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PUBLICATIONS (BOOKS, PAPERS, AND ARTICLES PROCEEDINGS)

BOOKS / CHAPTERS IN INTERNATIONAL BOOKS

1. Muhammad Munawar, Dirk Wolfram Schubert, **Shahzad Maqsood Khan**, Nafisa Gull, Atif Islam, Muhammad Atiq Ur Rehman and Monika M Voigt, Book title "Polyester-Production, Characterization and Innovative Applications", Chapter title "A Case Study: Particulate Filled Polyester Hybrid Composites" ISBN 978-953-51-5876-9 **Intech Publications (2018)**
2. Nafisa Gull, **Shahzad Maqsood Khan**, Atif Islam, Tahir Jamil, Muhammad Taqi Zahid Butt Book title "Polyaniline Blends, Composites, and Nanocomposites" 3rd Chapter title "Modification of Polyaniline", **Hard Cover ISBN 9780128095515 Elsevier (2018)**
3. Nafisa Gull, Shahzad Maqsood Khan, Atif Islam, Muhammad Taqi Zahid Butt "Bio Monomers for Green Polymeric Composites Materials" 09th Chapter "Hydrogels used for Biomedical Applications" ISBN: 978-1-119-30170-7, pp 175-199 **Wiley-blackwell, UK, (2019)**
4. **Shahzad Maqsood Khan**, Nafisa Gull, Muhammad Taqi Zahid Butt. Book title "Polyvinylchloride (PVC) based blends: Preparation, Characterization and Applications" Chapter title "Polyvinylchloride(PVC): Structure and Properties Relationship" **Springer Germany (Accepted)**

RESEARCH PAPERS (INTERNATIONAL)

TOTAL NUMBER OF PUBLICATIONS = 37

TOTAL IMPACT FACTOR = 113.449

NUMBER OF CITATIONS = 394

h-INDEX = 10

i10-INDEX = 12

1. Synthesis and characterization of chitosan and guar gum based ternary blends with polyvinyl alcohol. Dure Najaf Iqbal, Mehwish Tariq, Shahzad Maqsood Khan, Nafessa Gull, Sadia Sagar, Abida Aziz, Arif Nazir, Munawar Iqbal. International Journal of Biological Macromolecules **(2020) I.F. = 4.784 (Accepted)**
2. Preparation of Formaldehyde – free Melamine Resins using Furfural as Condensing Agent and Investigation of their Retanning Performance. Muhammad Naveed Ashraf, **Shahzad**

- Maqsood Khan**, Shahid Munir, Rashid Saleem, Society of Leather Technologists and Chemists. Volu 103, pp 272-278 **(2019) (I.F. = 0.333)**
3. Synthesis of Orthanic Acid Modified Glyoxylated Melamine Resin with Improved Retanning and Thermal Properties Muhammad Naveed Ashraf, **Shahzad Maqsood Khan**, Shahid Munir, Rashid Saleem, Journal of the Society of Leather Technologists and Chemists **(2019) (I.F. = 0.351)**
 4. In vitro study of Chitosan based multi-responsive hydrogels as drug release haulier: A preclinical study. Nafisa Gull, **Shahzad Maqsood Khan**, Muhammad Taqi Zahid Butt, Syed Khalid, Muhammad Shafiq, Atif Islam, Sumreen Asim, Sadaf Hafeez, Rafi Ullah Khan. RSC Advances, 9, 31078-31091**(2019) (I.F. = 3.049).**
 5. Hybrid crosslinked hydrogels as a technology platform for in vitro release of cephadrine. Nafisa Gull, **Shahzad Maqsood Khan**, Muhammad Taqi Zahid Butt, Saba Zia, Syed Khalid, Atif Islam, Imran Sajid, Rafi Ullah Khan, Martin William King. Polymers for Advanced Technologies, 30, 2414-2424 **(2019) (I.F. = 2.162).**
 6. Fabrication and modelling of the macro-mechanical properties of cross-ply laminated fiber reinforced polymer composites using artificial neural network. **Shahzad Maqsood Khan**, Samandar Ali Malik, Nafisa Gull, Sidra Saleemi, Atif Islam, Muhammad Taqi Zahid Butt. Advanced Composite Materials. 28: 409-423. **(2019) (I.F. = 1.393)**
 7. Controlled release of cephradine by biopolymers based target specific crosslinked hydrogels. Atiya Butt, Sehrish Jabeen, Numrah Nisar, Atif Islam, Nafisa Gull, Sadia Sagar Iqbal, **Shahzad Khan**, Basit Yameen. International Journal of Biological Macromolecules 121: 104-112 **(2019) (I.F. = 4.784)**
 8. Controlled release of Montelukast Sodium from pH-sensitive injectable hydrogels. Polymer-Plastics Technology and Engineering. Irtaza Javeria, Atif Islam, Nafisa Gull, Abdul Ghaffar, **Shahzad Maqsood Khan**, Aneela Sabir, Shaista Khaliq, Muhammad Taqi Zahid Butt and Sadia Atta. Polymer-Plastics Technology and Engineering. Taylor and Francis 58: 948-956 **(2019) (I.F. = 1.705)**
 9. Investigation of functional, physical, mechanical and thermal properties of TiO₂ embedded polyester hybrid composites: A design of experiment (DoE) study. Muhammad Azeem Munawar, Dirk Wolfram Schubert, **Shahzad Maqsood Khan**, Muhammad Atiq Ur Rehman, Nafisa Gull, Atif Islam, Aneela Sabir, Muhammad Shafiq, Bilal Haider, Mudassar Azam, Saba Urooge Khan, Monika M. Voigt. Progress in Natural Science: Materials International 28: 266-274 **(2018) (I.F. = 3.764)**
 10. γ -irradiated Chitosan Based Injectable Hydrogels for Controlled Release of Drug (Montelukast Sodium). Sadaf Hafeez, Nafisa Gull, Abbas Ali, **Shahzad Maqsood Khan**, Saba

- Zia, Kalsoom Anwar, Saba Khan, Tahir Jamil. International Journal of Biological Macromolecules 114: 890-897 (2018) (I.F. = 4.784)
11. Cellulose acetate based thin film nanocomposite reverse osmosis membrane incorporated with TiO₂ nanoparticles for improved performance. Muhammad Shafiq, Aneela Sabir, Atif Islam, **Shahzad Maqsood Khan**, Nafisa Gull, Syed Nadir Hussain, Muhammad Taqi Zahid Butt. Carbohydrate Polymers 186: 367-376 (2018) (I.F. = 6.044)
 12. Co-concentration effect of silane with natural extract on biodegradable polymeric films for food packaging; Anbreen Bashir, Sehrish Jabeen, Nafisa Gull, Atif Islam, Misbah Sultan, Abdul Ghaffar, **Shahzad Maqsood Khan**, Sadia Sagar Iqbal and Tahir Jamil. International Journal of Biological Macromolecules 106: 351-359. (2018) (I.F. = 4.784)
 13. Mechanical, Thermal, and Microscopic Profile of Novel Glass Fiber-Reinforced Polyester Composites as a Function of Barium Sulfate Loading. Farheen Anjum, Nafisa Gull, **Shahzad Maqsood Khan**, Muhammad A. Munawar, Atif Islam, Sajid I. Niazi, Saba Zia, Muhammad Shafiq, Muhammad Taqi Zahid Butt and Tahir Jamil. Advances in Polymer Technology 37: 3, 929-936 (2018) (I.F. = 2.663)
 14. Enhanced mechanical properties of wood ash and fly ash as supplementary cementitious materials; Zaib Hussain, Rohama Maqsood, Muhammad Imran Din, **Shahzad Maqsood Khan**, Akhtar Shahnaz, Mohsin Rashid & Saba Ameen; Advances in Applied Ceramics Structural, Functional and Bioceramics. 116: 7, 355-361 (2017) (I.F. = 1.429)
 15. Development and performance characteristics of silane cross linked poly (vinyl alcohol)/chitosan membranes for reverse osmosis. Muhammad Shafiq, Aneela Sabir, Atif Islam, **Shahzad Maqsood Khan**, Syed Nadir Hussain; Muhammad Taqi Zahid Butt; Tahir Jamil; Journal of Industrial and Engineering Chemistry 48: 99-107 (2017) (I.F. = 4.978)
 16. Integrally skinned nano-cellular crosslinked asymmetric thin films infused with PEO-PPO-PEO block copolymer/ZnO-NPs for desalination using sea salt. Aneela Sabir, Wail Falath, Karl I Jacob, Muhammad Shafiq, Nafisa Gull, Atif Islam, Muhammad Azeem Munawar, Saba Zia, **Shahzad Maqsood Khan**, Amir Shafeeq, Muhammad Taqi Zahid Butt, Tahir Jamil. "Materials Chemistry and Physics, 183: 595-605 (2016) (I.F. = 2.781)
 17. Fabrication and Performance Characteristics of Tough Hydrogel Scaffolds based on Biocompatible Polymers. Atif Islam, Tariq Yasin, Nafisa Gull, **Shahzad Maqsood Khan**, Aneela Sabir, Muhammad A. Munawar, Muhammad Shafiq, Tahir Jamil, Muhammad H. Raza. International Journal of Biological Macromolecules 92: 1-10 (2016) (I.F. = 4.784)
 18. 2D Carbon Fiber Reinforced High Density Polyethylene Multi-layered Laminated Composite Panels: Structural, Mechanical, Thermal and Morphological Profile **Shahzad Maqsood Khan**, Nafisa Gull, Muhammad Azeem Munawar, Atif Islam, Saba Zia, Muhammad Shafiq, Aneela

- Sabir, Syed Muhammad Awais, Muhammad Arif Butt, Muhammad Taqi Zahid Butt and Tahir Jamil. Journal of Materials Science & Technology 32: 1077-1082 **(2016) (I.F. = 5.040)**
19. Polyphenylene sulphide/carbon fiber composites: study on their thermal, mechanical and microscopic properties. **Shahzad Maqsood Khan**, Nafisa Gull, Muhammad Azeem Munawar, Saba Zia, Farheen Anjum, Muhammad Sajid Iqbal, Muhammad Shafiq, Atif Islam, Muhammad Arif Butt, Muhammad Taqi Zahid Butt and Tahir Jamil. Iranian Polymer Journal 25: 475-485 **(2016) (I.F. = 1.776)**
20. Novel Green Nano Composites films fabricated by Indigenously Synthesized Graphene Oxide and Chitosan. Younas H Khan, Atif Islam, Afsheen Sarwar, Nafisa Gull, **Shahzad Maqsood Khan**, Muhammad A Munawar, Saba Zia, Aneela Sabir, Muhammad Shafiq and Tahir Jamil. Carbohydrate Polymers 146: 131-138 **(2016) (I.F. = 6.044)**
21. Fabrication and characterization of novel zirconia filled glass fiber reinforced polyester (GFRP) hybrid composites. Muhammad Azeem Munawar, **Shahzad Maqsood Khan**, Nafisa Gull, Muhammad Shafiq, Atif Islam, Saba Zia, Aneela Sabir, Awais Ghouri, Muhammad Taqi Zahid Butt, Tahir Jamil. Journal of Applied Polymer Science 43615: 1-9 **(2016) (I.F. = 2.188)**
22. Effect of different oxidants on polyaniline/single walled carbon nanotubes composites synthesized via ultrasonically initiated in-situ chemical polymerization. Nafisa Gull, **Shahzad Maqsood Khan**, Atif Islam, Saba Zia, Muhammad Shafiq, Aneela Sabir, Muhammad Azeem Munawar, Muhammad Taqi Zahid Butt, Tahir Jamil; Materials Chemistry and Physics 172, 39-46, **(2016) (I.F. = 2.781)**
23. Impedance spectroscopy of chitosan/poly (vinyl alcohol) film, Atif Islam, Tariq Yasin, M. J. Akhtar, Zahid Imran, Aneela Sabir, Misbah Sultan, **Shahzad Maqsood Khan**, Tahir Jamil. Journal of Solid State Electrochemistry 20, 571-578 **(2016) (I.F. = 2.531)**
24. Evaluation of selected properties of biocompatible chitosan/poly (vinyl alcohol) blends. Atif Islam, Tariq Yasin, Nafisa Gull, **Shahzad Maqsood Khan**, Muhammad Azeem Munawar, Muhammad Shafiq, Aneela Sabir, Tahir Jamil. International Journal of Biological Macromolecules 82, 551-556, **(2016) (I.F. = 4.784)**
25. An investigation of AC impedance and dielectric spectroscopic properties of conducting chitosan-silane crosslinked-poly (vinyl alcohol) blended films, Atif Islam, Zahid Imran, Tariq Yasin, Nafisa Gull, **Shahzad Maqsood Khan**, Muhammad Shafiq, Aneela Sabir, Muhammad Azeem Munawar, Hafiz Muhammad Raza, Tahir Jamil. Materials Research 18: 6, 1256-1263 **(2015) (I.F. = 1.412)**
26. In-situ Cross Linked Nanofiber Mats of Chitosan/Poly (vinyl alcohol) Blend: Fabrication, Characterization and MTT Assay with Cancerous Bone Cells, Atif Islam, Tariq Yasin, M. A.

- Rafiq, Tahir H. Shah, Aneela Sabir, **Shahzad Maqsood Khan**, Tahir Jamil. *Fibers and Polymers* 16 (9), 1853-1860 (2015) (I.F. = 1.468)
27. Synthesis, characterization and permeation performance of cellulose acetate/polyethylene glycol 600 membranes loaded with silver particles for ultra-low pressure reverse osmosis. Sabad-e-Gul, Sidra Waheed, Adnan Ahmad, **Shahzad Maqsood Khan**, Muhammad Hussain, Tahir Jamil, Muhammad Zuber. *Journal of the Taiwan Institute of Chemical Engineers*. 57, 129-138 (2015) (I.F. = 3.834)
 28. High-temperature electrical properties of silane cross-linked chitosan/poly (vinyl alcohol) membrane: thermal, mechanical and surface characterization, Atif Islam, Tariq Yasin, Aneela Sabir, **Shahzad Maqsood Khan**, Misbah Sultan, Muhammad Shafiq, AU Khan, Tahir Jamil. *e-Polymers* 15 (4), 255–261 (2015) (I.F. = 1.491)
 29. Synthesis and characterization of zinc oxide (ZnO) filled glass fiber reinforced polyester composites Nafisa Gull, **Shahzad Maqsood Khan**, Muhammad Azeem Munawar, Muhammad Shafiq, Farheen Anjum, Muhammad Taqi Zahid Butt, Tahir Jamil. *Materials and Design*. 67: 313–317 (2015) (I.F. = 5.830)
 30. Effect of silica on the properties of cellulose acetate/polyethylene glycol membranes for reverse osmosis. Adnan Ahmad, Sidra Waheed, **Shahzad Maqsood Khan**, Sabad-e-Gul, Muhammad Shafiq, Muhammad Farooq, Khairuddin Sanaullah and Tahir Jamil. *Desalination* 355: 1–10, (2015) (I.F. = 6.566)
 31. Influence of Polyethylene Glycol 600 on Cellulose Acetate Membranes for Reverse Osmosis Desalination. Aneela Sabir, M. Shafiq, Atif Islam, **Shahzad Maqsood Khan**, Tahir Jamil¹, M. Taqi Zahid, Amir Shafeeq, Arslan Shehzad, Arshad S. Bhatti, Younas Habib, Saba Behzad, and Sarwat Jabeen. *Polymer Research Journal*. 9 (2): 291-302 (2015)
 32. Synthesis, characterization, permeation and antibacterial properties of cellulose acetate/polyethylene glycol membranes modified with chitosan. Sidra Waheed, Adnan Ahmad, **Shahzad Maqsood Khan**, Sabad-e- Gul, Tahir Jamil. Atif Islam, Tousif Hussain. *Desalination* 351, 59–69, (2014) (I.F. = 6.566)
 33. Synthesis and Characterization of Visco-Elastic (VE) Polyurethane Foam, Shoaib Suleman, **Shahzad Maqsood Khan**, Nafisa Gull, Waqas Aleem, Muhammad Shafiq, and Tahir Jamil¹; *International Journal of Innovation and Applied Studies* 9 (4)1878-1886, (2014) (SJIF = 3.50)
 34. A Comprehensive Short Review on Polyurethane Foam; Shoaib Suleman, **Shahzad Maqsood Khan**, Nafisa Gull, Waqas Aleem, Muhammad Shafiq, and Tahir Jamil; *International Journal of Innovation and Scientific Research*, 12, 165-169 (2014) (SJIF = 3.50)

35. Synthesis and Characterization of Flexible and Rigid Polyurethane Foam, Shoaib Suleman, **Shahzad Maqsood Khan**, Tahir Jamil, Waqas Aleem, Muhammad Shafiq, Nafisa Gull, Asian Journal of Applied Sciences. 2(5),701-710 **(2014)**
36. A Study On Synthesis and Testing of Polyols Using Soybean Oil and Castor Oil; **Shahzad Maqsood Khan**, Nafisa Gull, Muhammad Yaseen Akram, Hakim Ali Haider, Muhammad Yasir Akram, Muhammad Imran, Muhammad Taqi Zahid Butt and Tahir Jamil, ASEAN Journal of Chemical Engineering 13 (2) 27-38 **(2013)**
37. Effect of additives on the properties and performance of cellulose acetate derivative membranes in the separation of isopropanol/water mixtures; Muhammad Zafar, Muddassir Ali, **Shahzad Maqsood Khan**, Tahir Jamil, Muhammad Taqi Zahid Butt, Desalination, 285 359–365 **(2012)** (I.F. = 6.566)

PUBLICATIONS & ARTICLES (NATIONAL)

Total Number of Publications: 11

1. Synthetic and Natural Polymer Blends. Tehreem Anwar, **Dr. Shahzad Maqsood Khan**, Prof. Dr. Muhammad Taqi Zahid Butt², Dr. Atif Islam Nafisa Gull, Muhammad Shafiq, Saba Zia, Dr. Sadia Sagar Iqbal, Adnan Ahmed, Fahd Jamshed. Pakistan Plastic Manufacturing Association (PAK PLAS) **(2018)**
2. Hydrogels as Drug Haulier for Biomedical Applications, Nafisa Gull, **Dr. Shahzad Maqsood Khan**, Prof. Dr. Muhammad Taqi Zahid Butt, Dr. Atif Islam, Muhammad Shafiq, Dr. Aneela Sabir, Sadaf Hafeez, Saba Urooj Khan, Sehrish Jabeen. Pakistan Plastic Manufacturing Association (PAK PLAS) **(2018)**
3. Polymer Fiber Composites; A prodigious breakthrough in Medical Arena. Article submitted in Pakistan Plastic Manufacturing Association (PAK PLAS) Engr. **Shahzad Maqsood Khan (2015)**.
4. Chemistry in Every Day Use. Participated in article writing for Dunnickliff Chemical Society **(2015)**
5. Polymers: A prodigious Revolution in Medical Arena, **Shahzad Maqsood Khan**, Saba Zia, Prof. Dr. Muhammad Taqi Zahid Butt, Prof. Dr. Tahir Jamil, Pakistan Plastic Manufacturers Association (PAK PLAS) 91-93 **(2014)**
6. Dehydration of Industrial Ethanol by Pervaporation; **Shahzad Maqsood Khan**, Muhammad Usman, Nafisa Gull, Muhammad Taqi Zahid Butt, Tahir Jamil. Journal of Quality and Technology Management (JIQTM) IX (II) 163-170 **(2013)** Category X.

7. An Overview on Pervaporation (An Advanced Separation Technique); **Shahzad Maqsood Khan**, Muhammad Usman, Nafisa Gull, Muhammad Taqi Zahid Butt, Tahir Jamil. Journal of Quality and Technology Management (JIQTM) IX (1) 155-161 **(2013)** Category X.
8. A Study on Synthesis and Testing of Polymer Modified Concrete; **Shahzad Maqsood Khan**, Khurram Javed, Muhammad Taqi Zahid Butt, and Tahir Jamil, Engineering News, A Quarterly journal of the Pakistan Engineering Congress (**PECC**) 44 (5-6) 55-63 **(2012)**
9. Synthesis and Characterization of Polyacrylonitrile Copolymers, Waqar Ahmad, **Shahzad Maqsood Khan**, Muhammad Arif Butt and Tahir Jamil, Journal of Pakistan Institute of Chemical Engineers (**JPICHE**) XXXVII, 61-67 **(2009)** Y Category
10. Synthesis, Properties and Characterization of rubber Latices; A Review, **Shahzad Maqsood Khan**, Arshad Chughtai, Abdul Sattar, Muhammad Arif Butt and Tahir Jamil Journal of Pakistan Institute of Chemical Engineers (JPICHE) XXXVI, 9-16 **(2008)** Y Category
11. Determination of Solubility Parameter of Latices. **Shahzad Maqsood Khan** and Prof. Dr. Tahir Jamil, Journal of Pakistan Institute of Chemical Engineers (JPICHE) XXXVI, 17-34 **(2008)** Y Category