmental Health Engineering**. 2017 Jan 1;5(1):73-82.

5. Investigating the impact of training on water consumption saving in Khorramabad in 2015, **Journal of Environmental Health Engineering.** 2017;4(1):1-9.

6. Ammonia removal from effluent using isolated native bacteria from Kermanshah Petrochemical Industries effluent, **Journal of Environmental Science and Technology.** 2017, Sep 23;19(3):38-48.

7. Comparison between Solar Radiation and Mother Chlorine for Water Disinfection and E. Coli, 2017 Oct 23;13(6):651-64. **Jundishapur Scientific Medical Journal** . Jan/Feb2015, Vol. 13 Issue 6, p651-664.

8. Removal of methylene blue from aqueous solutions using modified clay. **Journal of Basic Research in Medical Sciences**. 2015 Mar 15;2(1):32-41.

9. Survey of heavy metal pollution (copper, lead, zinc, cadmium, iron and manganese) in drinking water resources of Nurabad city, Lorestan, Iran 2013. **yafte**. 2016;18(2).

11. Performance of Clarifier Recycled Sludge as Coagulant Aid to Poly-Ferric Sulfate in Terms of Removal Efficiency of Turbidity and Total Coliform from the River of Bahmanshir, Abadan, Iran. **Health System Research,** 2016 , Volume 13 , Number 2.

12. Basiri H, Godini H, Omidi-Khaniabadi Y. Study of indoor and ambient air fungual bioaerosols and its relation with particulate matters in a hospital of khorramabad. **yafte.** 2015;17(4).

13. Haghizadeh A, Godini H, Khorramabadi S. The performance evaluation of Khorramabad wastewater treatment plant by using artificial intelligence network. **Yafte.** 2016;18(3).

14. Indoor and Outdoor Air Pollutants at Residential Houses in Khorramabad, 2012. **Journal of Mazandaran University of Medical Sciences**. 2015 Feb 15;24(121):392-9.

15. Health evaluation of drinking water regarding to scaling and corrosion potential using corrosion indexes in Noorabad city, Iran**. yafte.** 2016;18(1).

116. Removal of P-chloro Phenol from Aqueous Solutions Using Chestnut Shell Modified by Sulfuric Acid: Study of Adsorption Kinetic and Isotherm. **Journal of Environmental Health Enginering.** 2015;2(4):319-31.

17. Study of Pyrocatechol Absorption Efficiency from Aqueous Solutions Using Pumice (Natural and Modified with Hydrochloric Acid). **Journal of Health System Research.** 2017; 4:434-41.

18. Ammonia removal from effluent using isolated native bacteria from Kermanshah Petrochemical Industries effluent. **Journal of Environmental Sciences and Technology**. 2017; 19(3):38-48.

19. Application of Immobilized Silica Nanopowder within Alginate for Cadmium Adsorption from Aqueous Solutions. **Journal of Water and Wastewater**. 2015; 26(3):2-10.

20. Study of bacteria, fungi and biomass in airborne dust in Khorramabad in summer and autumn 2012. Yafteh 2015; 17(1):43-54.

21. Comparison of photocatalytic process of silica-zinc oxide with photocatalytic process of zinc oxide in decolorization and COD removal. **Yafteh**, 2014; 16(3):34-43/

22. Assessing Performance of Walnut Green Hull Adsorbent in Removal of Phenol from Aqueous Solutions. **Iranian Journal of Health and Environment**, 2014; 7(2): 265-276.

23. Study of water quality of Khorram River with water quality index (NSFWQI) and its zoning with Geographic Information System (GIS), **Yafte,** 2013, 15(5): 83-92.

24. The study of advanced oxidation process (UV/H_2O_2) performance in removal of the ceftriaxone antibiotic from aqueous solution. **Yafteh**, 2014; 16(1): 23 – 31.

25. Removal of Toluene from the Airflow Using Catalytic Ozonation. **Journal of Health System Research**, 2014; 9(12):1346-1356.

26. The relationship between dust storm pollution concentration and burden of hospital admissions for respiratory and heart diseases in hospitals of Kermanshah city in 2011. **Journal of Kermanshah University of Medical Sciences**, 2013; 17(7), 442.

27. Study of ZnO nano particles photocatalytic process efficiency in decolorization of methylene blue and COD removal from synthetic wastewater. **Yafteh**, 2013:14(5), 51 – 61.

28. The effect of metronidazole on biological denitrification of *Pesudomonas stutzeri* in wastewater. **Yafteh**, 2012; 14(4): 79 – 94.

29. Methylene Blue Using UV Radiation in Study of the Effective Parameters on Decolorizationof Methylene Blue Using UV Radiation in the Presence of Immobilized Catalyst. **Ilam University of Medical Science**, 2013; 21(1), 36 – 46.

30. Sensitivity Coefficient and Death Kinetics of *Escherichia Coli* and *Staphylococcus Aureus* to Zinc Oxide and Copper Oxide Nanoparticles. **Journal Of Isfahan Medical School**, 2012; 30(200): 2.

31. Nitrate removal from water using denitrifier-bacteria immobilized on activated carbon at fluidized-bed reactor. **Yafteh**, 2012; 14(3); 15.

32. Hydrogenotrophic denitrification of water using zero valent iron nano particles. **Iran Journal of Health and Environment.** 2010; 3(2): 143-153.

33. Comparison of ethanol, methanol and succinate effects as carbon sources on effluent biological denitrification. **yafte**. 2008; 10 (1): 63-70.

34. Petroleum wastes and its treatment and disposal methods. **HSE**, 2005; 1(3).

35. Study the effect of aeration rate on the quality of the final compost product, **Journal of Isfahan University**, 1997.

36. Water chlorination efficiency of Khorramabad city. **Yafte**, 1996.

37. Study of health facilities in primary schools in Khorramabad. **Yafte**, 1996.

38. Performance of co`mposting process (by Windrows method) in removing microorganisms. **Yafte**, 1995.

C: Abstracts Presented & Posters in Scientific Conferences

1. Study of Echerichi coli removal from polluted water by solar radiation. **21th International Microbiology Congres**s, August 17-20, 2020, Tehran, Iran.

2. Removal of Dissolved Hexavalent Chromium using Synthetic Biopolymer, 2011 2nd **International Conference on Environmental Science and Technology**, IPCBEE vol.6 (2011) © (2011) IACSIT Press, Singapore.

3. Experimental design and response-surface modeling for optimization of fluoride removal from water by *Moringa Oleifera* seed extract, the XXXth Conference of the International Society for Fluoride Research September 5–8, 2012; Szczecin, Poland

4. Municipal Solid Waste Management in KhoramAbad, **World Academy of Science, Engineering and Technology**, 62, 2010., Malysia

5. Denitrification of Wastewater Containing High Nitrate Using a Bioreactor System Packed by Microbial Cellulose, **World Academy of Science, Engineering and Technology,** 62, 2010. Malysia

6. Effect of Influent COD on Biological Ammonia Removal Efficiency, **World Academy of Science**, Engineering and Technology, 62, 2010. Malysia

7. Effluent biological denitrification (bench scale) by microbial cellulose as carbon source, **5th IWA Leading-Edge conference on water and wastewater Technologies**, 1-4 June 2008 Zurich, Switzerland.

8. Adsorption of nitrate on impregnated granular activated carbon by zero-valent iron, **IWA DIPCON**, Thailand, 25-29 August 2008.

9. Elimination of *E.coli* using electrochemical process via steel mesh electrode, **1st International Conference on Environmental Health and Sustainable Development**, 22-24Oct 2016, Tehran. Iran.

10. Study of Escherichia coli removal from polluted water by solar radiation, **21th International Congress of Microbiology of Iran**, 2020.

11. Evaluation of drinking water disinfection potential using solar radiation (SODIS) in deprived areas and in emergency situations, **18th National Conference on Environmental Health**, December 14-16, 2015, Shiraz University of Medical Sciences, Iran.

12. Study of photocatalytic degradation of phenol from saline wastewater using zinc oxide nanoparticles fixed on glass, **18th National Conference on Environmental Health**, December 14-16, 2015, Shiraz University of Medical Sciences, Iran.

13. Evaluation of the efficiency of activated carbon modified with sulfuric acid / sodium nitrate / potassium permanganate in the removal of ammonia nitrogen from aqueous solutions - Study of isotherm and reaction kinetics, **18th National Conference on Environmental Health**, December 14-16, 2015, Shiraz University of Medical Sciences, Iran.

14. Removal of Natural Organic Matter from Water Using Electrocoagulation and inhanced Coagulation Processes, **17th Iranian National Conference on Environmental Health**, December 10-18, 2014, Bushehr University of Medical Sciences.

15. Study of the efficiency of photocatalytic process of zinc oxide nanoparticles by thermal stabilization method in the removal of methyl blue dye by UVC radiation, **17th National Conference on Environmental Health** of Iran, December 10-18, 2014, Bushehr University of Medical Sciences.

16. Study of physical and chemical properties of particles smaller than 10 microns (PM_{10}) in the air of Khorramabad, **15th National Conference on Environmental Health of Iran**, November 9-11, 2012, Gilan University of Medical Sciences.

17. Removal of humic acid from water using iron-coated activated carbon, **14th National of Environmental Health Conference** of Iran, 10-12 November 2011, Yazd University of Medical Sciences.

18. Removal of sulfate from water by sulfate reducing bacteria immobilized ingranular, **first international and 12 th Iranian Congress of Microbiology**, 23-26 May 2011, Kermanshah, Iran.

19. Removal of high nitrate concentration from water using bacteria isolated from Razi Petrochemical effluent, **11th Iranian Congress of Microbiology**, May 2010, Gilan University of Medical Sciences.

20. Nitrate removal from water using a combination of biological methods and the use of zero capacity iron, **12th National Conference on Environmental Health**, November 2009, Shahid Beheshti University of Medical Sciences.

21. Performane of activated carbon produced from almond shell and modified with ferric sulfate in nitrate removal from water, **9th National Conference on Environmental Health**, Isfahan University of Medical Sciences, November 6-17, 2006.

22. Potential of municipal solid waste recovery at the source of production, **National Seminar on Environmental Health**, Mazandaran University of Medical Sciences, November 2003.

23. Study of the effect of moisture on the stabilization process and quality of compost from municipal solid waste in Isfahan, **National Seminar on Recovery and Conversion of Materials**, Isfahan, 13-14 May 1997.

24. Study of bacteriological quality and the performance of chlorination in water resources of Khorramabad, **the second national seminar on water hygiene**, 5-6 September 1976.

25. Study of chlorination efficiency of water resources in Khorramabad, **National Seminar on Health and Development**, March 23-28, 2001.

26. The effect of agricultural development on water resources pollution, **National Seminar on Health and Development**, March 21-22, 2001.

27. The effect of agricultural development on water resources pollution, **National Seminar on Health and Development**, March 21-22, 2001.

28 Comparison of Alum and PAC in Water Treatment, **Provincial Conference on Environmental Health**, Khorramabad, March 26-27, 2002.

29. The performance of BTEX Compounds in Air Pollution, **Provincial Conference on Environmental Health**, Khorramabad, March 28, 2003.

30. Candida yeast infection in local yogurt, **Provincial Conference on Environmental Health**, Khorramabad, March 8, 2003.

31. Investigating the current status of drinking water quality in the distribution system and the role of the Water and Sewerage Company and the existence of a distribution network in improving its quality (**Health Sciences Seminar**), Shahid Beheshti University of Medical Sciences, 2017.

32. Evaluation of the efficiency of photocatalytic process of zinc oxide nanoparticles by thermal stabilization method in the removal of methylene blue dye with UVC rays, **National Seminar on Environmental Health**, Tabriz, 2015.

Books:

Petroleum wastes bioremediation

Patent:

Nitrate removal from water using stabilized bacteria on microbial cellulose (Patent No. 56861)