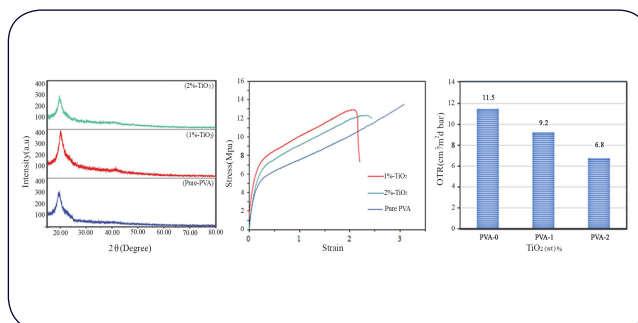


Graphical Abstracts

Research Paper

Effect of TiO₂ Nanoparticles on Barrier and Mechanical Properties of PVA FilmsMaryam Zamanian¹, Hassan Sadrnia^{1,*}, Mehdi Khojastehpour¹, Fereshte Hosseini², Jules Thibault³¹ Department of Biosystems Engineering, Ferdowsi University of Mashhad, Iran² Department of Food Additives, Iranian Academic Centre for Education Culture and Research (ACECR), Mashhad, Iran³ Department of Chemical and Biological Engineering, University of Ottawa, Ottawa, Ontario, Canada K1N 6N5

DOI: 10.22079/JMSR.2020.112911.1283



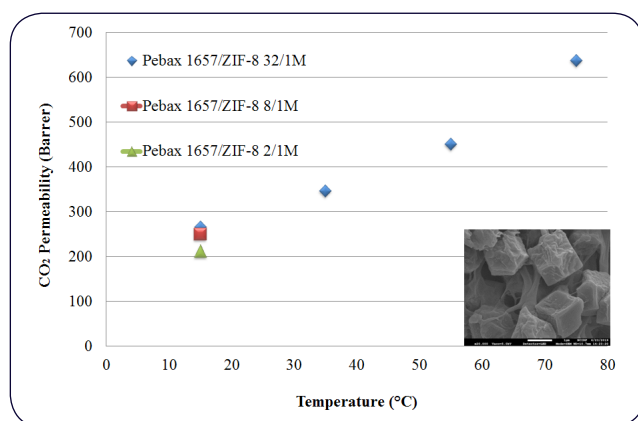
Research Paper

Effect of 2-MeIM/Zn Molar Ratio on CO₂ Permeability of Pebax/ZIF-8 Mixed Matrix Membranes

Jeein Kim, Taejun Park, Eunhyea Chung *

Department of Energy System Engineering, Seoul National University, Gwanak-ro 1, Gwanak-gu, Seoul, 08826, Republic of Korea

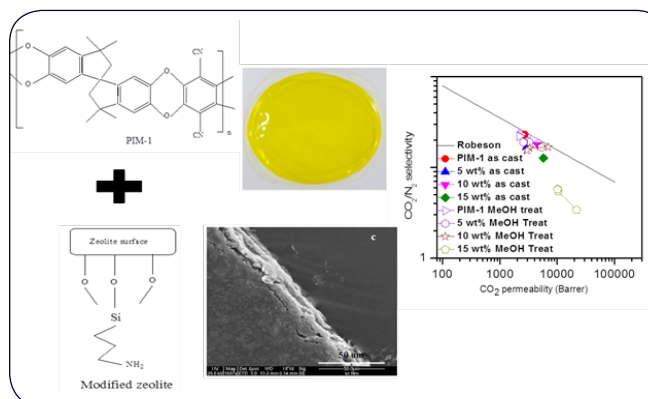
DOI: 10.22079/JMSR.2020.119041.1316



Research Paper

Preparation and Characterization of PIM-1/Modified Zeolite Mixed Matrix Membranes for CO₂/N₂ separationSedra Tul Muntha¹, Nusrat Shaheen¹, Muhammad Siddiq^{2,*}, Asma Khan¹, Tanzeela Fazal¹¹ Department of Chemistry, Abbottabad University of Science and Technology, Abbottabad, 22010, Pakistan² Department of Chemistry, Quaid i Azam University, Islamabad, 45320, Pakistan

DOI: 10.22079/JMSR.2020.123596.1360



Graphical Abstracts

Preparation and Characterization of Bentonite - Based Ceramic Hollow Fiber Membrane

Yusuf Olabode Raji ^{1,2}, Mohd Hafiz Dzarfan Othman ^{1,*}, Nik Abdul Hadi Sapiaa Md Nordin ³, Ahmad Fauzi Ismail ¹, Mukhlis A. Rahman ¹, Juhana Jaafar ¹, Jamilu Usman ^{1,4}, Stanley Chinedu Mamah ^{1,5}

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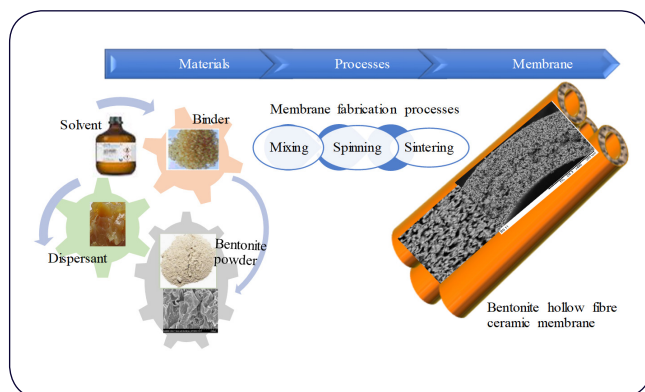
² Department of Chemical Engineering, Abubakar Tafawa Balewa University (ATBU), 0248, Bauchi, Nigeria

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⁴ Department of Chemistry, Faculty of Science, Sokoto State University, P.M.B. 2134, Sokoto, Sokoto State, Nigeria

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DOI: 10.22079/JMSR.2020.121902.1346



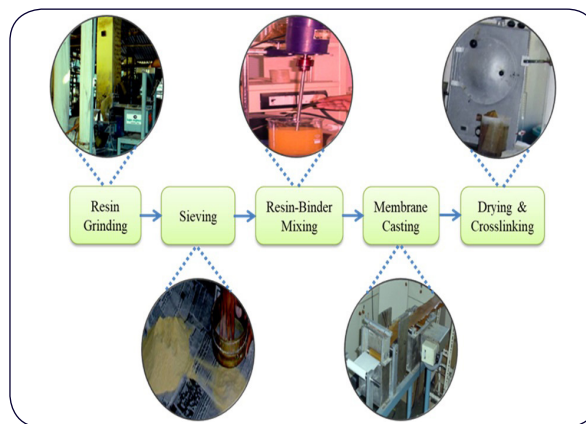
Preparation of Heterogeneous Cation- and Anion-Exchange Membranes by Eco-Friendly Method: Electrochemical Characterization and Desalination Performance

Jaydevsinh M. Gohil ^{1,*}, Paramita Ray ^{2,*}

¹ School for Advanced Research in Polymers - Advanced Polymer Design and Development Research Laboratory (SARP-APDDRL), Central Institute of Plastics Engineering & Technology (CIPET), Hi Tech Defence and Aerospace Park (IT Sector), Jala Hobli, Bengaluru – 562 149, Karnataka, India

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DOI: 10.22079/JMSR.2020.122044.1350

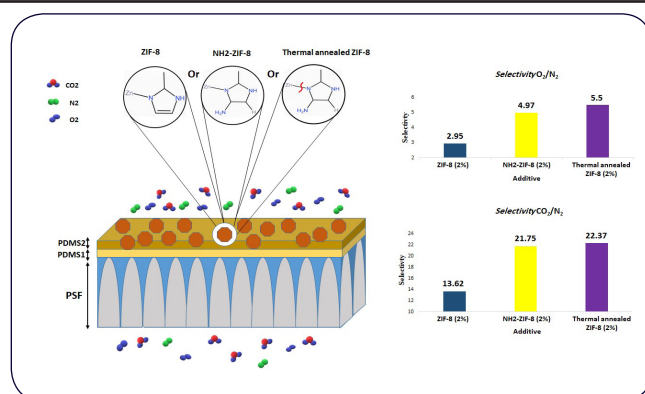


Improvement of the Performance of PDMS Top Layer of Mixed Matrix Membrane Incorporated with Treated ZIF-8 for Gas Separation

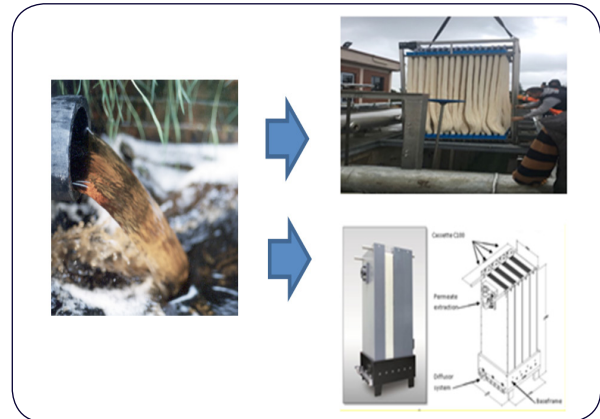
Fatemeh Bagri, Yaghoub Mansourpanah *

Membrane Research Laboratory, Lorestan University, 68137-17133 Khorramabad, Iran

DOI: 10.22079/JMSR.2020.122067.1348



Graphical Abstracts

Full Scale Sanitary Landfill Leachate Treatment by MBR: Flat Sheet vs. Hollow Fiber MembraneHamit Tolu ¹, Erol İren ¹, Mahmut Altınbaş ^{2,3,*}¹ Ozturk Enerji Corp., Kahramanmaraş, Turkey² Department of Environmental Engineering, Istanbul Technical University, 34469, Maslak, Istanbul, Turkey³ National Research Center of Membrane Technologies, Istanbul Technical University, 34469, Maslak, Istanbul, TurkeyDOI: [10.22079/JMSR.2020.123563.1358](https://doi.org/10.22079/JMSR.2020.123563.1358)**The Synergistic Fouling of Ceramic Membranes by Particles and Natural Organic Matter Fractions using Different Surface Waters in South Africa**Welldone Moyo ¹, Nhamo Chaukura ^{1,2}, Machawe M. Motsa ¹, Nomcebo H Mthombeni ³, Titus A.M Msagati ¹, Bhekcie B. Mamba ⁴, Sebastiaan G.J Heijman ⁵, Thabo T.I Nkambule ^{1,*}¹ Institute for Nanotechnology and Water Sustainability (iNanoWS), University of South Africa (UNISA), Johannesburg, South Africa² Department of Physical and Earth Sciences, Sol Plaatje University, Kimberley, South Africa³ Department of Civil and Chemical Engineering, University of South Africa (UNISA), Johannesburg, South Africa⁴ College of Science, Engineering and Technology, University of South Africa (UNISA), Johannesburg, South Africa⁵ Department of Civil Engineering and GeoSciences, Technical University of Delft, Delft, the NetherlandsDOI: [10.22079/JMSR.2020.127635.1384](https://doi.org/10.22079/JMSR.2020.127635.1384)