

Engr. Muhammad Azeem Munawar

Research Interests

Polymer Synthesis, Rheology, Processing and Characterization, Polymer reaction kinetics, Hybrid, Graphene, Green and Nano-Composites, Membrane Technology using Reverse Osmosis, Pervaporation & Desalination, Responsive and Biopolymers.

List of Publications (Total Impact Factor: 24.312)

1. Atif Islam, Tariq Yasin, Nafisa Gull, Shahzad Maqsood Khan, Aneela Sabir, **Muhammad Azeem Munawar**, Muhammad Shafiq, Tahir Jamil, Muhammad Hamid Raza. "Fabrication and performance characteristics of tough hydrogelscaffolds based on biocompatible polymers". **International Journal of Biological Macromolecules**, (I.F. = 3.138).
2. **Munawar MA**, Khan SM, Gull N, Shafiq M, Islam A, Zia S, Sabir A, Ghouri AS, Butt MTZ, Jamil T. Fabrication and characterization of novel zirconia filled glass fiber reinforced polyester (GFRP) hybrid composites. **Journal of Applied Polymer Science** (2016), DOI: 10.1002/app.43615. (I.F. = 1.866).
3. Khan SM, Gull N, **Munawwar MA**, Zia S, Anjum A, Iqbal MS, Shafiq M, Islam A, Butt MA, Butt MTZ, Jamil T. A study on effect of Carbon Fiber layers on thermal, mechanical and microscopic properties of Polyphenylene Sulphide/Carbon fiber composites **Iranian Polymer Journal** (I. F 1.684).
4. Khan SM, Gull N, **Munawar MA**, Islam A, Zia S, Shafiq M, Sabir A, Awais SM, Butt MA, Butt MTZ, Jamil T. 2D Carbon Fiber Reinforced High Density Polyethylene Multi-layered Laminated Composite Panels: Structural, Mechanical, Thermal and Morphological Profile **Journal of Materials Science & Technology** (I.F= 2.267).
5. Anjum F, Gull N, Khan SM, **Munawar MA**, Islam A, Niazi SI, Zia S, Shafiq M, Butt MTZ, Jamil T. Mechanical and thermal profile of novel glass fiber reinforced polyester composites as a function of barium sulphate loading. **Advances in Polymer Technology** (I.F. = 1.114).
6. Younas Habib Khan, Atif Islam, Afsheen Sarwar, **Nafisa Gull**, Shahzad Maqsood Khan Muhammad Azeem Munawar, Saba Zia, Aneela Sabir, Muhammad Shafiq, Tahir Jamil. "Novel green nano composites films fabricated by indigenously synthesized graphene oxide and chitosan". **Carbohydrate Polymers**, 146 (2016) 131-138. <http://dx.doi.org/10.1016/j.carbpol.2016.03.031>. (I.F. = 4.219).
7. Gull N, Khan SM, Islam A, Zia S, Shafiq M, Sabir A, **Munawar MA**, Butt MTZ, Jamil T Effect of Different Oxidizing Agents on Polyaniline/Single Walled Carbon Nanotube Composites synthesized via Ultrasonically Initiated in-situ Chemical Polymerization **Materials Chemistry and Physics** 172 (2016) 39-46 (I.F. = 2.101).
8. Islam A, Yasin T, Gull S, Khan SM, **Munawwar MA**, Shafiq M, Sabir A, Jamil T Evaluation of selected properties of biocompatible chitosan/poly (vinyl alcohol) blends **International Journal of Biological Macromolecules** 82 (2016) 551–556 (I.F. = 3.138.).
9. Islam A, Imran Z, Yasin T, Gull N, Khan SM, Shafiq M, Sabir A, **Munawar MA**, Raza MH, Jamil T. An investigation of AC impedance and dielectric spectroscopic properties of conducting chitosan-silane crosslinked-poly (vinyl alcohol) blended films **Materials Research** (2015) (I.F. = 0.788) 10.1590/1516-1439.043715; Page 1-8.
10. Gull N, Khan SM, **Munawar MA**, Shafiq M, Anjum F, Butt MTZ, Jamil T. Synthesis and characterization of zinc oxide (ZnO) filled glass fiber reinforced polyester composites **Materials and Design** 67 (2015) 313–317, (I.F. = 3.997)

11. Ghouri AS, Noor S, Munawar MA. Production of Ethanol from Quetta Pinus halepensis by Fermentation. **Journal of Chemical Engineering and Process Technology**, 6 (2015) 1-4.
12. Polymer Fiber Composites; A prodigious breakthrough in Medical Arena. Article submitted in **Pakistan Plastic Manufacturing Association (PAK PLAS)** Shahzad Maqsood Khan, **Muhammad Azeem Munawar**, Saba Zia, Prof. Dr. Muhammad Taqi Zahid Butt, Prof. Dr. Tahir Jamil **2015**.
13. Polymers: A prodigious Revolution in Medical Arena, Shahzad Maqsood Khan, Muhammad Azeem Munawar, Saba Zia, Prof. Dr. Muhammad Taqi Zahid Butt, Prof. Dr. Tahir Jamil, **Pakistan Plastic Manufacturers Association (PAK PLAS)**, Pg 91 & 93, **2014**.

Under Review Articles

1. Atif Islam, Tariq Yasin, Nafisa Gull, Shahzad Maqsood Khan, **Muhammad Azeem Munawar**, Aneela Sabir, Muhammad Shafiq, Tahir Jamil, Muhammad Hamid Raza. "Electrospun nanofibrous scaffolds materials from γ -irradiated chitosan and PVA for biomedical applications". **Iranian Journal of Chemistry and Chemical Engineering**, (Under Review) (I.F. = **0.325**).
2. Shahzad Maqsood Khan, Nafisa Gull, **Muhammad Azeem Munawar**, Muhammad Shafiq, Atif Islam, Muhammad Taqi Zahid Butt, Tahir Jamil. "A study on fabrication of high density polyethylene/glass fiber composite for load bearing applications: Mechanical, thermal and surface properties". **Materials Research**, (Submitted) (I.F. = **0.793**).
3. Aneela Sabir, Wail Falath, Karl I Jacob, Muhammad Shafiq, Nafisa Gull, Atif Islam, **Muhammad Azeem Munawar** Muhammad Taqi Zahid Butt, Tahir Jamil. "High performance and chlorine resistant PVA/DGEBA crosslinked TFN-RO membranes infused with Pluronic F127/ZnO-NPs using natural sea salt for desalination". **Materials Chemistry and Physics**, (Submitted) (I.F. = **2.259**).
4. Aneela Sabir, Wail Falath, Karl I Jacob, Muhammad Shafiq, **Muhammad Azeem Munawar**, Atif Islam, **Nafisa Gull**, Muhammad Taqi Zahid Butt, Tahir Jamil. "Hyperbranched polyethyleneimine a polycation induced zwitterionic membranes for improved fouling resistance and high RO performance". **Polymer**, (Submitted) (I.F. = **3.562**).