Curriculum Vitae

Prof. Dr. Mohammed Mizanur Rahman

Professor of Applied Chemistry and Chemical Engineering, University of Dhaka
Visiting Professor of Kumamoto University, Japan and University of Duisburg-Essen, Germany
Fellow of Alexander von Humboldt (AvH-Humboldt), Germany & Japan Society for the Promotion of Science (JSPS), Japan; Gold Medal Recipient of Bangladesh Academy of Science (BAS) & Third World Academy of Science (TWAS) (Triste, Italy); Tel: +880 1710417260, Email: mizanur.rahman@du.ac.bd
Personal web: https://env-biomat.info.bd/ II https://www.du.ac.bd/body/faculty_details/ACT/1139
Google Scholar:
https://scholar.google.com/citations?hl=en&user=HXWSBVMAAAAJ&view_op=list_works&sortby=pubdate

CAREER SUMMARY

Professor Dr. Mohammed Mizanur Rahman is an accomplished research and development expert with over 20 years of experience across diverse fields, including **chemical management**, waste management, waste valorization, biomaterials for biomedical applications, and nanotechnology. His expertise extends to eco-friendly material development, renewable energy technologies, waste-to-energy solutions, and advanced nanobiotechnology, particularly in drug delivery and biomaterials. In the realm of **administration**, Prof. Rahman has demonstrated outstanding leadership by spearheading various institutions in the textile (Director of National Institute of Textile Engineering and Research, NITER, Savar and Director of Institute of Leather Engineering and Technology (ILET) of the University of Dhaka) leather sectors for over nine years. His strategic vision has driven these institutions to achieve significant advancements, particularly in the sustainable management of industrial waste, including from tanneries and textile industries.

As a dedicated **researcher**, Prof. Rahman has a prolific academic career, evidenced by his over 250+ publications in reputable journals and one patent, which collectively underscore his commitment to innovation and knowledge dissemination. His work has been instrumental in developing eco-friendly leather processing technologies and advancing the field of biomedical materials. His academic contributions are further highlighted by his roles as a Visiting Professor at Kumamoto University, Japan, and the University of Duisburg-Essen, Germany. He is also a Fellow of the Alexander von Humboldt Foundation (Germany) and the Japan Society for the Promotion of Science, and a recipient of the prestigious Gold Medal from the Bangladesh Academy of Science and the Third World Academy of Science. In terms of **consultation services**, Prof. Rahman has a proven track record of collaboration with international organizations such as the Asia Foundation, Prabriddi, Solidaridad, and GiZ. His consultancy work has significantly impacted industrial waste management practices, particularly in the leather and textile sectors, contributing to sustainable development and environmental stewardship on a global scale.

POSITION HELD (Administrative and Academic); Total Professional Experiences: 22 Years	
9/2020~07/2024	***Director, Institute of Leather Engineering and Technology (ILET), University of Dhaka. Web: https://www.du.ac.bd/faculty/faculty_details/ILET/4187***
1/2014 ~	***Professor, Department of Applied Chemistry and Chemical Engineering, Faculty of Engineering and Technology, University of Dhaka. Web: www.du.ac.bd/faculty/faculty_details/ACT/1139***
7/2015 ~11/2021	Director, National Institute of Textile Engineering and Research (NITER), Nayarhat, Savar.
12/2019~2022	Member, National Strategic and Planning Committee (NSPC), College Education Development Project (CEDP), Ministry of Education, Govt. of the Peoples Republic of Bangladesh.
1/2014~ to date	Member, National Science and Technology Fellowship Committee (NST-Fellowship), Ministry of Science and Technology (MoST), Govt. of the Peoples Republic of Bangladesh.
7/2015 ~01/2024	Member, Project Standing Committee, Skill for Employment Investment Program (BTMA-SEIP), Ministry of Finance, GoB.
7/2015~12/2017	Syndicate Member, University of Dhaka
7/2020~7/2024	Member, National Tax Force of Leather and Allied Sector of Ministry of Industries, GoB.
10/2021~7/2024	Member, Subcommittee of Sustainable Industrial Development for Leather and Allied Sector under Prime minister's Office, GoB and Ministry of Industries, Ministry of Environment, Climate Change and Forest, GoB.
1/ 2014~to date	Member, Selection Committee of Lecturer to Professor of Dhaka University, Jashore Science and Technology University (JUST), DUET, Gazipur; Bangabondhu Sheikh Mujibor Rahman Science and Technology University, Gopalganj
1/2015- to date	Board of Governors Member of Institute of Leather Engineering and Technology, DU, Enam Medical College, Savar, Uttara Adhunik Medical College, East West Medical College, Uttara, Medical College for Women's, Uttara, Sikder Womens Medical College, Dhanmondi, Dhaka and Jahurul Islam Nursing College, Kishorganj
7/2020-to date	Chairman, Governing Body, Dynamic Nursing College (nominated by Dhaka University Syndicate)

EDUCATION	
Period(s)	**Institutions, Degrees Awarded, Specialization/subjects, and Division/class**
7/2012-12/2013	Alexander von Humboldt (**AvH-Humboldt**) Post-Doctoral Fellow (University of Duisburg-Essen, Germany)
9/2006-8/2208	Japan Society for the Promotion of Science (**JSPS**) Post-Doctoral Fellow (Kumamoto University, Japan)
2005	**Doctor of Philosophy (Ph.D.)** in Materials and Life Sciences, Graduate School of Science and Technology, Kumamoto University, Japan: Field of Study: Environmental Analytical and Separation Sciences; Grade: Conferred
1997	**Master of Science (MSc)** in Applied Chemistry and Chemical Engineering, University of Dhaka. Field of Study: Industrial Chemistry; Grade/Class: *First Class Second Position*
1996	**Bachelor of Science (BSc)** in Applied Chemistry and Chemical Engineering, University of Dhaka. Grade/Class: *First Class Second Position*
1991	**Higher Secondary Certificate** (HSC), Field of Study: Science; Division: First Division, Dhaka Board
1989	**Secondary School Certificate** (SSC), Field of Study: Science; Division: First Division, Dhaka Board

PERSONAL INFORMATION		
Father: Md. Wahidur Rahman Mother: Hosneara Begum Spouse: Farzana Sultana **Date of Birth: 23rd February 1974** **Married** with 3 Kids of 21, 16 and 13 years	**Permanent Address:** Village + P.O.-North Keroa Upazila: Raipur District: Lakshmipur	**Residence**: Flat No. B1, ANM Moniruzzaman Bhaban Fuller Road, Dhaka University **NID No. 327 699 5168**

Patent: "*Sustainable Chrome Tanning by Crude Protease Enzymes: Enhanced Chemical Uptake and Reduction of Effluent Load*" Patent No. BD/P/2023/92, IPCs: 14C 3/06, Published on 25 March, 2024.

Selected Publications (Total Publications:200+)

1) Md Jawad Hasan, Md Samaul Alam, Sumaiya Mim, Papia Haque, Mohammed Mizanur Rahman, Pre-tanning of goatskin by minimizing chemical usage using crude protease enzyme for crust leather preparation, ***Environmental Science and Pollution Research*** (Accepted) in August, 2024.
2) Sumaiya Mim, Kawsar Akhtar, Fatema Tujjohra and **Mohammed Mizanur Rahman**, Preparation of Nontoxic Biodegradable Packaging Materials from Hazardous Leather Shaving Dusts Using Poly (Vinyl Alcohol), ***ACS Sustainable Resource Management,*** 1, 7, 1350-1362 (2024)
3) Raymond Shikuku, Mohammed Abul Hasnat, Salman Bin Aziz Mashrur, Papia Haque, **Mohammed Mizanur Rahman**, M Nuruzzaman Khan, Chitosan-based pH-sensitive semi-interpenetrating network nanoparticles as a sustained release matrix for anticancer drug delivery, ***Carbohydrate Polymer Technologies and Applications,*** 7, 100515 (2024).
4) Md Samaul Alam, Md Jawad Hasan, Papia Haque and **Mohammed Mizanur Rahman**, Sustainable leather tanning: Enhanced properties and pollution reduction through crude protease enzyme treatment, ***International Journal of Biological Macromolecules***, 268, 131858 (2024).
5) Mysha Maliha, Taslim Ur Rashid, **Mohammed Mizanur Rahman**, A green strategy for collagen extraction from tannery raw trimmings using papain enzyme: Process optimization by MW-TOPSIS for enhanced yield, ***International Journal of Biological Macromolecules*** 262, 130040 (2024).
6) Israth Jahan Bithi, Md Abdul Mottalib, Muhammed Shah Miran, Md Fardin Ehsan, **Mohammed Mizanur Rahman**, Removal of Cr(VI) from wastewater by impregnated activated carbon generated from vegetable tanned leather waste with aluminium oxide, ***Results in Surfaces and Interfaces*** 14, 100197(2024).
7) M Nuruzzaman Khan, M Tarik Arafat, Taslim Ur Rashid, Papia Haque, **Mohammed Mizanur Rahman**, Chitosan-Stabilized CuO Nanostructure-Functionalized UV-Crosslinked PVA/Chitosan Electrospun Membrane as Enhanced Wound Dressing, ***ACS Applied Biomaterials*** Vol 7 (2), 961–976
8) Sajneen Akter Munmun, Taslim Ur Rashid, **Mohammed Mizanur Rahman**, Optimization of enhanced collagen extraction from tannery rawhide trimming waste using pineapple peel-derived bromelain enzyme through response surface methodology, ***Journal of Cleaner Production*** 438, 140774(2024).
9) Md Abdul Moktadir, Mysha Maliha, Fatema Tujjohra, Sajneen A Munmun, Md Samaul Alam, Md Ariful Islam, **Mohammed Mizanur Rahman**, Treatment of tannery wastewater by different membrane bioreactors: A critical review, ***Environmental Advances*** Vol.15, 100478(2024).
10) Sabrina Samad Shoily, Kaniz Fatema, Rasheda Begum Dina, Anik Biswas, Papia Haque, **Mohammed Mizanur Rahman**, Md Zulhash Uddin, Abu Ashfaqur Sajib, The pectinolytic activity of

Burkholderia cepacia and its application in the bioscouring of cotton knit fabric, ***Journal of Genetic Engineering and Biotechnology***. Vol. 21, pp 136 (2023).

11) Niloy Chandra Das, **Mohammed Mizanur Rahman**, Sumaya F Kabi, Preparation of novel clay/chitosan/ZnO bio-composite as an efficient adsorbent for tannery wastewater treatment, ***International Journal of Biological Macromolecules,*** Volume 249, 126136 (2023).

12) Fatema Tujjohra, Md. Samaul Alam, M.M Rahman and **Mohammed Mizanur Rahman**, An eco-friendly approach of biodiesel production from tannery fleshing wastes by crude neutral protease enzyme; ***Cleaner Engineering and Technology*** 14, 100638 (2023)

13) Abrar A Sitab, Fatema Tujjohra, Taslim Ur Rashid, **Mohammed Mizanur Rahman**, Thermally crosslinked electrospun nanofibrous mat from chrome-tanned solid wastes for cationic dye adsorption in wastewater treatment; ***Cleaner Engineering and Technology*** 13, 100621 (2023)

14) MMU Hoque, SH Rimu, AK Mallik, **Mohammed Mizanur Rahman**, Ecofriendly pretreatment of cotton fabrics by ultrasonication and reusing bath chemicals; ***Environmental Science and Pollution Research*** 30 (13), 36904-36914 (2023).

15) SH Rimu, **Mohammed Mizanur Rahman**, Insight of chitosan-based nanocomposite for removal of hexavalent chromium from wastewater-a review; International Journal of Environmental Analytical Chemistry 102 (18), 6801-6818 (2022).

16) **Mohammed Mizanur Rahman**, Sunzida H Rimu, Shanta Biswas, Taslim U Rashid, Adib H Chisty, Ashiqur Rahman, Salauddin Murad, Papia Haque, Preparation of poly(acrylic acid) exfoliated clay composite by in-situ polymerisation for decolouration of methylene blue from wastewater; ***International Journal of Environmental Analytical Chemistry*** 102 (18), 6538-6554 (2022).

17) Mohammed Mizanur Rahman, Sunzida H Rimu, Recent development in cellulose nanocrystal-based hydrogel for decolouration of methylene blue from aqueous solution: a review; ***International Journal of Environmental Analytical Chemistry*** 102 (18), 6766-6783 (2022).

18) Md Jawad Hasan, Papia Haque, Mohammed Mizanur Rahman, Protease enzyme based cleaner leather processing: A review; ***Journal of Cleaner Production***, 132826 (2022).

19) Abul K Mallik, SM Fijul Kabir, Fahim Bin Abdur Rahman, Mohammad Nazmus Sakib, Shakil Shahriar Efty, **Mohammed Mizanur Rahman**, Cu (II) removal from wastewater using chitosan-based adsorbents: a review; ***Journal of Environmental Chemical Engineering***, 108048 (2022).

20) Md Abdul Moktadir, **Mohammed Mizanur Rahman**, Energy production from leather solid wastes by anaerobic digestion: A critical review; ***Renewable and Sustainable Energy Reviews*** 161, 112378 (2022).

21) Samia Afrin, Md Shahruzzaman, Papia Haque, Md Sazedul Islam, Shafiul Hossain, Taslim Ur Rashid, Tanvir Ahmed, Makoto Takafuji, **Mohammed Mizanur Rahman**, Advanced CNC/PEG/PDMAA Semi-IPN Hydrogel for Drug Delivery Management in Wound Healing, ***Gels*** 8 (6), 340 (2022).

22) Abul K Mallik, Adib H Chisty, M Nuruzzaman Khan, Sumaya F Kabir, Md Shahruzzaman, **Mohammed Mizanur Rahman**, Antibacterial Surface Modification to Prevent Biofilm Formation on Polymeric Biomaterials, Nanoscale Engineering of Biomaterials: Properties and Applications, 425-455 (2022).

23) Md Sazedul Islam, Md Ashiqur Rahman, Shafiul Hossain, Papia Haque, Md Shahruzzaman, **Mohammed Mizanur Rahman**, Polymer Matrixes Used in Wound Healing Applications, *Nanoscale Engineering of Biomaterials: Properties and Applications*, 279-317 (2022).

24) Md Shahruzzaman, Shafiul Hossain, Sumaya F Kabir, Tanvir Ahmed, Md Minhajul Islam, Sabrina Sultana, Abul K Mallik, **Mohammed Mizanur Rahman**, Properties and Characterization of Advanced Composite Materials; Nanoscale Engineering of Biomaterials: Properties and Applications, 589-617 (2022).

25) Adib H Chisty, **Mohammed Mizanur Rahman**, Insight of Iron Oxide-Chitosan Nanocomposites for Drug Delivery; Nanoscale Engineering of Biomaterials: Properties and Applications, 619-648 (2022).

26) Md Minhajul Islam, Shanta Biswas, Md Sazedul Islam, Md Shahruzzaman, M Mehedi Hasan, Md Didarul Islam, Papia Haque, **Mohammed Mizanur Rahman**, Chitosan-Based Gels for Ocular Drug Delivery; *Marine Biomaterials: Drug Delivery and Therapeutic Applications*, 281-315 (2022).

27) AK Mallik, MA Moktadir, MA Rahman, M Shahruzzaman, **MM Rahman**, Progress in surface-modified silicas for Cr (VI) adsorption: A review, ***Journal of Hazardous Materials*** 423, 127041 (2022)

28) MN Sakib, AK Mallik, **MM Rahman**, Update on chitosan-based electrospun nanofibers for wastewater treatment: A review, ***Carbohydrate Polymer Technologies and Applications*** 2, 100064 (2021)

29) MN Khan, M Chowdhury, **MMRahman**, Biobased amphoteric aerogel derived from amine-modified clay-enriched chitosan/alginate for adsorption of organic dyes and chromium (VI) ions from aqueous solution, ***Materials Today Sustainability*** 13, 100077 (2021)

30) Farzana Yeasmin, Rifat Ara Masud, Adib H Chisty, Md Arif Hossain, Abul K Mallik, **Mohammed Mizanur Rahman**, Lignin-metal oxide composite for photocatalysis and photovoltaics, Renewable Polymers and Polymer-Metal Oxide Composites, 1-43 (2022).

31) Abul K Mallik, Adib H Chisty, Sumaya F Kabir, M Nuruzzaman Khan, Papia Haque, **Mohammed Mizanur Rahman**, Coating of chitosan onto bone implants, Chitosan in Biomedical Applications, 355-381 (2022).

32) Md Shahruzzaman, Shafiul Hossain, Tanvir Ahmed, Sumaya F Kabir, Md Minhajul Islam, Ashiqur Rahman, Md Sazedul Islam, Sabrina Sultana, **Mohammed Mizanur Rahman**, Biological macromolecules as antimicrobial agents; Biological Macromolecules, 165-202 (2022).

33) Md Ashiqur Rahman, Md Lawshan Habib, Adib H Chisty, Abul K Mallik, M Nuruzzaman Khan, Papia Haque, **Mohammed Mizanur Rahman**, Organic–inorganic polymer hybrids for water and wastewater treatment; Inorganic-Organic Composites for Water and Wastewater Treatment: Volume 1, 29-54 (2022).

34) AK Mallik, H Noguchi, **MMRahman**, M Takafuji, H Ihara, Selectivity enhancement for the separation of shape-constrained isomers by particle size-derived molecular ordering and density in RP-HPLC y ***Separation Science Plus*** 4 (8), 296-304

35) Abul K Mallik, Shanta Biswas, Md Shahruzzaman, Tanvir Ahmed, Md Minhajul Islam, M Nuruzzaman Khan, Papia Haque, **MM Rahman**, Electrospinning of Nanocellulose for Advanced Nanocomposite Materials, ***Cellulose Nanoparticles***, 136-169 (2021).

36) Hafsa Naznin, Abul K Mallik, Khandker S Hossain, Md Shahruzzaman, Papia Haque, **MM Rahman**, Enhancement of thermal and mechanical properties of PMMA composites by incorporating mesoporous micro-silica and GO, ***Results in Materials***, 100203 (2021).

37) Shafiul Hossain, Md Shahruzzaman, Sumaya F Kabir, Md Shirajur Rahman, Sabrina Sultana, Abul K Mallik, Papia Haque, Makoto Takafuji, **MM Rahman**, Jute cellulose nanocrystal/poly (N, N-dimethylacrylamide-co-3-methacryloxypropyltrimethoxysilane) hybrid hydrogels for removing methylene blue dye from aqueous solution, ***Journal of Science: Advanced Materials and Devices***, 6 (2), 254-263 (2021)

38) **MM Rahman,** NN Lata, SH Rimu, AH Chisty, Simultaneous determination of heavy metals and cationic dyes from industrial effluent by prawn shell derived chitosan-g-poly(acrylic acid) biocomposite, Desalination and Water Treatment 216, 252-262 (2021)

39) Farzana Yeasmin, Abul K Mallik, Adib H Chisty, Fataha N Robel, Md Shahruzzaman, Papia Haque, **MM Rahman,** Nanami Hano, Makoto Takafuji, Hirotaka Ihara, Remarkable enhancement of thermal stability of epoxy resin through the incorporation of mesoporous silica micro-filler, ***Heliyon*** 7 (1), e05959 (2021)

40) S H Rimu and **Mohammed Mizanur Rahman**, Insight of chitosan-based nanocomposite for removal of hexavalent chromium from wastewater- a review, *International Journal of Environmental Analytical Chemistry*; pp 1-18, (2020)

41) **MM Rahman** and SH Rimu**,** Recent development in cellulose nanocrystal-based hydrogel for decolouration of MB from aqueous solution: a review, ***International Journal of Environmental Analytical Chemistry***; 1-18, (2020)

42) T U Rashid, A H Chisty, M A Rahman, S Murad, P Haque**,** Recent development in cellulose nanocrystal-based hydrogel for decolouration of methylene blue from aqueous solution: a review, ***International Journal of Environmental Analytical Chemistry*** 1-17, (2020)

43) MD Islam, MM Hasan, A Rahaman, P Haque, MS Islam, **MM Rahman** "Translocation and bioaccumulation of trace metals from industrial effluent to locally grown vegetables and assessment of human health risk in Bangladesh", *SN Applied Sciences* 2 (8), 1-11 (2020).

44) MM Hasan, ML Habib, M Anwaruzzaman, M Kamruzzaman, MN Khan, **MM Rahman** "Processing techniques of chitosan-based interpenetrating polymer networks, gels, blends, composites and nanocomposites" *In Handbook of Chitin and Chitosan*: Volume 2: Composites and Nanocomposites, 2020.

45) AH Chisty, RA Masud, M Mehedi, M Hasan, AK Mallik, **Mohammed Mizanur Rahman** "PEGylated chitin and chitosan derivatives" *In Handbook of Chitin and Chitosan*: Volume 1: Preparation and Properties, 2020.

46) RA Masud, MS Islam, P Haque, MNI Khan, M Shahruzzaman, M Khan, M. Takafuji, **MM Rahman** "Preparation of novel chitosan/poly (ethylene glycol)/ZnO bionanocomposite for wound healing application: effect of gentamicin loading" ***Materialia***, 100785 (2020).

47) MA Rahman, MS Islam, P Haque, M N Khan, M Takafuji, M Begum, G W Chowdhury, M Khan, **MM Rahman** "Calcium ion mediated rapid wound healing by nano-ZnO doped calcium phosphate-chitosan-alginate biocomposites" ***Materialia*****,** 2000328 (2020).

48) A Al-Mamun, P Haque, T Debnath, MF Rahman, JMM Islam, **MM Rahman** "γ-Irradiated gelatin and polyvinyl alcohol films as artificial articular cartilage" *Journal of Thermoplastic Composite Materials* 33 (5), 614-627 (2020).

49) T Debnath, MS Islam, S Hoque, P Haque, **MM Rahman** "Preparation and characterization of chitosan grafted poly (lactic acid) films for biomedical composites" *Journal of Polymer Engineering*, 40(4), 333-341(2020).

50) S Biswas, TU Rashid, T Debnath, P Haque, **MM Rahman** "Application of Chitosan-Clay Biocomposite Beads for Removal of Heavy Metal and Dye from Industrial Effluent" *Journal of Composites Science* 4 (1), 1-14 (2020)

51) MM Hasan, AH Chisty, **MM Rahman**, MN Khan "Bioprotein Based IPN Nanoparticles as Potential Vehicles for Anticancer Drug Delivery: Fabrication Technology" *Interpenetrating Polymer Network: Biomedical Applications*, 183-203 (2020).

52) M Shahruzzaman, MM Islam, MS Islam, MN Sakib, AK Mallik, P Haque, **MM Rahman** "Semi-IPN Systems for Drug Delivery" in Book *Interpenetrating Polymer Network: Biomedical Applications*, 205-236 (2020).

53) S H Rimu and **M M Rahman**, Insight of chitosan-based nanocomposite for removal of hexavalent chromium from wastewater- a review, *International Journal of Environmental Analytical Chemistry*; pp 1-18, (2020) https://doi.org/10.1080/03067319.2020.1817426

54) **MM Rahman** and SH Rimu**,** Recent development in cellulose nanocrystal-based hydrogel for decolouration of methylene blue from aqueous solution: a review, *International Journal of Environmental Analytical Chemistry*; pp 1-18, (2020) https://doi.org/10.1080/03067319.2020.1817424

55) **M M Rahman**, S H Rimu, S Biswas, T U Rashid, A H Chisty, M A Rahman, S Murad, P Haque**,** Recent development in cellulose nanocrystal-based hydrogel for decolouration of methylene blue from aqueous solution: a review, *International Journal of Environmental Analytical Chemistry*; pp 1-17, (2020 https://doi.org/10.1080/03067319.2020.1813732

56) MD Islam, MM Hasan, A Rahaman, P Haque, MS Islam, **MM Rahman** "Translocation and bioaccumulation of trace metals from industrial effluent to locally grown vegetables and assessment of human health risk in Bangladesh", *SN Applied Sciences* 2 (8), 1-11 (2020).

57) MM Hasan, ML Habib, M Anwaruzzaman, M Kamruzzaman, MN Khan, **MM Rahman** "Processing techniques of chitosan-based interpenetrating polymer networks, gels, blends, composites and nanocomposites" *In Handbook of Chitin and Chitosan*: Volume 2: Composites and Nanocomposites, 2020.

58) AH Chisty, RA Masud, M Mehedi, M Hasan, AK Mallik, **MM Rahman** "PEGylated chitin and chitosan derivatives" *In Handbook of Chitin and Chitosan*: Volume 1: Preparation and Properties, 2020.

59) RA Masud, MS Islam, P Haque, MNI Khan, M Shahruzzaman, M Khan, M. Takafuji, **MM Rahman** "Preparation of novel chitosan/poly (ethylene glycol)/ZnO bionanocomposite for wound healing application: effect of gentamicin loading" *Materialia*, 100785 (2020).

60) MA Rahman, MS Islam, P Haque, M N Khan, M Takafuji, M Begum, G W Chowdhury, M Khan, **MM Rahman** "Calcium ion mediated rapid wound healing by nano-ZnO doped calcium phosphate-chitosan-alginate biocomposites" *Materialia*, 2000328 (2020).

61) S Biswas, TU Rashid, T Debnath, P Haque, **MM Rahman** "Application of Chitosan-Clay Biocomposite Beads for Removal of Heavy Metal and Dye from Industrial Effluent" *Journal of Composites Science* 4 (1), 1-14 (2020)

62) MM Hasan, AH Chisty, **MM Rahman**, MN Khan "Bioprotein Based IPN Nanoparticles as Potential Vehicles for Anticancer Drug Delivery: Fabrication Technology" *Interpenetrating Polymer Network: Biomedical Applications*, 183-203 (2020).

63) M Shahruzzaman, MM Islam, MS Islam, MN Sakib, AK Mallik, P Haque, **MM Rahman** "Semi-IPN Systems for Drug Delivery" in Book *Interpenetrating Polymer Network: Biomedical Applications*, 205-236 (2020).

64) FT Zohora, MS Islam, MS Bashar, P Haque, **MM Rahman** "Preparation and Characterization of Thin Conductive Nanocomposite Film from Dispersed Multiwall Carbon Nanotubes Reinforced Chitosan/Polyvinyl Alcohol Blend" *Science Research*, 7 (6), 78 (2019).

65) MN Islam, MN Khan, AK Mallik, **MM Rahman** "Preparation of bio-inspired trimethoxysilyl group terminated poly (1-vinylimidazole)-modified-chitosan composite for adsorption of chromium (VI) ions" *Journal of hazardous materials* 379, 120792-13 (2019).

66) AH Chisty, AK Mallik, FN Robel, M Shahruzzaman, P Haque, KS Hossain, **MM Rahman** "Enhanced Epoxy/GO Composites Mechanical and Thermal Properties by Removing Air Bubbles with Shear Mixing and Ultrasonication" *ChemistrySelect* 4 (38), 11417-11425 (2019).

67) M Shahruzzaman, S Biswas, MN Sakib, P Haque, **MM Rahman**, AK Mallik "Pharmaceutical Applications of Agar-Agar" in *Book Natural Polymers for Pharmaceutical Applications*, 71-86, 2019.

68) MN Sakib, MM Islam, M Sharuzzaman, P Haque, **MM Rahman**, "Pharmaceutical Applications of Sterculia Gum" in *Book Natural Polymers for Pharmaceutical Applications*: Volume 1: Plant-Derived 2019.

69) S Biswas, S Sharmeen, MM Islam, **MM Rahman**, P Haque "Pharmaceutical Applications of Okra Gum in *Book Natural Polymers for Pharmaceutical Applications*: Volume 1: Plant-Derived 2019.

70) MA Hannan, P Haque, SMF Kabir, **MM Rahman** "Chemical-Free Scouring and Bleaching of Cotton Knit Fabric for Optimum Dyeing Performance, *Clothing and Textiles Research Journal* 37 (4), 265-280 (2019).

71) AK Mallik, ML Habib, FN Robel, M Shahruzzaman, P Haque, **MM Rahman**, Reduced Graphene Oxide (rGO) Prepared by Metal-Induced Reduction of Graphite Oxide: Improved Conductive Behavior of a Poly (methyl methacrylate)(PMMA)/rGO Composite, *ChemistrySelect* 4 (27), 7954-7958 (2019).

72) Md.Abdulla-Al-Mamun, **MM Rahman** "Dual cocatalysts induced photocurrent enhancement of $LaTiO_2N$ photoanode" *Materials Letters* 245 (15), 147-150 (2019).

73) **MM Rahman**, M Shahruzzaman, MS Islam, MN Khan, P Haque "Preparation and properties of biodegradable polymer/nano-hydroxyapatite bioceramic scaffold for spongy bone regeneration" *Journal of Polymer Engineering* 39 (2), 134-142 (2019).

74) AK Mallik, S Guragain, **MM Rahman**, M Takafuji, H Ihara "L-Lysine-derived highly selective stationary phases for hydrophilic interaction chromatography: Effect of chain length on selectivity, efficiency, resolution, and asymmetry" *Separation Science Plus* 2 (2), 42-50 (2019).

75) AK Mallik, N Sakib, A Zaman, S Rahman, M Islam, S Islam, P Haque, **MM Rahman** "Benefits of Renewable Hydrogels over Acrylate-and Acrylamide-Based Hydrogels" In Books *Springer Science and Business Media* LLC,4* 2019.

76) AK Mallik, M Shahruzzaman, A Zaman, S Biswas, T Ahmed, MN Sakib, **MM Rahman** "Fabrication of polysaccharide-based materials using ionic liquids and scope for biomedical use" *Functional Polysaccharides for Biomedical Applications*, 131-171, (2019).

77) S Sharmeen, MS Rahman, MM Islam, MS Islam, M Shahruzzaman, **MM Rahman** "Application of polysaccharides in enzyme immobilization" *Functional Polysaccharides for Biomedical Applications*, 357-395, 2019.

78) MS Rahman, MM Islam, MS Islam, A Zaman, T Ahmed, S Biswas, **MM Rahman** "Morphological Characterization of Hydrogels" in *Book Polymers and Polymeric Composites: A Reference Series*, 819-863, Vol-3,2019.

79) Md. Abdulla-Al-Mamun; **Mohammed Mizanur Rahman**; Sayed Md. Shamsuddin (2019): Dual cocatalysts induced photocurrent enhancement of LaTiO2N photoanode, Materials Letters (accepted for publication, MLBLUE-D-19-00472R4).

80) Abul K. Mallik; Sudhina Guragain; **Mohammed Mizanur Rahman**; Makoto Takafuji; Hirotaka Ihara (2019): L-Lysine-derived highly selective stationary phases for hydrophilic interaction chromatography: Effect of chain length on selectivity, efficiency, resolution, and asymmetry, Separation Science Plus, Vol. 2: pp 42-50.

81) **Mohammed Mizanur Rahman**, M Shahruzzaman, MS Islam, MN Khan, P Haque (2019): Preparation and properties of biodegradable polymer/nano-hydroxyapatite bioceramic scaffold for spongy bone regeneration, Journal of Polymer Engineering, 39 (2), 134-142.

82) Abdullah Al-Mamun; Papia Haque; Tonmoy Debnath; M. Fizur Rahman; Jahid MM Islam; **Mohammed Mizanur Rahman**; Mubarak Ahmed Khan (2019): γ-Irradiated gelatin and polyvinyl alcohol films as artificial articular cartilage, Journal of Thermoplastic Composite Materials, Publication date-2018/12/16 (DOI: 0892705718808555).

83) Tonmoy Debnath; Md. Sazedul Islam; Md. Shirajul Haq; Papia Haque; **Mohammed Mizanur Rahman** (2019): Preparation and characterization of chitosan grafted poly (lactic acid) films for biomedical application, ***Iranian Journal of Chemical Engineering (IJChE)*** 15 (4), 63-80 (2018).

84) MA Hannan, P Haque, SMF Kabir and **Mohammed Mizanur Rahman** (2020): Scope of Sustainable Pretreatment of Cotton Knit Fabric Avoiding Major Chemicals, **Journal of natural fibers 17 (5), 623-634.**

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Total Publications: 200+; Invited Lectures: 15; Key note Speaker: 10; Oral Presentation: 8

(Mohammed Mizanur Rahman)