Tahereh Jafari, PhD

Home Address:
Al Ghushbah, Suhar, Oman
t.jafary@gmail.com; tahereh@imco.edu.om

Assistant Professor, Engineering Department
International Maritime College Oman (IMCO)
ResearchGate, Google Scholar, Academic Email

Short Bio

Tahereh Jafari is an assistant professor of Chemical Engineering at the Engineering Department, International Maritime College Oman, National University of Science and Technology. Studied chemical engineering major with a minor in oil and gas in her BS, she pursued her MS in the Advanced Chemical Engineering field. Her Ph.D. research was on the development of eco-friendly catalysts for green hydrogen generation in electrochemical systems at the National University of Malaysia. She has pursued her research path on desalination and generation of value-added products in bioelectrochemical systems as a postdoctoral fellow at Sultan Qaboos University. Besides her academic activities, she was engaged in R&D projects, e.g., a pilot-scale project on syngas conversion to ethanol as the project manager for 6 years. She has authored three book chapters, more than 30 peer-reviewed journal articles, and more than 30 conference papers. Currently, she is the editorial board member of Biofuel Research Journal and Advisory board member of Heliyon Journal-Chemical Engineering section and the reviewer of different peer-reviewed journals in Elsevier, Springer and etc. She and her team have received more than 15 awards at national and international levels, such as Startup ideas, National Research Award in 2020, 2021 and 2022, Falling Wall lab in 2021 and 2022, etc. Her research interests are focused on bioelectrochemical systems, hydrogen, bioenergy, desalination, pyrolysis, fermentation, biosensor, and wastewater treatment.

Education

Ph.D.	**Hydrogen energy, National University of Malaysia (UKM), Malaysia** Dissertation: Catalyst development for green hydrogen generation in a novel electrolysis cell Committee: Prof. Dato' Ir. Dr. Wan Ramli Wan Daud, Prof. Byung Hong Kim, Prof. Dr. Jamaliah Md Jahim	*Sep2013-Feb2018*
Master	**Chemical Engineering, Babol University of Technology (BNUT), Iran** (GPA: Grade A) Thesis: Modeling and Experimental study on the impact of type and concentration of feedstock on the electrical performance of Fuel cell Supervisor and Advisor: Prof Asghar Ghoreyshi, Prof Ghasem Najafpour	*2008-2011*
Bachelor	**Chemical Engineering, University of Mazandaran, Iran** (GPA: Grade A) Supervisor: Prof Asghar Ghoreyshi FYP Title: Design of Benzene Toluene and Xylene Separation Process Internship: Tehran Oil Refinery (atmospheric and vacuum distillation Unit)	*2004-2008*
Diploma	**Mathematics and Physics** (GPA: Grade A) **English, Iran Language Institute (ILI)**	*2004* *2005*

Research Experience

Postdoctoral Fellow, Sultan Qaboos University (SQU), Oman	*2018-2020*
Graduate Research Assistant, national University of Malaysia (UKM), Malaysia	*2015- 2018*
Graduate Research Assistant, Babol Noshirvani University of Technology (BNTU), Iran	*2009- 2011*
Undergraduate Research assistant, Mazandaran University, Iran	*2007- 2008*

Teaching Experience

Assistant Professor, Engineering Department, *International Maritime College Oman (IMCO), National University of Science and Technology* Courses: Process Equipment Design and Reaction Engineering, Material Balance and Chemical Process calculations, Process Mechanical Equipment; Process System Energy Balance; Process Simulation & Control Using Universal dynamic simulation GSE's Envision software; Process Troubleshooting Using Universal dynamic simulation GSE's Envision software	*2020- Present*
Postdoctoral fellow	*2018-2020*
Graduate assistant, UKM, Malaysia	*2015-2018*

Teaching Assistant in Chemical Engineering Department, Babol Noshirvani University of Technology (BNUT), Iran *2008-2011*
Courses: Process Control 1& 2, Oil Refinery Product, biotechnology labs

Tutor of chemical engineering courses. *2006-2012*
Thermodynamic, Unit Operation, Process Control, introduction to chemical engineering, Chemistry for chemical engineers, Biotechnology (undergraduate level), Physics, Chemistry, Mathematics, English

Professional Experience in Industry:

Project manager and Bioprocess Engineer *in Hexagon Synergy (M) Sdn Bhd Company* *Jun 2012- Aug 2016*
Job scopes: Preparation, maintenance and scaling up the biocatalyst; Processing bioreactors in lab and pilot scales; Processing pilot-scale CO2 absorption and desorption units; Processing pilot-scale evaporation unit; Processing pilot-scale distillation unit; Handling respective analyses in lab and pilot plant;

Internship: *Trainee in Tehran Oil Refinery (Atmospheric and Vacuum Distillation Unit)* *3 months*

Awards and Honors

1. Startup Ideas Competition (Manafa), Ministry of Higher education, Research and Innovation (MOHERI), Oman, 2023 (Supervisor)
2. National Research Award, Ministry of Higher education, Research and Innovation (MOHERI), Oman, 2022
3. Three minutes project presentation, First and second places, IMCO, 2022 (Supervisor)
4. Falling Walls Lab Oman competition, First Place (selected as the representative of Oman), 2022 (Supervisor)
5. Best Research Mentor Award, IMCO, 2022
6. Abu Dhabi University Research Competition, Engineering Category, 2022, First Place (Supervisor)
7. Abu Dhabi University Research Competition, Innovation category, 2022, Third Place (Supervisor)
8. National University Research Competition, 2022, First Place (Supervisor)
9. Dhofar University Student Research Competition, 2022, Second Place (Supervisor)
10. Omani Young Water Researchers Award, Middle East Desalination Research Center, Dec 2021, Second Place (Supervisor)
11. Three minutes project presentation, Second place, IMCO, 2021 (Supervisor)
12. National Research Award, Ministry of Higher education, Research and Innovation (MOHERI), Oman, 2021
13. Falling Walls Lab Oman competition, First Place (selected as the representative of Oman), 2021 (Supervisor)
14. National Research Award, Ministry of Higher education, Research and Innovation (MOHERI), Oman, 2020
15. Salalah award for water and wastewater, Research Council of Oman, Ministry of Higher Education, First Place, June 2020
16. Research and innovation award for water science, Research Council of Oman, Ministry of Higher Education, Second Place, March 2020
17. EJAKATA Competition, National University of Malaysia, Champion, 2015
18. Top-Five students at Babol Noshirvani University of Technology, 2011
19. Babol Noshirvani University of Technology, Elite scholarship, 2008
20. Top-three students at University of Mazandaran, Second Place, 2008
21. Top student at Taghavi Pre-university School, First Place, 2004
22. Top student at Sherafat High School, First Place, 2003

P. O. Box: 532| PC: 322|Suhar| International Maritime College| Phone: +968-95839569|Email: t.jafary@gmail.com

INSTITUTIONAL AND PROFESSIONAL SERVICES

a) Professional International Activities:

Reviewer in: Journal of Cleaner production, Biofuel Research Journal, Scientific Reports, Biocatalysis and Agricultural Biotechnology, International Journal of Environmental Science and Technology (JEST), Journal of Environmental Chemical Engineering	*Present*
Member of Iranian Association of chemical engineers	*2021-Present*
Assistant Editor in Biofuel Research Journal	*Mar2020-Present*
Advisory board member of Heliyon Journal-Chemical Engineering section	*Nov2022-Present*
Editor in Chief's Assistant in International Journal of Engineering (IJE)	*2011-June 2012*
Scientific Committee of International Conferences	*Going*

b) Institutional Service Activities:

Member: ABET Accreditation Committee, Engineering Department (IMCO)	*2021-Present*
Officer: Academic Development Office, IMCO	*Sep 2020 -Present*
Member: Departmental Exam Committee, Engineering Department (IMCO)	*2021-Present*
Member: Department Curriculum Committee, Engineering Department (IMCO)	*2020-Present*
Champion: Accreditation Board for Engineering and Technology (ABET) Students' Outcomes (SOs)	*2020-Present*
Year Coordinator-Engineering department	*Feb 2020 -Present*
Final Year project Coodinator	*Sep 2022-Present*
Member: Engineering Department Monthly Colloquium Committee	*Jan 2021 -Present*
Coordinator: Engineering Department New Staff Training	*2020-Present*
Lab coordinator (Petrochemical lab and Dynamic simulation lab)	*present*

Research Interests:

Energy	Water & Wastewater	Environment
Modern Renewable Energy Sources: Biomass; Biosensors; Hydrogen; Biofuels	Water & Wastewater Treatment; Value-added product recovery, Circular Economy	Real-Time Water Quality Monitoring; Life Cycle Assessments

Funding and Grants:

No	Title of the Project	Funding body	Role	Date
1.	Fabrication of low-cost microbial fuel cell for wastewater treatment and bioenergy production	IMCO	PI	2020
2.	Process Modelling and Techno-Economic Analysis of Membrane Distillation as an Alternative to Reverse Osmosis in Seawater Desalination	IMCO	Co-I	2020
3.	Synthesis of Chitosan from Sea Waste in Sohar	IMCO	Co-I	2021
4.	A Comprehensive Study on Valorization of Spent Coffee Grounds into Activated Carbon in Oman; A Step Towards Pilot-scale Implementation	MOHERI (Ministry of Higher Education, Research and Innovation)	PI	2021
5.	Removal of Toxic Heavy Metals from Industrial Wastewater by Activated Waste Tire	IMCO	Co-I	2021
6.	Synthesis of plastic Oil and its Utilization in a compression Ignition Engine to Investigate Emission, Combustion and Performance features	MOHERI	Co-I	2021
7.	Removal of Heavy Metals and toxic organics Using Thermally and Chemically Modified Lignocellulosic biomass and clay	IMCO	Co-I	2022
8.	Simultaneous green hydrogen generation, decentralized wastewater treatment and desalination in a novel reactor design of microbial electrolysis desalination system	IMCO	PI	2022

9.	Moving toward sustainability by a novel, low-cost and integrated electrolysis-desalination system for simultaneous green hydrogen generation, wastewater treatment, and zero-waste desalination	MOHERI	PI	2022
10.	Hydrodynamic cavitation and advanced oxidation for enhanced aerator performance in industrial and municipal wastewater treatment plants	MOHERI	Co-PI	2022
11.	Fabrication of Low-cost and eco-friendly MFC-based biosensor for real-time monitoring of chemical oxygen demand in industrial wastewater plants	MOHERI	PI	2022
12	Novel 3D Designed sand filter for CO2 Capture and Conversion into Methanol	MOHERI	Co-PI	2022
13	Synthesis of Chitosan from Marine Waste as green corrosion inhibitor for industrial applications	MOHERI	Co-I	2022
14	An experimental probe to ascertain the ignition delay of fuels on employing hot-plate evaporation setup	MOHERI	Co-I	2022

Some of the workshops passed with certificates

Coaching and Mentoring:

- ✓ Coaching and Mentoring Overview
- ✓ Coaching Peers
- ✓ Coaching with GROW
- ✓ Delegation

Giving and Receiving Feedback:

- ✓ Counseling and Teaching At-Risk Students Online Professional Development Workshop

Business Data Analysis & Visualization:

- ✓ Mastering Data Analysis
- ✓ Understanding Data Analysis
- ✓ Creating a data frame

Creating High Performance:

- ✓ Effective Delegation
- ✓ 7 Ways to Delegate Work
- ✓ How to Delegate Effectively

Learning and Development in Organizations:

- ✓ Training and Development overview
- ✓ Support Employee Development
- ✓ Organizing Your Workspace
- ✓ Train Your Brain for Success
- ✓ Learning & Development: Evolving Strategies
- ✓ How To Create a Personal Development Plan
- ✓ Your Development - Organisational Objectives

Process Excellence:

- ✓ ISO 14001 Environmental Management Systems
- ✓ ISO 9001 Quality Management Systems

Project Management Tools & Techniques:

- ✓ Multitasking

***Stress Management*:**

- ✓ Minimizing Workspace Stress

Manufacturing Safety:

- ✓ Chemical Safety
- ✓ Hazardous Chemical Information Awareness
- ✓ Work Practices and Engineering Controls
- ✓ Cleaning Up Small Chemical Spills

Customer Service

- ✓ Communicating effectively
- ✓ Expert insights on essential customer service
- ✓ Dealing with customer service
- ✓ Controlling Conflict, Stress and Time

Polishing Your Skills for Excellent

- ✓ Interacting with Customers

Microsoft-Office:

Excel 2016:

- ✓ Overview of Excel
- ✓ Excel Settings
- ✓ Microsoft Excel Data Analysis
- ✓ Top Excel Tips and Tricks
- ✓ Solver
- ✓ The Excel Ribbon
- ✓ Forecasting Data in Excel: Forecast Data Trends
- ✓ Use Sparklines to Show Data Trends
- ✓ Working With Excel: Select a Template in Excel

Word 2016:

- ✓ Adding Document References and Links in Word 2016: Add Captions

Excel 2019:

- ✓ Excel Options - Advanced
- ✓ Forecast Sheets
- ✓ Filtering Data
- ✓ Excel Options – Formulas
- ✓ Sorting Data in Excel
- ✓ MS Excel - Excel Environment
- ✓ Wrapping Text in Excel

PowerPoint 2016:

- ✓ Working With PowerPoint
- ✓ General Considerations About Slide Structure

Outlook 2016:

- ✓ Working With Outlook
- ✓ Customizing Message Options in Outlook 2016: Recall a Sent Message

Publications

Summary:

Book Chapter	International Journals	National and International Conferences	h-index in Google Scholar	Citations in Google Scholar
3	**>30**	**>30**	**21**	**>1200**

Book Chapter

1. Jafary, T., Ghasemi, M., Alam, J., Aljlil, S. A. & Yusup, S. 15 - Carbon-Based Polymer Nanocomposites as Electrodes for Microbial Fuel Cells. Dlm. Ismail (pnyt.) & Goh (pnyt.). *Carbon-Based Polymer Nanocomposites for Environmental and Energy Applications*, hlm. 361–390. Elsevier (2018).
2. Jafary, T., Yeneneh, A.M., et al., 10- Current advances, challenges, and prospects of CO2 capture, storage, and utilization. *Nanotechnology for CO2 Utilization in Oilfield Applications.* Elsevier (2022).
3. Jafary, T., Yeneneh, A.M., Al Hinai, M., 18-Future applications, *Biological Fuel cells Fundamental to Application*, Elsevier (2023).

International Journals

1. Ahanchi, M., Jafary, T., Yeneneh, A. M., Rupani, P. F., Shafizadeh, A., Shahbeik, H., ... & Aghbashlo, M. (2022). Review on waste biomass valorization and power management systems for microbial fuel cell application. Journal of Cleaner Production, 134994
2. Al Ajmi, M., AL-Hamadani, A., Yeneneh, A.M. and Jafary, T., 2022. Removal of Oil from Contaminated Wastewater Using Thermo-Chemically Modified Lignocellulosic Biomass. In Materials Science Forum (Vol. 1059, pp. 157-170). Trans Tech Publications Ltd.
3. Adewole, J.K., Al Maawali, H.M., Jafary, T., Firouzi, A. and Oladipo, H., 2022. A review on seawater desalination with membrane distillation: material development and energy requirements. Water Supply.
4. Soltanian, S., Kalogirou, S.A., Ranjbari, M., Amiri, H., Mahian, O., Khoshnevisan, B., Jafary, T., Nizami, A.S., Gupta, V.K., Aghaei, S. and Peng, W., 2022. Exergetic sustainability analysis of municipal solid waste treatment systems: A systematic critical review. Renewable and Sustainable Energy Reviews, 156, p.111975.
5. Al Balushi, A., Al Maqbali, F., Al Saidi, H., Al Maaini, I., Mesfin, A.Y., Sharifzadeh, B., Al Ajmi, M. and Jafary, T., 2022. Effect of External load and Salt Concentration on the Performance of Microbial Desalination Cell. International Journal of Integrated Engineering, 14(2), pp.106-114.
6. Rahman, S., Siddiqi, S.A., Al-Mamun, A. and Jafary, T., 2022. Sustainable leachate pre-treatment using microbial desalination cell for simultaneous desalination and energy recovery. Desalination, 532, p.115708.
7. Jafary, T., Yeneneh, A.M., Daud, W.R.W., Al Attar, M.S.S., Al Masani, R.K.M. and Rupani, P.F., 2021. Taxonomic classification of sulphate-reducing bacteria communities attached to biocathode in hydrogen-producing microbial electrolysis cell. International Journal of Environmental Science and Technology, pp.1-10.
8. Al Hinai, A., Jafary, T., Alhimali, H., Rahman, S. and Al-Mamun, A., 2022. Desalination and acid-base recovery in a novel design of microbial desalination and chemical recovery cell. Desalination, 525, p.115488.
9. Basha, J.S., Jafary, T., Vasudevan, R., Bahadur, J.K., Ajmi, M.A., Neyadi, A.A., Soudagar, M.E.M., Mujtaba, M.A., Hussain, A., Ahmed, W. and Shahapurkar, K., 2021. Potential of Utilization of Renewable Energy Technologies in Gulf Countries. Sustainability, 13(18), p.10261.
10. Soltanian, S., Kalogirou, S.A., Ranjbari, M., Amiri, H., Mahian, O., Khoshnevisan, B., Jafary, T., Nizami, A.S., Gupta, V.K., Aghaei, S. and Peng, W., 2022. Exergetic sustainability analysis of municipal solid waste treatment systems: A systematic critical review. Renewable and Sustainable Energy Reviews, 156, p.111975.
11. Rahman, S., Al-Mamun, A., Jafary, T., Alhimali, H., & Baawain, M. S. (2021). *Effect of internal and external resistances on desalination in microbial desalination cell.* Water Science and Technology, 83(10), 2389-2403.
12. Alwahaibi, B., Jafary, T., Al-Mamun, A., Baawain, M. S., Aghbashlo, M., Tabatabaei, M., & Stefanakis, A. I. (2021). *Operational modifications of a full-scale experimental vertical flow constructed wetland with effluent recirculation to optimize total nitrogen removal.* Journal of Cleaner Production, 126558
13. Wei, T. M., Daud, W. R. W., Jafary, T., Somalu, M. R., Sitorus, S. R. I., & Bakar, M. H. A. (2021). *Low operating cost approach in Spirulina platensis bio-photovoltaic cell*. International Journal of Nanotechnology, 17(11-12), 840-856.
14. Juhari, A. N., Sharani, M. S., Daud, W. R. W., Jafary, T., & Abu Bakar, M. H. (2021). UKM2 Chlorella sp. Strain *Electricity Performance as Bio-anode under Different Light Wavelength in a Biophotovoltaic Cell*. SAINS MALAYSIANA, 49(12), 3229-3241.
15. Rahman, S., Jafary, T., Al-Mamun, A., Baawain, M. S., Choudhury, M. R., Alhaimali, H., ... & Tabatabaei, M. (2021). *Towards Upscaling Microbial Desalination Cell Technology: A Comprehensive Review on Current Challenges and Future Prospects*. Journal of Cleaner Production, 125597.

P. O. Box: 532| PC: 322|Suhar| International Maritime College| Phone: +968-95839569|Email: t.jafary@gmail.com

16. Jafary, T., Al-Mamun, A., Alhimali, H., Baawain, M.S., Rahman, M.S., Rahman, S., Dhar, B.R., Aghbashlo, M. and Tabatabaei, M.,. *Enhanced power generation and desalination rate in a novel quadruple microbial desalination cell with a single desalination chamber*. Renewable and Sustainable Energy Reviews, 127 (2020), p.109855.
17. Jafary, T., Al-Mamun, A., Alhimali, H., Baawain, S. Rahman, S., Tarpeh W.A.,Dhar, B.R., Kim, B.H. *Novel two-chamber tubular microbial desalination cell for bioelectricity production, wastewater treatment and desalination with a focus on self-generated pH control (2020)*. Desalination.
18. Alhimali, H., Jafary, T., Al-Mamun, A,. Baawain, S. M.Vakili-Nezhad, R. *New insights into the application of microbial desalination cells for desalination and bioelectricity generation*. Biofuel Research Journal. 24 (2019).
19. Al Lawati, M., Jafary, T., Al-Mamun, A,. Baawain, S. M. *A mini review on biofouling on air cathode of single chamber microbial fuel cell; prevention and mitigation strategies*. Biocatalysis and Agricultural Biotechnology, 101370. (2019)
20. Jafary, T., Daud, W. R. W., Ghasemi, M., Bakar, M. H. A., Aljlil, S.A., Kim, B. H., Carmona-Martínez, A.A., Jahim, J. M., Ismail, M. *Clean Hydrogen Production in a Full Biological Microbial Electrolysis Cell.* International Journal of Hydrogen Energy (2019).
21. Al-Mamun, A., Jafary, T., Baawain, M.S., Rahman, S., Choudhury, M.R., Tabatabaei, M. and Lam, S.S., 2020. Energy recovery and carbon/nitrogen removal from sewage and contaminated groundwater in a coupled hydrolytic-acidogenic sequencing batch reactor and denitrifying biocathode microbial fuel cell. Environmental research, 183, p.109273.
22. Jafary, T., Daud, W. R. W., Aljlil, S. A., Ismail, A. F., Al-Mamun, A., Baawain, M. S., & Ghasemi, M. (2018). *Simultaneous organics, sulphate and salt removal in a microbial desalination cell with an insight into microbial communities*. Desalination, 445, 204-212.
23. Jafary, T., Daud, W.R.W., Ghasemi, M., Kim, B.H., Carmona-Martínez, A.A., Bakar, M.H.A., Jahim, J.M. and Ismail, M. *A comprehensive study on development of a biocathode for cleaner production of hydrogen in a microbial electrolysis cell.* Journal of Cleaner Production, 164 (2017): 1135-1144.
24. Jafary, T., Daud, W. R. W., Ghasemi, M., Kim, B. H., Bakar, M. H. A., Jahim, J. M., & Kamaruzzaman, M. A. *Assessment of recirculation batch mode of operation in bioelectrochemical system; a way forward for cleaner production of energy and waste treatment*. Journal of Cleaner Production, 142 (2017), 2544-2555.
25. Jafary, T., Aljlil, S.A., Alam, J., Ghasemi, M. *Effect of the membrane type and resistance load on the performance of the microbial fuel cell;A step ahead of microbial desalination cell establishment.* Journal of the Japan Institute of Energy 96, no. 9 (2017): 346-351.
26. Ghasemi, M., Ahmad, A., Jafary, T., Azad, A. K., Kakooei, S., Daud, W. R. W., & Sedighi, M. *Assessment of immobilized cell reactor and microbial fuel cell for simultaneous cheese whey treatment and lactic acid/electricity production*. International Journal of Hydrogen Energy 42 (2017): 9107-9115.
27. Jafary, T., Daud, W. R. W., Ghasemi, M., Kim, B. H., Jahim, J. M., Ismail, M., & Lim, S. S. *Biocathode in microbial electrolysis cell; present status and future prospects.* Renewable and Sustainable Energy Reviews 47 (2015): 23-33.
28. Ghasemi M., Daud W.R.W., Hassan S.H., Jafary T., Rahimnejad M., Ahmad A., Yazdi M.H., *Carbon nanotube/polypyrrole nanocomposite as a novel cathode catalyst and proper alternative for Pt in microbial fuel cell.* International Journal of Hydrogen Energy 41(2016): 4872-4878.
29. Satar, I., Daud W.R.W., Kim, B. H., Somalu, M.R., Ghasemi, M., Bakar, M.H.A., Jafary, T. *Performance of Titanium-Nickel (Ti/Ni) and Graphite Felt-Nickel (GF/Ni) Electrodeposited by Ni as Alternative Cathodes for Microbial Fuel Cells.* Journal of the Taiwan Institute of Chemical Engineers (2018).
30. Jafary, T., Rahimnejad, M., Ghoreyshi, A. A., Najafpour, G., Hghparast, F., & Daud, W. R. W. *Assessment of bioelectricity production in microbial fuel cells through series and parallel connections*. Energy Conversion and Management, 75(2013), 256-262.
31. Jafary, T., Ghoreyshi, A. A., Najafpour, G. D., Fatemi, S., & Rahimnejad, M.. *Investigation on performance of microbial fuel cells based on carbon sources and kinetic models*. International Journal of Energy Research, 37(12), (2013), 1539-1549.
32. Sadeqzadeh, M., Ghasemi, M., Ghannadzadeh, A., Salamatinia, B., Jafary, T., Daud, W. R. W., & Hassan, S. H. A.. *Mass transfer limitation in different anode electrode surface areas on the performance of dual chamber microbial fuel cell*. American Journal of Biochemistry and Biotechnology, 8(4), (2012), 320.
33. Rahimnejad M., Ghoreyshi A., Najafpour G.D., Jafary T," *Power generation from organic substrate in batch and continuous-flow microbial fuel cell operations*". Applied Energy, 88 (2011) 3999–4004.
34. Selyari, T., Ghoreyshi, A.A., Shakeri, M., Najafpour, G.D., Jafary, T., "*measurement Of Polarization Curve And Development Of A Unique Semiempirical Model For Description Of PEMFC And DMFC Performances*". Chemical Industry & Chemical Engineering Quarterly, 17 (2011) 207−214.
35. Rahimnejad M., Jafary T., Hagparast F., Najafpour G.D.and Ghoreyshi A.," *Nafion as a nanoproton conductor in microbial fuel cells*". Turkish J. Eng. Env. Sci (2010).

Some of the National and International Conferences

Only some of the conferences are listed.
1. Jafary, T., Yeneneh, A.M., Daud, W.R.W., Al Attar, M., Al Masani, R., *Taxonomic Classification of Sulphate Reducing Bacteria Communities Attached to Biocathode in Hydrogen Producing Microbial Electrolysis Cell*, SFCHT2021, Oct 26-27, 2021, Malaysia.
2. Al Balushi, A., Al Maqbali, F., Al Saidi, H., Al Maaini, I., Yeneneh, A.M., Jafary, T. *Sustainable Desalination and Bioelectricity Generation using Green Technology of Microbial Desalination Cell*, SFCHT2021, Oct 26-27, 2021, Malaysia.
3. Alburiki, M., Alnaqbi, M., Alzaabi, F., Alzaabi, M, Yeneneh, A.M., Al-Ajmi, M., Jafary, T., *Combined microwave-oxidation pretreatment of used motor oil contaminated wastewater for enhanced anaerobic degradation*. The 4th Sohar University Research Conference, 2020, Suhar, Oman.

4. Rahman, S., Al-Mamun, A., Jafary, T., Baawain, M. S., *Role of operating resistance on differential cathode for desalination, sewage treatment and current generation iun bioelectrochemical cell*. The 2nd Intrenational Conference on Water Resources in Arid Areas, November 9-11, 2020, Muscat, Oman.
5. Al-Mamun, A., Abdus Sattar, Jafary, T., Baawain, M.S., (2019). *Effect of external resistance on the efficiency of desalination, sewage treatment and power recovery in open air-cathode microbial desalination cell*. Proceeding of the ISMET7 Conference, Okinawa, Japan, Oct 7-11
6. Jafary, T., Daud, W. R. W., Ghasemi, M., Bakar, M. H. A., Jahim, J. M., Kim, B. H., Ismail, Sustainable *and Enhanced Biocathode Startup by an Abio-Bio Cathode Configuration for Hydrogen Production in a Microbial Electrolysis Cell*, accepted in the 6th International Conference on Fuel Cell & Hydrogen Technology (ICFCHT 2017)
7. Jafary, T., Daud, W. R. W., Ghasemi, M., Kim, B. H., Jahim, J. M., Ismail, M., " *Assessment of Mode of Operation for Integrated Bioelectrochemical Systems; Power, bioelectrochemical and waste treatment evaluation* ", 29 th Symposium of Malaysian Chemical Engineers (SOMChE) 2016, Miri, Sarawak, Malaysia, December 1 – 3, 2016
8. Jafary T., Ghasemi, M., Daud, W. R. W., Jahim, J. M., "*Polypyrrole and Carbon nanotube/Polypyrrole nanocomposite as a novel cathode catalysts and proper alternatives for Pt in microbial fuel cell*", Asia Biohydrogen and Biorefinery (ABB) Symposium, (Dec 2014).
9. Jafary, T., Daud, W. R. W., Ghasemi, M., Kim, B. H., Jahim, J. M., Ismail, M., "*A Review on Biohydrogen Production in Biocathode Microbial Electrolysis Cell*", 28th Symposium of Malaysian Chemical Engineers (SOMChE 2015), (October 2015)
10. Jafary T., Ghoreyshi A.A., Najafpour G.D., Rahimnejad M.,"*Combined Power Generation and COD Removal using Whey as Substrate in a Dual Chambered Microbial Fuel Cell*".The 3rd International Conference on Fuel cell and Hydrogen technology, Malaysia (Nov. 2011).
11. Rahimnejad M., Najafpour G.D., Ghoreyshi A., Jafary T.,"*Bioelectricity Generation in biological Fuel Cell with and without Mediators; A review*". The 3rd International Conference on Fuel cell and Hydrogen technology, Malaysia (Nov. 2011).
12. Jafary T., Ghoreyshi A.A., Najafpour G.D.,"*The effect of substrate concentration on the electrial performance of microbial fuel cell (MFC)* ". International Conference on Environment 2010 (ICENV 2010), Malaysia (Nov. 2010).
13. Jafary T., Najafpour G.D., Ghoreyshi A.A., HaghparastF., Rahimnejad M., Zare H. "*Bioelectricity power generation from organic substrate in a Microbial fuel cell using Saccharomyces cerevisiae as biocatalysts*". World Renewable Congress, Sweden(May 2011)
14. Ghoreyshi A.A., Jafary T., Najafpour G.D., HaghparastF., " *Effect of type and concentration of substrate on power generation in a dual chambered microbial fuel cell*". World Renewable Congress, Sweden(May 2011)
15. Rahimnejad M., Najafpour G.D., Ghoreyshi A.A., Jafary T., Haghparast F., Zareh H., Heydarzade H., "*Activated sludge as biocatalyst in microbial fuel cell*". Chisa, Prague(Augest 2010)
16. Rahimnejad M., Najafpour G.D., Ghoreyshi A., Jafary T., Haghparast F., "*Microbial Fuel Cell a Reliable Source for Recovery of Electrical Power from Synthetic Wastewater*". Linnaeus ECO-TECH´10, Sweden (Kalmar 2010)
17. Rahimnejad M., Jafary T., Ghoreyshi A.A., Najafpour G.D., *Effect of glucose concentration on the performance of microbial fuel cell*. International conference on environmental technology, Malaysia (2010)
18. Jafary T., Rahimnejad M., Najafpour G.D., Ghoreyshi A.A., Haghparast F.," *Use of Fructose as Substartefor bioelectricity Generation in MFC*" 2nd National congress on Fuel, Energy and Environment, Kermanshah (2010)
19. Haghparast F., Rahimnejad M., Najafpour G.D., Ghoreyshi A.A, Jafary T.," *Use of Graphit as a proper Electrode in MFC*", 2nd National congress on Fuel, Energy and Environment, Kermanshah (2010)
20. Rahimnejad M., Najafpour G.D., Ghoreyshi A.A, Jafary T., Haghparast F.," *Investigation the effect of oxidants on Microbial Fuel cell performance" Use of Graphit as a proper Electrode in MFC*", 4nd Iran Fuel Cell Conference, Tehran (2011)

P. O. Box: 532| PC: 322|Suhar| International Maritime College| Phone: +968-95839569|Email: t.jafary@gmail.com