Mohammad Mohidus Samad Khan | PhD

Assistant Professor
Bio and Environmental Technology (BET) Research Group
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Fields of Interest:

Biotechnology: Health and Food; Bioprocess Engineering; Environmental Engineering; Process Safety; Engineering Education.

Education:

Oct'06 – Mar'10: **PhD in Chemical/Biochemical Engineering, Monash University, Australia**
PhD Project, '*Bioactive Papers: Printing, Activity and Stability*', under the supervision of *Prof. Gil Garnier* and *Prof. Wei Shen* (Department of Chemical Eng, Monash University).
Sep'99 – Jul'04: **BSc in Chemical Eng, Bangladesh Uni of Eng. and Tech. (BUET), Dhaka**
Undergrad Thesis (one year) project, '*Study of Wastewater Treatment Process of a Synthetic Fabric Dyeing Plant*', under the supervision of Prof. Sabder Ali (BUET).

Professional Experiences:

Oct'16 – Jan'17: **Visiting Research Scholar, Texas A&M University, USA**

Jun – July'15: **Visiting Professor, McGill University, Canada**

Nov'13 onward: **Assistant Professor, Dept of Chem Eng, Bangladesh Uni of Eng and Tech (BUET)**
This work encompasses Teaching, Research, Consultancy and Departmental activities.
Teaching – Courses Taught: ChE 485 (Industrial Pollution Control), ChE 481 (Environmental Engineering I), ChE 411 (Economics and Management of Chemical Process Industries), ChE 473 (Biochem Eng I), ChE 475 (Biochem Eng II), ChE 441 (Fertilizer, Pulp and Paper Tech), ChE 6504 (Fermentation Technology), ChE 6505 (Biochemical Engineering).

Design and Consultancy – Provide consultancy services to Environmental and Biotechnological Projects (Govt of Bangladesh, IFC-World Bank, JICA, European Funding Agencies and Local Industries), which include but not limited to Bioprocess Engineering, Industrial Wastewater Management, Industrial Solid Waste Management, Environmental Impact Assessment (EIA), Environmental and Social Impact Assessment (ESIA), etc.

- Working on Industrial Waste Management and Environmental issues since 2004; working experience with different waste management options including Physico-Chemical, Biological and Zero-Discharge techniques.
- Hands-on experience in designing and troubleshooting textile (dyeing and washing) and pharmaceutical Effluent Treatment Plants (ETPs).
- Technological assessment of Green Energy and Biofuel production options.
- Prefers to mix Technical Consultancy with Research Approach

Research – supervising different research projects on Biotech, Food and Environmental Engineering, such as: Food Processing and Preservation, Low-Cost Diagnostics to Detect Biomarkers in Biofluid, Biofuel Production from Biomass, Biological Effluent Treatment, Resource Recovery from Solid Waste, etc.

Jun'10 – Sept'13: **Post-Doctoral Fellow, McGill University, Canada**
This work encompassed Theoretical and Experimental research. The Experimental research work aimed developing Antibody active paper and cellulose beads to detect and filter bacteriophage 'T7'. The Theoretical research work aimed to perform molecular modelling of building blocks of Picloram antibody, 3D Homology modelling of Antibody Binding Fragments, and Quantum Calculation of Antibody-Antigen Interaction Energies at different physiological conditions.

Feb-May'10: **Post-Doctoral Researcher, Monash University, Australia**
This project developed bioactive enzymatic papers. Main focuses of the project were to deliver enzymes in a controlled pattern on paper, to investigate activity, stability, selectivity, aging, fixation and retention of enzymes on paper.

Jan'07 – May'10: **Casual Academic/Sessional Teacher, Monash University, Australia**
Course Taught - CHE4180 (Chemical Engineering Project), CHE4163 (Transport Phenomena and Numerical Methods), CHE3161 (Chemistry and Chemical Thermodynamics), CHE3164 (Reaction Engineering), CHE2165 (Bio-nano Engineering), MEC2404 (Fluids Mechanics).

May-Sept'06: **Environmental Consultant and Engineering Design, Renata Ltd., BD**
Work independently to design the '*Effluent Treatment Plant, ETP*' and to develop the *'Waste Management Plan*' for *Renata Limited*, a prominent pharmaceutical industry in Bangladesh (www.renata-ltd.com).

Sep'04-Aug'06: **Project Engineer, ETP, ISM Project**
ISM was an international research project aiming pollution abatement. The project was funded by DFID (UK), USAID (US), Dept of Env (DoE) of Bangladesh Govt; and was undertaken by Bangladesh Centre for Advanced Studies (BCAS), Stockholm Env Inst (SEI) and Uni of Leeds, UK. This project worked to identify and reduce industrial water pollution in the Turaag River and surrounding wetlands. Key Responsibilities: Identifying and measuring water pollution in the Turaag River; Helping industries to establish and troubleshoot Effluent Treatment Plants; Report Writing; Scientific Publication; Presenting Research works to the Industry and Local community.

2007-2008: **Monash University**
- Safety and Lab Manager: Chemistry Lab (2007-08) and Humidity Controlled Lab (2008-09), APPI, Monash University.
- Member of Safety Committee, Dept of Chem Eng, Monash University.

Jul'98 – Jun'00: **Lab Assistant Demonstrator, Physics Lab, Notre Dame College**
● Demonstrate different lab experiments; ● Marking reports; ● Maintain lab equipment

Major Awards, Scholarships and Achievements:

- ✓ '*iCFP2016 Young Scientist Award*' in recognition of the Outstanding Young Research in 2nd International Conference on Food Properties (iCFP2016), Bangkok, Thailand, 2016.
- ✓ iCFP2016 Best Paper Award on *Mass Transfer Properties, Mass-volume-area related Properties & Mechanical Properties Track* for the paper entitled: 'Analyzing Diffusivity of Formaldehyde in Formalin Treated Fish Samples: 'Catla catla'', at the 2nd International Conference on Food Properties (iCFP2016), Bangkok, Thailand, 2016.
- ✓ iCFP2016 Best Paper Award on *Health and Wellness & Medicinal Properties Track* for the paper entitled: 'Measuring and Analyzing Dental Erosion Caused by Beverages and Bottled Drinking Water in Bangladesh', at the 2nd International Conference on Food Properties (iCFP2016), Bangkok, Thailand, 2016.
- ✓ Winner of 'Young Innovator Award 2012' entitled '*TR35@Singapore Awards*' organized by the '*MIT Technology Review Inc*' to recognize the top innovators in the *Asia-Pacific regions* under the age of 35 for *Developing Paper Diagnostic for Blood Typing **.
- ✓ Vice-Chancellor's commendation (2010) for Doctoral Thesis Excellence (known as: *Mollie Holman Doctoral Medal*) as a recognition of Excellence in PhD Research.
- ✓ Kenneth Hunt Medal (2010) from *Monash Engineering Faculty* for the Best Engineering PhD Thesis.
- ✓ Finalist for '*IChemE 2010 Award: the Young Engineer'* of the Year sponsored by GlaxoSmithKline (GSK) and Institute of Chemical Engineers' (IChemE), UK.
- ✓ State Winner (VIC) in '*2009 AusBiotech-GSK Student Excellence Awards'* for the PhD work on 'Bioactive Papers'; AUS national award is for the postgrad (PhD) students working in Biotehcnology.
- ✓ Monash Post Graduate Publication Award (2009); Monash Postgraduate Research Travel Grant (2009); Monash Graduate Scholarship (2006-09); Monash Departmental Scholarship (2006-09); Monash Research Scholarship.
- ✓ Selected as one of the '*Ten High Achieving International Students*' from the Engineering Faculty, Monash University in 2008, as a recognition of Academic Achievements.

- ✓ Selected and Featured in the special edition (21st Anniversary, 2012) of Daily Star Bangladesh as one of the '*Young and Future Leaders of Bangladesh*' working in national and international level.
- ✓ '*Award of Appreciation*' from the International Conference on Chemical Engineering 2008, Dhaka, Bangladesh, for the contribution to organize ICChE2008 Poster Competition for undergraduate students.
- ✓ BUET Technical Scholarship (2000-04); University Merit Scholarship (BUET).

* The blood typing work was further developed in Monash Uni, and went to win Australian Eureka Prize for Innovation in Technology.

Research Grants:

- ✓ BCEF Academic Research Fund of BDT 950,000/- (year 2014-16) for the project: Paper Based Detection of Health Hazard Components in Chemically Adulterated Foods; Applicant: M.S. Khan.
- ✓ CASR-BUET Research Grant of BDT 3,46,000/- (year 2014-16) for the project: Low cost Paper Diagnostics for the Qualitative and Quantitative Detection of Harmful Chemicals Used in Food Processing and Preservation; Applicant: M.S. Khan
- ✓ BCEF Academic Research Fund of BDT 90,000/- (year 2013) for the project: Computational Modelling in Biotechnology; Applicant: M.S. Khan.
- ✓ CSACS (Centre for Self-Assembled Chemical Structures) ECO Grant of $20,000 CAD, for Feb 2011 to Jan 2012; Applicants: T.G. van de Ven (PI) and M.S. Khan.
- ✓ SENTINEL Summer Student Grant 2012 and 2013; Applicants: T.G. van de Ven (PI) and M.S. Khan.

Editor and Reviewer:

- ✓ Editor, "Pesticide Residue in Foods: Sources, Management, and Control", 2016, Publisher: Springer, New York; (in press).
- ✓ Member, Proceedings Sub-Committee, 4th International Conference on Chem Eng (ICChE) 2014, Dec 29-30, 2014, Dhaka, Bangladesh.
- ✓ Editor, Program and Abstract Booklet, 85th Annual ACS Colloid and Surface Science Symposium 2011, Montreal, Canada.
- ✓ Editor, Book entitled: *Cascades Festschrift in Honour of Professor Emeritus M.A. (Tony) Whitehead including The Richard Hart Symposium Scientific Papers and Reminiscences* (Revised First Edition), Cascades Inc., Quebec (ISBN-13: 978-2-9808323-6-9).
- ✓ Editor, 'ChE Thoughts' (www.chethoughts.com), the Chemical Engineering and Science.
- ✓ Journal Reviewer, 'Molecular Pharmaceutics' (ACS Publication), 'Sensors' (MDPI Publication).

Short Course and Workshop:

- ✓ Instructor, Workshop on Industrial Pollution Control, the Central Bank, Bangladesh, 2017.
- ✓ Instructor, Short Training on Effluent Treatment Plant Management, PaCT Bangladesh, IFC-World Bank, 2015.
- ✓ Instructor, Good Laboratory Practices 2015: Water Quality Analysis, Department of Environment, and Government of Bangladesh.
- ✓ Instructor, Technical Writing and Presentation Workshop 2013, Department of Chemical Engineering, BUET, Dhaka.
- ✓ Instructor, Technical Writing and Presentation Workshop 2011, Department of Chemical Engineering, BUET, Dhaka.

Organizational Activities and Experiences:

- ✓ Assistant Provost (March 2018 onward), Ahsanullah Hall, Bangladesh University of Engineering and Technology (BUET).
- ✓ Member and Co-Chair (May 2017 onward), 'Fine Chemicals' Committee, Bangladesh Standards and Testing Institute (BSTI), Ministry of Industries, Government of the People's Republic of Bangladesh.
- ✓ Member (2017), Committee to develop guideline for 'Production, Processing, Packaging and Exporting Charcoal from Jute Stick', Ministry of Textiles and Jute, Government of the People's Republic of Bangladesh.

- ✓ Member (2016 onward), The National Steering Board of Bangladesh Water Multi-Stakeholder Partnership, Ministry of Water Resources (Bangladesh Water MSP) (Ref: Gazette No. 42.00.0000.038.18.039/15 dated December 6, 2015 of Ministry of Water Resources)
- ✓ Member (2017 onward), Industrial Water and Wastewater Management Work Stream, Bangladesh Water MSP, Prime Minister's Office, Government of the People's Republic of Bangladesh.
- ✓ Member, Committee to Develop Guideline to Establish Bio-Ethanol Plants in Bangladesh (2016-17), Ministry of Power, Energy and Mineral Resources, Government of People's Republic of Bangladesh.
- ✓ Member, Organizing Committee, 4th International Conference on Food Security and Nutrition (ICFSN 2017), Prague, Czech Republic, 2017.
- ✓ Member Secretary, 4th International Conference on Chem Eng (ICChE) 2014, Dhaka, Bangladesh.
- ✓ Member, Organizing Committee, CSACS 11th Annual Meeting, May 9, 2013, Montreal, Canada.
- ✓ Member, Organizing Committee, CSACS 10th Annual Meeting, May 9-10, 2012, Montreal, Canada.
- ✓ Member Secretary, 'Sigma Xi Montreal Chapter', from Jul 2011 to June 2013.
- ✓ Convener, Student Poster Session and Poster Competition, 3rd International Conference on Chem Eng 2011, Dhaka, Bangladesh.
- ✓ Convener, Student Poster Session and Poster Competition, 2nd International Conference on Chem Eng 2008, Dhaka, Bangladesh.
- ✓ Moderator, 'ChemicalBUET', an organization dedicated to the students, academics and alumni of the Department of Chemical Engineering, BUET.

Professional Accreditation and Association:

- ✓ Professional Engineer (Engineers Australia; Level-1).
- ✓ Member, American Chemical Society (ACS), Sigma Xi, Australia's Biotechnology Organisation (AusBiotech), APPITA, The Institute of Engineers, Bangladesh (IEB), Bangladesh Chemical Engineering Alumni Association.
- ✓ Associate Member, Institute of Chemical Engineers (IChemE)

Language: Fluent in English and Bengali.

For more information please visit: www.mohidkhan.com

Research Publications:

(Citations: 437; h-index: 10, i10-index: 10; source: google scholar, date: 29-May-2018)

Patents:

1. **M.S. Khan,** M. N. Islam, I. Ahmed, M. I. Anik and M. S. Ferdous, "Low-Cost Paper Diagnostics for the Qualitative and Quantitative Detection of Uric Acid in Urine and other Biofluids", US Provisional Patent, 62672580, 17 May, 2018; BD Provisional Patent Application P/BD/2018/000147, 07 June, 2018.
2. **M.S. Khan,** M. N. Islam, and M. Mursalat, "Low-Cost Paper Diagnostics for the Qualitative and Quantitative Detection of Formaldehyde (Formalin, Primary Aldehyde) in Food, Water and other Biofluids", US Provisional Patent, 62457901, 12 Feb, 2017; Bangladesh Patent Application, P/BD/2017/000076, 14 Mar, 2017.
3. **M.S. Khan,** X. Li, G. Thuas, W. Shen and G. Garnier, "Test Device for Identifying Antigens and Antibodies in Biofluids", PCT/AU2010/001255, 24 Sept, 2009; US20120322086 A1, CN102576017A, EP2480885A1, EP2480885A4, WO2011035385A1.
4. W. Shen, J. Tian, X., Li, **M.S. Khan,** G. Garnier, "Methods for Fabricating Microfluidic Systems", PCT/AU2009/000889, 10 July, 2009; US20120009662, CN102119056A, EP2300165A1, WO2010003188A1.
5. W. Shen, J. Tian, X. Li, **M. Khan**, G. Garnier, "Method of Fabricating Paper-Based Microfluidic Systems by Printing", Australian Provisional Patent, 2008905776, 7 Nov, 2008.

Book and Booklet:

6. "Pesticide Residue in Foods: Sources, Management, and Control", ed. **M. S. Khan**, M. S. Rahman, 2016, Publisher: Springer, New York; 2017. (Hardcover ISBN 978-3-319-52683-2; eBook ISBN 978-3-319-52683-6).
7. **M.S. Khan**, G. Garnier and W. Shen (2010), "Printing, Specificity and Stability of Enzymatic Bioactive Papers", VDM Publishing House Ltd (ISBN: 978-3-639-31878-4; DOI: 10.13140/RG.2.1.3675.2482).
8. **M.S. Khan**, J. Knapp, A. Clemett, M. Chadwick, M.A. Mahmood (2006), "Managing and Monitoring Effluent Treatment Plants", *Booklet series, Managing Industrial Pollution from Small and Medium Scale Industries in Bangladesh*, R8161-ETP, Department for International Development (DFID), UK (ISBN: 984-8121-08-0; DOI: 10.13140/RG.2.1.1840.2408).

Book Chapters:

9. M. N. Islam, S. F. Bint-E-Naser, **M. S. Khan**, "Pesticide Food Laws and Regulations", in "Pesticide Residue in Foods: Sources, Management, and Control", ed. M. S. Khan, M. S. Rahman, Publisher: Springer, 2017, pp. 37-51 (ISBN: 978-3-319-52681-2 (Print) 978-3-319-52683-6 (Online)).
10. M. Debnath, **M. S. Khan**, "Health Concerns of Pesticide", in "Pesticide Residue in Foods: Sources, Management, and Control", ed. M. S. Khan, M. S. Rahman, Publisher: Springer, New York; 2017, pp. 103-118 (ISBN: 978-3-319-52681-2 (Print) 978-3-319-52683-6 (Online)).
11. L. Hossain, R. Rahman, **M. S. Khan**, "Alternatives of Pesticides", in "Pesticide Residue in Foods: Sources, Management, and Control", ed. M. S. Khan, M. S. Rahman, Publisher: Springer, New York; 2017, pp. 147-165 (ISBN: 978-3-319-52681-2 (Print) 978-3-319-52683-6 (Online)).
12. M. N. Islam, M. Mursalat, and **M. S. Khan** (2016), "A Review on the Legislative Aspect of Artificial Fruit Ripening", Advances in Food Additives, H. Naegeli, C. S. Huh, et al., Scientific Research Publishing, Chapter 3, pp. 45-69. (ISBN: 978-1-61896-278-2).
13. L. Hossain, S. F. Bint-E-Naser, **M. S. Khan**, "A Case Study: A Review on Prospects and Constraints of Bioethanol Production in Bangladesh", in "Biofuels: Advances & Perspectives", ed. G. Kaushik, S. Chaturvedi, A. Chel, Publisher: Studium Press LLC, USA, 2017, Chapter 5, pp. 69-86 (ISBN: 978-93-85046-22-3).
14. F. Ahmed, A. Ferdous, **M. S. Khan**, "Algae in a vat may power the future: A Review on Algal biodiesel production", in "Biofuels: Advances & Perspectives", ed. G. Kaushik, S. Chaturvedi, A. Chel, Publisher: Studium Press LLC, USA, 2017, Chapter 10, pp. 193-220 (ISBN: 978-93-85046-22-3).
15. **M.S. Khan**, and G. Garnier (2014), "Novel Image Analysis Technique to Measure Enzymatic Activity and Stability on Paper Surfaces", Advances in Image Analysis Research, *Ed. R. M. Echon,* Nova Publishers, Chapter 10, pp. 217-238. (ISBN: 978-62948-602-4; DOI: 10.13140/RG.2.1.3413.1041).
16. G. Garnier, **M.S. Khan**, Y. Ngo, W. Mosse (2013), "Paper, Printing and Apple Pie", Fundamental and Applied Pulp and Paper Modelling Symposium (FAPPMS) 2011, *Ed. Gaudreault, R., Robert, S., and Whitehead, M.A.,* Cascades Inc., Kingsey Falls, Quebec, chapter-12, pp. 147-183 (ISBN: 978-2-9808323-7-6; DOI: 10.13140/RG.2.1.1027.1844).
17. M.S. Khan, M.A. Whitehead, and T.G.M. van de Ven (2013), "Semi-Empirical (PM3) Molecular Modelling of Amino Acids Available in Picloram (4-Amino-3,5,6-trichloropyradine-2-carboxylic Acid) Antibody", Fundamental and Applied Pulp and Paper Modelling Symposium (FAPPMS) 2011, *Ed. Gaudreault, R., Robert, S., and Whitehead, M.A.,* Cascades Inc., Kingsey Falls, Quebec, chapter-9, pp. 99-115 (ISBN: 978-2-9808323-7-6; DOI: 10.13140/RG.2.1.1373.2966).
18. **M.S. Khan**, J. Tian, L. Xu, W. Shen, G. Garnier, "Bioactive Enzymatic Papers", in: S.J. I'Anson (Ed.), *Advances in Pulp and Paper Research, Oxford 2009*, The Pulp & Paper Fundamental Research Society, 2009, pp. 1149-1166. (ISBN: 978-0-9545272-6-6) (DOI: 10.13140/RG.2.1.2487.4084).

Journal Articles:

19. M. N. Islam, M. Y. Imtiaz, S. S. Alam, F. Nowshad, S. A. Shadman, **M. S. Khan**, "Artificial Ripening on Banana (MusaSpp.) Samples: Analyzing Ripening Agents and Change in Nutritional Parameters", ***Cogent Food & Agriculture,*** **4** (1), pp. 1-16 (DOI: 10.1080/23311932.2018.1477232).

20. L. Hossain, S. K. Sarker, **M. S. Khan**, "Evaluation of Present and Future Wastewater Impacts of Textile Dyeing Industries in Bangladesh", ***Environmental Development*****, 26** (2018), pp. 23-33 (DOI: https://doi.org/10.1016/j.envdev.2018.03.005).
21. F. Nowshad, M. Nazibul, **M. S. Khan**, "Concentration and Formation Behavior of Naturally Occurring Formaldehyde in Foods", ***Agriculture and Food Security,* 7** (17), pp. 1-8 (DOI: 10.1186/s40066-018-0166-4).
22. M. M. Uddin, S. K. Amit, R. Rahman, S. M. R. Islam, **M. S. Khan**, "A Review on Technological and Commercial Aspects of Food Preservation and Processing", ***Agriculture and Food Security* 6:51**, pp. 1-22 (DOI: DOI 10.1186/s40066-017-0130-8).
23. C. J. Garvey, **M. S. Khan**, M. P. Weir. G. Garnier, "Localisation of Alkaline Phosphatase in the Pore Structure of Paper", ***Colloid and Polymer Science,* 29**5(8), pp. 1293-1304 (DOI: 10.1007/s00396-017-4037-5).
24. F. Enam, M. Mursalat, U. Guha, N. Aich, M. I. Anik, N. S. Nisha, A. Ahsan, **M. S. Khan** (2017)**,** "Dental Erosion Potential of Beverages and Bottled Drinking Water in Bangladesh", ***International Journal to Food Properties,* 20**(11), pp. 2499-2510 (DOI: http://dx.doi.org/10.1080/10942912.2016.1242607).
25. S. F. Bint-E-Naser, L. Hossain, M. Debnath, P. P. Barua, **M.S. Khan** (2017), "Analyzing Physico-Chemical Properties of Bioethanol and Bioethanol Blended Fuels", ***Journal of Nature Science and Sustainable Technology,* 11** (4),pp. 331-340.
26. A. Ferdous, F. Ahmed, M. S. Khan, J. L. Munshi, C. K. Roy, S. P. Nur, **M.S. Khan** (2017), "Studying Growth Kinetics of Chlorella vulgaris, a Microalgae with High Lipid Content, to Produce Biodiesel in Local Condition", ***Journal of Nature Science and Sustainable Technology, 11 (4)***, pp. 341-348.
27. M. R. Abedin, S. Abedin, M. H. A. Mahbub, N. Deb, **M. S. Khan (2017)**, "A Hydrometallurgical Approach to Recover Zinc and Manganese from Spent Zn-C Batteries", ***Materials Science Forum 886*** (Nano Engineering and Materials Technologies), pp. 117-21 (DOI: 10.4028/www.scientific.net/MSF.886.117).
28. M. N. Islam, M. Mursalat, and **M.S. Khan** (2016), "A Review on the Legislative Aspect of Artificial Fruit Ripening", ***Agriculture & Food Security* 5:8**, pp. 1-10 (DOI: DOI 10.1186/s40066-016-0057-5).
29. **M.S. Khan**, T. Pandey, and T.G.M. van de Ven (2015), "Qualitative and Quantitative Detection of T7 Bacteriophages using Paper Based Sandwich ELISA", ***Colloids and Surfaces B: Biointerfaces 132***, pp. 264-270. (DOI: 10.1016/j.colsurfb.2015.05.028)
30. M. N. Islam, A. H. M. S. Rahman, M. Mursalat, A. H. Rony, and **M.S. Khan** (2015), "A Legislative Aspect of Artificial Fruit Ripening in a Developing Country like Bangladesh", ***Chemical Engineering Research Bulletin 18(1)*** (2015), pp. 30-37 (DOI: 10.3329/cerb.v18i1.26219).
31. **M.S. Khan**, M.A. Whitehead, and T.G. van de Ven (2015), "Theoretical Calculation of Antigen-Antibody Interactions to Develop Antibody Based Filter", ***International Research Journal of Pure and Applied Chemistry 9***(3), pp. 1-6 (DOI: 10.9734/IRJPAC/2015/18579).
32. **M.S. Khan** and G. Garnier (2013), "Direct Measurement of Enzymatic Kinetics on Bioactive Paper", ***Chemical Engineering Science* 87** (January 2013), pp. 91-99. (DOI: 10.1016/j.ces.2012.09.022)
33. K. Neibert, V. Gosein, A. Sharma, **M. Khan,** M.A. Whitehead, D. Maysinger, and A. Kakkar (2013), ""Click" Dendrimers as Anti-inflammatory Agents with Insights from Molecular Modelling Studies." ***Molecular Pharmaceutics* 10**(6), pp. 2502-2508. (DOI: 10.1021/mp4000508)
34. M. Mursalat, A. Hasan (Rony), A.H.M.S. Rahman, M.N. Islam, and **M.S. Khan** (2013) "A Critical Analysis of Artificial Fruit Ripening: Scientific, Legislative and Socio-Economic Aspects." ***ChE Thoughts* 4** (1), 6-12.
35. **M.S. Khan,** D. Kannangara, G. Garnier and W. Shen (2011) "Effect of Impact Velocity on the Wicking of a Sessile Droplet on a V-Groove." ***Chemical Engineering Science* 66**(23), pp. 6120-6127. (DOI: 10.1016/j.ces.2011.08.037)
36. **M.S. Khan,** G. Thouas, G. Whyte, W. Shen, and G. Garnier (2010) "Paper Diagnostics for Blood Typing", ***Analytical Chemistry* 82**(10), pp. 4158-4164. (DOI: 10.1021/ac100341n)
37. **M.S. Khan,** (2011) "Blood Line", ***The Chemical Engineer (tce)* 836**(February 2010), pp. 22-23.
38. **M.S. Khan**, S., Haniffa, A. Slater, and G. Garnier (2010) "Effect of Polymers on the Thermal Stability of Bioactive Enzymatic Papers", ***Colloids and Surfaces B: Biointerfaces* 79**(1), pp. 88-96. (DOI: 10.1016/j.colsurfb.2010.03.034)
39. **M.S. Khan**, D. Fon, X. Li, J. Tian, J. Forsythe, G. Garnier, and W. Shen (2010) "Biosurface Engineering Through Ink Jet Printing", ***Colloids and Surfaces B: Biointerfaces* 75** (2), pp. 441-447. (DOI: 10.1016/j.colsurfb.2009.09.032)
40. **M.S. Khan**, L. Xu, W. Shen, and G. Garnier (2010) "Thermal Stability of Bioactive Enzymatic Papers", ***Colloids and Surfaces B: Biointerfaces* 75** (1), pp. 239-246. (DOI: 10.1016/j.colsurfb.2009.08.042)
41. **M.S. Khan**, D. Kannangara, W. Shen, and G. Garnier (2008) "Isothermal Noncoalescence of Liquid Droplets at the Air-Liquid Interface", ***Langmuir* 24** (7), pp. 3199-3204. (DOI: 10.1021/la7028627)
42. **M.S. Khan**, S., Ahmed, A.E.V. Evans, and M. Chadwick, "Methodology for Performance Analysis of Textile Effluent Treatment Plants in Bangladesh", ***Chemical Engineering Research Bulletin 13 (2)***, pp. 51-56. (DOI: 10.3329/cerb.v13i2.3939)
43. K. B. Kabir, K. B., **M.S. Khan**, and I. Mahmud (2008), "Novel Ideas on Engineering Education in Bangladesh." ***Chemical Engineering Research Bulletin***, 12, pp. 11-19. (DOI: 10.3329/cerb.v12i0.1492)
44. M.S. Ali, S. Ahmed, and **M.S. Khan** (2005) "Characteristics and Treatment Process of Wastewater in a Nylon Fabric Dyeing Plant." ***Journal of Chemical Engineering****, IEB*, ChE 23, pp. 17-22. (DOI: 10.3329/jce.v23i0.5566)

Peer Reviewed Conference Articles:

45. S. K. Amit, M. M. Uddin, S. Samira, R. Rahman, M. Rahman, S. Nandy, **M.S. Khan**, "Time and Temperature Effect on the Residual Concentration of Formaldehyde in Formalin Treated Samples of Labeo rohita", 4th International Conference on Food Security and Nutrition (ICFSN 2017), Prague, Czech Republic, 2017, Article No. S0012.
46. F. Nowshad, M. N. Islam, **M.S. Khan**, "Analysis of the Concentration and Formation Behavior of Naturally Occurring Formaldehyde Content in Food", 4th International Conference on Food Security and Nutrition (ICFSN 2017), Prague, Czech Republic, 2017, Article No. S0009.

47. R. Rahman, S. Samira, S. K. Amit, M. M. Uddin, S. Nandy, M. Rahman, **M. S. Khan**, 'Analyzing Diffusivity of Formaldehyde in Formalin Treated Fish Samples: 'Catla catla'', at the 2nd International Conference on Food Properties (iCFP2016), Bangkok, Thailand, 2016.
48. N. S. Nisha, A. Ahsan, F. Enam, M. Mursalat, M. I. Anik, **M. S. Khan**, 'Measuring and Analyzing Dental Erosion Caused by Beverages and Bottled Drinking Water in Bangladesh', at the 2nd International Conference on Food Properties (iCFP2016), Bangkok, Thailand, 2016.
49. S. F. Bint-E-Naser, L. Hossain, M. Debnath, P. P. Barua, **M.S. Khan**, "Analyzing Physico-Chemical Properties of Bioethanol and Bioethanol Blended Fuels", International Conference on Petroleum Engineering 2016 (ICPE2016), Dhaka, Bangladesh, 2016, Article No. 049.
50. A. Ferdous, F. Ahmed, M. S. Khan, J. L. Munshi, C. K. Roy, S. P. Nur, **M.S. Khan**, "Studying Growth Kinetics of Chlorella vulgaris, a Microalgae with High Lipid Content, to Produce Biodiesel in Local Condition", International Conference on Petroleum Engineering 2016 (ICPE2016), Dhaka, Bangladesh, 2016, Article No. 051.
51. M. N. Jahangir, S. Khan, A. K. Mila, **M.S. Khan**, M. A. H. Mamun, "Biogas Production from Tannery Wastage Using Mesophilic Anaerobic Digestion Process", International Conference on Mechanical Engineering 2015 (ICME2015), Dhaka, Bangladesh, 2016, Article No. 199.
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5. ***Training on Good Laboratory Practice for Officials of the Department of Environment (DoE)*.**
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