**MOHAMED ZAINAL ABEDIN**

**Office Address Home Address**

Department of Environmental Science, A- 11 Mohanagar Housing

Independent University, Bangladesh, Project, Block No: A, Road # 2

Bashundhara, R/A, Dhaka-1229. West Rampura, Dhaka- 1229,

Bangladesh. Phone: +88-02-55128669

Phone: +88-02-8401645-53, Ext. Cell Phone: +88-01711171404

E-mail: zabedinbd@iub.edu.bd

Place and Date of Birth: Comilla, 1st November, 1946

Nationality: Bangladeshi by birth

**EDUCATION:**

* B.Sc. (Hons.) Chemistry, Chittagong University, 1968
* M.Sc. (Chemistry), Dhaka University, 1969
* MS (Chemistry), Free University Berlin (West Germany), 1975
* Dr. rer. Nat (Ph.D) (Chemistry), Free University Berlin (West Germany), 1978

**DOCTORAL THESIS:**

* Chemistry and Properties of Placental-Collagens.

**MASTER´S THESIS:**

* Determination of Total Vitamin C in different pretreated Potatoes.

**PROFESSIONAL EXPERIENCE:**

**A. Administrative Positions:**

1. 1990-2006: Member, Academic Council, Shahjalal University of Science and

 Technology, Sylhet.

1. 1992-1994: Member, Syndicate, Shahjalal University of Science and

 1997-1998 Technology, Sylhet.

1. 1991-1993: Treasurer, Student Union; Shahjalal University of Science and

Technology , Sylhet.

1. 1993-1994: Provost, Shahparan Hall, Shahjalal University of Science and

 Technology, Sylhet.

1. 1997-1999: Member, Academic Council, National University.

 2000-2001

1. 1997-1998: Dean, School of Applied Science and Technology, Shahjalal University of

 (2001-2005) Science and Technology, Sylhet.

1. 1999-2000: Dean, School of Agriculture and Mineral Sciences, Shahjalal University of

 (2006-2007) Science and Technology, Sylhet.

1. 2004 -2008: Member, Syndicate and Academic Council, Sylhet International University, Sylhet.

**B. Academic Experience:**

1. 1972-1975: German Language Learning ( six months) and Post-graduate studies:Goethe Institute, Iserlohn and Free University Berlin, West Germany.

2. 1975-1978: PhD studies, Free University Berlin, Germany.

3. 1978-1979: Post-doctoral Research Fellow: Free University Berlin, Germany.

4. 1979-1982: MRC Post-doctoral Research Fellow: Manchester University, UK.

5. 1982-1989: Lecturer, Assistant Professor and Associate Professor:

Dept. of Environmental Studies, Higher Inst. of Technology,

Brack, Libya.

6. 1990-1993: Associate Professor, Dept. of Chemistry,

 Shahjalal University of Science and Technology, Sylhet.

7. 1994-1995: Head, Dept. of Chemical Engineering and Polymer Science,

 Shahjalal University of Science and Technology, Sylhet.

8. 1995-2007: Professor and Head, Dept. of Chemical Engineering and Polymer Science, Shahjalal University of Science and Technology, Sylhet.

9. 2007- 2009 Professor, Dept.of Chemical Engineering and Polymer Science.

 Shahjalal University of Sc.and Technology, Sylhet, Bangladesh.

10. 2009- Professor (Adjunct), Dept of Environmental Science ,Independent

 University, Bangladesh, , Dhaka, Bangladesh.

**C. Other Positions:**

**1.** **Member, Editorial Board:** a) Journal of Bangladesh Chemistry Society,

 b) Shahjalal University Studies

 c) Sylhet International University Studies

 **2.** **Co-founder:** Department of Chemistry, Shahjalal University, Sylhet.

 **3.** **Founder:** Department of Chemical Engineering and Polymer Science, Shahjalal University , Sylhet.

 **4.** **Co-ordinator: (2008-2010)** Joint M.S Programme in Disaster and Environmental Engineering among Shahjalal

 University of Sc. and Technology, Chittagong University of Engg. and Tecnology and University of Kassel,

. Germany .

**D. Scholarships and Fellowships:**

1. **German Academic Exchange Service Scholarship (DAAD) for Post-graduate and Doctoral studies:** Free University of Berlin, Federal Rep. of Germany (1972-1977).

2. **Post-doctoral Research Fellow:** Free University of Berlin (1977-1978).

3. **MRC (UK) Post-doctoral Research Fellow:** Manchester University, England (1979-1982).

4. **Commonwealth Academic Staff Fellow:** Strathclyde University, Glasgow, UK (1995).

5. **Japan Society for the promotion of Science (JSPS) Fellow:** Saga University, Japan (2001)

**E. List of Publications:**

1. R. Riemschneider, M Zainal Abedin: Qualititäts and Stabilisierungsprufung Hitzekonservierter Nahrungsmittel unter Verwendung von Vitamin C als Kriterium- Alimenta 15 (1976) 171 (Switzerland)
2. R. Riemschneider, M Zainal Abedin, R.P. Mocelin, Characterisation of Soluble Collagens: An.Farm.Quim,Sau Paulo 16(1976)687
3. R. Riemschneider, M Zainal Abedin, Hitzekonservierte Nahrungsmittel(Mitt.2)Betriebsverpflegung 4(1976)13 Germany
4. R. Riemschneider, R.P. Mocelin , M Zainal Abedin, Vitamin C determination in potatoes submitted to two different industrial processes (Mitt.3) Rev.Centro.Ciencias Rurais 7(3)(1977 ) 191 Brazil
5. R. Riemschneider, I.A Khan Ghouri, M Zainal Abedin, Hitzekonservierte Nahrungsmittel (Mitt.5) Bestimmung und Stabilisierung von Thiamin in

 Hitzekonservierten Rindfleisch. Alimenta 18(1979) 147 Switzerlan

1. R. Riemschneider, I.A Khan Ghouri, M Zainal Abedin, Hitzekonservierte Nahrungsmittel (Mitt.4) .Betriebsverpf egung7(1979)22Germany
2. R. Riemschneider, M Zainal Abedin, Lösliche Kollagene aus Rinderplazenten : Angew.Makromol.Chem 66(1978)113Switzerland
3. R. Riemschneider, M Zainal Abedin, Kollagen und Vitamin C Gehalt von Humanplazenten.: Geburtsh-u.Frauenheilk. 38(1978) 1070 Germany.
4. R. Riemschneider, M Zainal Abedin, Pepsin solubilised Collagen from Cow Placenta. Angew.Makromol.Chem 82(1979)131Switzerland.
5. R. Riemschneider, M Zainal Abedin, Langzeiteinwirkung von Äther auf Kollagen-haltige Materialen im Rahmen der Gewinnung löslicher kollagene: Pharm.Ind.41(1979)1077 Germany

 11. R. Riemschneider, M Zainal Abedin, Lösliche Plazenta-Kollagene:Tropokollagen und Atellokollagen: Pharm-Ind.42(1980)511 (Germany).

 12. M.Z.Abedin, S. Ayed, J.B. Weiss: Non-Basement Membrane Kollagen , A, B and C chains: Types V and VI collagens Biochem.Soc-Trans. 8(1980) 324

 13. R. Riemschneider, M Zainal Abedin, Collagen Polymorphism in Bovine Placenta:Pharm-Ind.43(1981)655 Germany.

 14. S. Ayed, M.Z.Abedin, S.M. Grundy, J.B. Weiss: Isolation and characterization of an unusual collagen from hyaline cartilage And intervertebral disc, FEBS Lett.123(1981) 195 Netherlands.

 15. M.Z.Abedin, S. Ayed, J.B. Weiss : Type V Collagen: The presence of appreciable amounts of alpha(V) chains in uterus: Biochem.Biophys.Res.Commun. 102(1981)1237 (USA).

 16. M.Z.Abedin, S. Ayed, J.B. Weiss: Isolation and native characterization of cystein-rich collagens from bovine placental tissues and uterus and their relationship to types IV collagen,Biosc,Reports 2 (1982) 300 Netherlands.

 17. S. Ayed, M.Z.Abedin, J.B. Weiss, S.M. Grundy: Characterisation of another short chain disulphide bonded collagen from cartilage,vitreous and intervertebral disc: FEBS Lett.139(1982)300 Netherlands.

 18. M. Z. Abedin, R. Riemschneider: Collagen heterogeneity in calf skin : Characterisation of Type V Collagen and its relation to cystein-rich high molecular weight aggregates,Pharm.Ind.44(1982)745, Germany.

 19. M. Z. Abedin, R. Riemschneider, Collagen heterogeneity and its significance: Angew.Makromol.Chem, 111(1983)107Germany.

 20. S.Ayed, m.z. Abedin, H.B Evans, S. Hopkins, KH Walter, J B Weissand, PJL Holt: Localisation of Collagen types and fibronectin in cartilage by immunoflourescence.

Annals.Rheum.Diseases 42(1983)575 UK

 21. M. Z. Abedin, R. Riemschneider: Chicken Skin Collagen: Molecular diversity and susceptibility to neutral proteases. Pharm. Ind-46(1984)532 Germany.

 22. M. Z. Abedin, B. Pahlavanpur, T.Hassan: Atomic Absorption Spectrophotometric Analysis of Zn and Mn in Libyan Fresh and canned Thuna Fish-Bull-Marine Biol. Res.7 (1986)46 Libya

 23. M. Z. Abedin, M. Sulaiman: The chemical composition of Alhagi Maurorum Root Flour : J.Soc.Pharm.Chem.Vol.1, No.4(1992)6 Bangladesh.

 24. M. Z. Abedin: Collagen Polymers :Heterogeneity and Function . J.Soc.Pharm.Chem.Vol.2.No.2 (1993) Bangladesh.

25. Salma Shirin, Tanvir Muslim, A.M.Aman, M.Z. Abedin: A simplified method for the determination of total vitamin C :J.Soc.Pharm.Chem.Vol.2.No-2 (1994) Bangladesh.

26. M.A. Mottaleb,M.Z.Abedin: Determination of chlorinated pesticides in soil by Solid Phase Extraction- Gas Chromatography. Analytical Sciences 15 (1999) 283 Japan.

27. Ashaful Alam, T. Muslim, S.M.M. Rahman, M.Z.Abedin: Comparative study of total vitamin C in various fruits of greater Sylhet area: J. Bangl.Chemical Soc.11 No.1(1998) Bangladesh.

28. M.K. Das, B.M.Sadi, M.A. Alam, M.Z.Abedin: A Study of some water quality parameters of the Industrial Effluents of Chatak Paper and Pulp Industry, SUST Studies Vol-3 No1.2001 Bangladesh.

29. MDH Beg, M.A.Khan, M.Z.Abedin: Effect of Fillers on curing of wood surfaces with polyester oligomers by ultraviolet radiation. J.Appl- Pol-Sc. 89 (2003) 3826 USA.

30. M.A.Shawapan, M.A.Khan, M.Z.Abedin: Surface modification of Jute yarn by photografting of low glass transition monomers. J-Appl-Pol-Sc. 87(2003) 993 USA.

31. M.A.Mottaleb, M.Z. Abedin, M.S. Islam: Determination of Benzene, Toluene,Ethylbenzene and Xylene in River water by Solid Phase Extraction-Gas Chromatography- Analytical Sciences Oct.2003.Vol19 Japan

32. Abdullah Al Kafi, M.Z.Abedin, MDG Beg, K L Pickering, M. A Khan; Studies on the Mechanical Properties of Jute/glass fibre reinforced plastics and composites. JRPC : Sage Publications Vol.25 No1 (2006) UK

33. M. A Khan , Abdullah Al Kafi, M.Z.Abedin, S.Islam: Effect of Plasticizer on the improvement of hessian cloth (jute), cured with HEMA and TPGDA under UV radiation.Pol-Plastics Technology and Engg. USA.

34. N.H. Haque, Abdullah Al Kafi, M.N. Alam, M.Z. Abedin: Jute reinforcedPolymer composites by gamma radiation : Effect of surface treatment with UV radiation. Polymer Plastics Tech.and Engg.Vol.4(2006)497 USA.

35. M.A.Mottaleb, M.Z.Abedin ,M.S. Islam: Determination of Volatile Organic Compounds in river water by Solid Phase Extraction and Gas Chromatography: J- Env. Sc. Vol.16 No-3 (2004) 497.China

36. K F Akhtar, M.A. Momin, M.Z. Abedin, M.N. Siddique: Determination of Total Vitamin C in various fruits and vegetables by SPE and Spectrophotometric Method : Oriental Journal of Chemistry Vol.21 (2005 ) 401- India.

37. M.S.Alam, M.Z.Abedin M J Uddin: Use of Biomass Wastes for the Adsorption of Cr (VI): Bangladesh J.Env.Sc.Vol12(1), (2006) 40 Bangladesh.

38. M Z A Chowdury, M.J.Uddin, M M R Khan, M.Z. Abedin: Graphical Method for finding out the lower energy consumption of centrifugal pumps in Parallel arrangement : SUST Studies Vol.6 No.1 Nov.2005 Bangladesh.

39. M A Mumin, K F Akhtar M. Z. Abedin: Determination and Characterisation of Caffeine in tea, coffee and soft drinks by SPE-HPLC : Malayasian J.Chem. Vol.8 , p.45 (2006) Malayasia.

40. K F Akhtar, M A Momin, M.Z. Abedin: Determination of Ascorbic Acid and Dehydroascorbic Acid by HPLC : J. Bangladesh Chem.Soc. 2007 (Bangladesh).

41. M Tamez Uddin, M.A. Abedin: Adsorption of Phenol from aqueous solution by water hyacinth ash . ARPN Journal of Engg.and Appl.Sciences.Vol.2.No.2 Apr.2007.

42. M M Rahman, S A Iqbal, N C Tarafdar, M.Z. Abedin: Preparation and Characterisation of Polyacrylamide/Polyacrylic acid blend Hydrogel using gamma radiation techniques : SUST Studies.Vol.1.(2008)47-53.

43. M.Z.Abedin: Improvement of Physico chemical properties of radiation-vulcanised natural rubber Latex films by adding urea. Polymer Plastics Technology and Engg.7 (2009) 696.

44. Arif Reza and M. Zainal Abedin: Applictaion of Bioadsorbents for the wastewater Treatment of a composite Knit Industry: Journal of the Environment, Vol.8, No 1 00(2011).

45. Marufa Naznin, Md. Zainal Abedin, Mubarak Ahmed Khan and Md. Abdul Gafur, Influence of Acasia catechu Extracts and urea and gamma irradiation on the mechanical properties of starch/ PVA- based material: ISRN Polymer Science, Vol.2012(2012), Article ID 348685, 8 pages, Doi: 10.5402/2012/348685.

46. Marufa Naznin, Md. Zainal Abedin : Effect of Sugar, Urea and Molasses and the influence of Radiation on the Plasticization of Acacia catechu Extract Incorporated Starch/ Poly- (Vinyl Alcohol) based film. ISRN Polymer Science, Vol.2013(2013), Article ID 593862, 10 pages. <http://dx.doi.org/10.1155/2013/593862>.

47. Jannatul Ferdous Rumky, Zainal Abedin, Hafizur Rahman, Ali Hossain: Environmental Treatment of Dyes: Methyl Orange Decolorization using Hog Plum peel and mixed bacterial strains: IOSR J. Env. Sc, Toxicology and food Technology, Vol.5, Issues 3, (July-aug.2013), pg 19-22.

49. Nabila Rahman, Zainal Abedin and M.A. Hossain: Am. J Environ .Sci 10: 157-163 (2014) Rapid Degradation of azodyes using nano-scale zerovalent iron.

48. Fahim. A. Rahman, M. Akter, M.Z. Abedin: Adsorption Removal of reactive dyes from textile Int. J. Sci. Tech and Research. Vol.2 (2013), 47-50-

50. Jannatul Ferdous Rumky, Zainal Abedin, Hafizur Rahman, Ali Hossain: Decolorization of Methyl Red by Hog Plum peel and Sunfix Red by, International Journal of Chemical and Environmental Engineering, Vol.5, No 1, (2014), p 65-68.

51. Arif Reza, Faheem A. Sheikh, M. Zainal Abedin, Hern Kim: Energy and Environment Focus , Vol. 4, (2015), p 1-6.

52. Koninika Tanzim, M..Zainal Abedin: A novel Bioadsorbent for the Removal of Methyl Red from Aqueous Solutions. IOSR J. of Env. Sc., Toxicology and Food Technology , Vol. 9, (Dec.2015), p 101-105.

53. Koninika Tanzim, M.Z. Abedin: Adsorption of Methyl Blue From Aqueous Solution By Pomelo (Citrus Maxima) Peel. Intl. J. of Scientific and Technology Research, Vol 4, (Dec. 2015), p 230-232.

54.Koninika Tanzim, Farhana Tarannum,M.Noor e Alam Siddique,Golam Mostafa,F.Rafiqul Alam,and M.Zainal Abedin. Level of Gaseous Pollutants , Particulate Matters and Lead: The Case of Roof Top of Dhaka Buildings. Global Science and Technology Journal, Vol4 No.1( ( (2016), p-58-72.

**F. BOOKS:**

1. Molecular Spectroscopy: Published by Bangla Academy 1999 (For B.Sc.(Hons.)

 and M.Sc).

2. H.S.C Chemistry (Part 2): Approved by NCTB, Panjeree Publications 2003 , Dhaka

3. H.S.C Chemistry (Part 1) (Edited): Approved by NCTB, Cambrian Publications 2003, Dhaka

4. Chemical Spectroscopy: Quality Publications: 2007 (For B.Sc. (Hons.) and M.Sc) , Dhaka

5. Analytical Chemistry: Quality Publications: 2007 (For B.Sc.(Hons.) and M.Sc) , Dhaka

6. Polymer Chemistry: Quality Publications: 2007 (For B.Sc. (Hons.) and M.Sc), Dhaka

7. Environmental Chemistry: Quality Publications:2008(For B.ScHons.and M.Sc) , Dhaka

8. Medicinal Chemistry : Quality Publications:2009 (For B.Sc.Hons.and M.Sc.) , Dhaka

9. Chemistry: Science Affairs 2011, Dhaka

10. Organic Spectroscopy, Quality Publications: 2011, Dhaka

11. Physical Chemistry in Chemical Technology, Quality Publications: 2011, Dhaka

12. Chromatography and other Separation Methods: 2010, Dhaka

13. Environmental Chemistry: Quality Publications: 2011, Dhaka

14. Chemistry- II: Quality Publications: 2012, Dhaka

15. Organic Chemistry- II : Quality Publications: 2012, Dhaka

16. H.S.C Chemistry- I, NCTB (Approved) 2013, Quality Publications, Dhaka

17. H.S.C Chemistry- II, NCTB (Approved) 2014, Quality Publications, Dhaka

18. Separation Techniques: Quality Publications 2014, Dhaka

19. Fundamentals of Analytical Chemistry: Quality Publications 2014, Dhaka

20. Fundamentals of Environmental Chemistry: Quality Publications 2014, Dhaka

21. Organic Polymers, Quality Publications 2014, Dhaka

22. Selected Topics in Organic Chemistry: Quality Publications Dhaka, 2015

23. Mathematical Chemistry, Part I, Panjeree Publications, Ltd. Dhaka, 2015

24. Mathematical Chemistry, Part II, Panjeree Publications Ltd-Dhaka- 2015