

## CURRICULUM VITAE

### **Dr. Alam Zeb**



*Biography Published in Marquis Who's Who in the World – 2011*  
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#### **PERSONAL**

**Father Name** : Shah Jehan  
**Date of birth** : 01 May 1979  
**Domicile** : Swat  
**Marital status** : Married  
**E-mails** : [Alamzeb01@yahoo.com](mailto:Alamzeb01@yahoo.com), ([zeb@alumni.tugraz.at](mailto:zeb@alumni.tugraz.at)),  
([azeb@uom.edu.pk](mailto:azeb@uom.edu.pk) ).  
**Home Address** : Village Ghalegay, Mohallah Chara Baba, P. O. # 19230,  
District Swat Khyber Pakhtunkhwa, Pakistan.  
**Postal Address** : Department of Biotechnology,  
University of Malakand,  
Chakdara, Khyber Pakhtunkhwa, Pakistan.

#### **SPECIALISATION**

Biochemistry (Lipids Chemistry – Biochemistry & Lipidomics)

#### **FACULTY POSITION**

Assistant Professor, Department of Biotechnology, University of Malakand, Chakdara, Lower Dir, Khyber Pakhtunkhwa, Pakistan, Phone #: +92-945-764131-ext- 3026, Fax #: 0945-763491.

#### **RESPONSIBILITIES/INTEREST**

Teaching Biochemistry to BS (*Hons*), MPhil/PhD students, Research [Lipids (*Triacylglycerols and Carotenoids*) Analysis, Oxidation, Biological Effects and Interactions with Antioxidants, Lipidomics]

## EDUCATION/TRAINING

- 2010**      **PhD (Biochemistry) –*Pass with Distinction.*** ★  
Institute of Biochemistry  
Graz University of Technology, Graz, Austria,  
([www.biochemistry.tugraz.at](http://www.biochemistry.tugraz.at))
- 2007**      **MPhil (Biochemistry)**  
Institute of Chemical Sciences, University of Peshawar, Pakistan
- 2001**      **MSc (Biochemistry)**  
Department of Chemistry, University of Peshawar, Pakistan
- 1999**      **BSc (Biology, Chemistry)**  
University of Peshawar
- 1997**      **FSc (Pre-Medical)**  
BISE Swat
- 1995**      **SSC (Science)**  
BISE Swat

## EXPERIENCE

### Teaching Experience

- ❑ Assistant Professor, University of Malakand, Chakdara (06/2011-Present)
- ❑ Lecturer Biochemistry, University of Malakand, Chakdara (08/2003 – 06/2011).
- ❑ Students Assistant, Institute of Biochemistry, Graz University of Technology, Austria (2009-10)
- ❑ Subject Specialist Chemistry, Barikot Public School & College Barikot Swat (2001-2002).

### Research Experience

- ❑ Research Fellow, Institute of Biochemistry, Graz University of Technology, Austria (2008-2010).
- ❑ Research Associate under HEC Foreign Faculty Research Program (09/2005 – 08/2006)
- ❑ MPhil Research Scholar, Institute of Chemical Sciences, University of Peshawar, (2002-2003).
- ❑ Research Assistant at Nuclear Institute for Food & Agriculture, Tarnab (NIFA) Peshawar (2001)

### Organizational Experience

- ❑ Member organizing committee, *1st National Symposium on Biotechnology; Recent Advances*. Department of Biotechnology, University of Malakand, 21-24 May 2007.
- ❑ MPhil/PhD coordinator, Department of Biotechnology, University of Malakand, 2011-2012.

## Professional Societies Membership

- ❑ European Federation for the Science & Technology of Lipids (Euro Fed Lipid, 2009-2011)
- ❑ European Federation of Food Science and Technology (EFFoST, 2009-)
- ❑ American Oil Chemists Society (AOCS, 2008-2011)
- ❑ Korean Society for Food Science & Technology (KoSFoST, 2008-)
- ❑ Society for Free Radical Research International (SFRI, 2008-)
- ❑ International Carotenoids Society (ICS, 2005-)
- ❑ South African Association of Mass Spectrometry (SAAMS, 2011-)

## Awards/ Fellowships/Distinctions

- ❑ Productive Scientist of Pakistan, PSP-2009 (*SCI-527*)
- ❑ HEC Approved PhD Supervisor (2011-)
- ❑ Research Productivity Award (2012)
- ❑ PhD Scholarship (2008-10) by Higher Education Commission, Government of Pakistan
- ❑ Graduate Scholarship (2003) by Higher Education Commission, Government of Pakistan

## Journal's Editorial Referee

- ❑ Journal of the American Oil Chemist's Society (*AOCS, USA*)
- ❑ Journal of Agriculture and Food Chemistry (*ACS, USA*)
- ❑ Journal of Planar Chromatography-Modern TLC (*Akadémiai Kiadó, Hungary*)
- ❑ Journal of Separation Science (*Wiley, Germany*)
- ❑ Journal of Food Science (*IFT, UK*)
- ❑ Biharean Biologist (*Romania*)
- ❑ Bulletin of the Chemical Society of Ethiopia (*CSE, Ethiopia*)
- ❑ African Journal of Biotechnology (*Academic journals, Nigeria*)
- ❑ African Journal of Food Science (*Academic journals, Nigeria*)
- ❑ Journal of the Chemical Society of Pakistan (*CSP, Pak*)
- ❑ Food Research International (*Elsevier, Canada*)

## Member of Editorial Board

- ❑ Journal of Agricultural, Food and Environmental Sciences (*SJI, USA*)

## Research Thesis Supervision

- ❑ Supervised BS (*Hons*) Biotechnology Thesis, & co-supervise Foreign MS-Food Chemistry Thesis. Currently one PhD, ten MPhil and two BS theses are in progress.

## CURRENT RESEARCH PROJECTS

- ❑ Effects of oxidized lipids on the triacylglycerols metabolism.
- ❑ Role of dietary sea buckthorn oil against the toxicity of oxidized lipids.
- ❑ Sea buckthorn green tea and oxidized saturated lipids.

- Effects of feeding *Uromastix Hardwickii* oil on the lipid metabolism.
- Fatty acids composition of different dry fruits of Pakistan.
- Effects of metabolic extract of *monotheca buxifolia* on rabbit (*Oryctolagus cuniculus*).

## LIST OF PUBLICATIONS

### Book Chapters

1. **Alam Zeb (2012)**. Thin-layer chromatographic analysis of Vitamin A related carotenoids, In: *Vitamin A and Carotenoids: Chemistry, Analysis, Functions and Effects*. VR. Preedy et al. (Ed), Royal Society of Chemistry, London, England, ISBN: 9781849733687.
2. **Alam Zeb (2012)**. Thermal degradation of  $\beta$ -carotene in food oils, In: *Vitamin A and Carotenoids: Chemistry, Analysis, Functions and Effects*. VR. Preedy et al. (Ed), Royal Society of Chemistry, London, England, ISBN: 9781849733687.
3. **Alam Zeb (2011)**. Sea buckthorn (*Hippophae rhamnoides* L. ssp. *turkistanica*) seed, chemical and physico-chemical properties. In: *Nuts and Seed in Health and Diseases Prevention*. VR. Preedy et al. (Eds), Elsevier Inc. USA, pp: 1003-1010, ISBN: 978-0123756886.
4. **Alam Zeb** and M. Murkovic (2011). Olive (*Olea europaea* L.) seeds, from chemistry to health benefits. In: *Nuts and Seed in Health and Diseases Prevention*. VR. Preedy et al. (Eds), Elsevier Inc. USA, pp: 847-853, ISBN: 9780123756886.
5. **Alam Zeb** & M. Murkovic (2010).  $\beta$ -Carotene induced oxidation of high oleic triacylglycerols model system. In: *Wertbestimmende Inhaltsstoffe in Lebensmitteln (Value Determining Constituents in Foods)*. M. Murkovic (Ed), Austrian Chemical Society, Vienna, Austria, pp: 210-214, ISBN: 978-3-90055467-5.
6. **Alam Zeb** & M. Murkovic (2010). Thermal stability of triacylglycerols in edible oils and triolein model system. In: *Wertbestimmende Inhaltsstoffe in Lebensmitteln (Value Determining Constituents in Foods)*. M. Murkovic (Ed), Austrian Chemical Society, Vienna, Austria, pp: 18-22, ISBN: 978-3-90055467-5.
7. **Alam Zeb** & I. Khan (2009). Pharmacological applications of Sea buckthorn (*Hippophae*), In: *Advances in Phytotherapy Research*. M. Eddouks (Ed) Research Signpost, N. Delhi, pp: 1-16, ISBN: 978-81-308-0223-7
8. **Alam Zeb** & I. Khan (2008). Composition and medicinal properties of Sea buckthorn juice, In: *Sea Buckthorn- A Multipurpose Wonder Plant. Vol. III - Advances in Research & Development*. H.

Kallio, B. Yang, *et al.*, (Eds), Daya Publishing House, N. Delhi, pp: 205-214, ISBN: 81-7035-520-5.

### ***Proceedings Papers***

9. **Alam Zeb** & M. Murkovic (2011). Mass spectrometric characterization of triglyceride oxidation. *Proceedings of the 2nd MS Food Day 2011*. October 19-21, University of Trieste, Italy, pp: 62-63.

### ***Journal Articles***

#### ***Submitted/In Press***

10. **Alam Zeb** & M. Murkovic (2012). Effects of  $\beta$ -carotene on the thermal stability of triacylglycerols in edible oils. *Food Chemistry*. (Under Review)
11. **Alam Zeb**, & W. Rehman (2012). Effects of oxidized tallow on the serum lipids and radical scavenging activity of *in-vitro* lipids. *Turkish Journal of Biology*. (Under Review)
12. **Alam Zeb**, & A. Mehmood (2012). Effects of thermally oxidized vanaspati ghee on the serum lipids and radical scavenging activity of *in-vitro* lipids. *Turkish Journal of Biochemistry*. (Under Review)
13. **Alam Zeb** (2012). Triacylglycerols composition, oxidation and oxidation compounds in Camellia oil using liquid chromatography mass spectrometry. *Chemistry and Physics of Lipids*. DOI: 10.1016/j.chemphyslip.2012.03.004.
14. **Alam Zeb** & M. Murkovic (2012). Determination of  $\beta$ -carotene and triacylglycerols thermal oxidation in corn oil. *Food Research International*. DOI: 10.1016/j.foodres.2011.02.039.

#### ***Published Papers***

15. **Alam Zeb** (2012). *Chemistry and Physics of Lipids*. 165 (3): 277-281.
16. **Alam Zeb** (2011). *African Journal of Biotechnology*. 10 (68): 15346-15352.
17. **Alam Zeb** & M. Murkovic (2011). *Food Chemistry*. 127 (4): 1584-1593.
18. **Alam Zeb** & M. Murkovic (2010). *European Journal of Lipid Science & Technology*. 112 (11): 1218-1228.
19. **Alam Zeb** & M. Murkovic (2010). *European Journal of Lipid Science & Technology*. 112 (8): 844-851.
20. **Alam Zeb** & M. Murkovic (2010). *Journal of Planar Chromatography*. 23 (2): 99-103.

21. **Alam Zeb** & M. Murkovic (2010). *Journal of Planar Chromatography*. 23 (1): 35-39.
22. **Alam Zeb** & I Malook (2009). *African Journal of Biotechnology*. 8(8): 1625-1629.
23. **Alam Zeb** & M Ali (2008). *Journal of the Chemical Society of Pakistan* 30 (5): 750-755.
24. **Alam Zeb** S. Khan, I. Khan & M. Imran (2008). *Journal of the Chemical Society of Pakistan* 30 (5): 790-794.
25. **Alam Zeb** A. Rasool & S. Nasreen (2008). *Journal of the Chinese Medical Association* 71(2): 62-65.
26. I. Khan, M. Shuaib, Z. Ali & **Alam Zeb** (2007). *Journal of the Chemical Society of Pakistan* 29 (4): 301-306.
27. I Khan, I. Ali & **Alam Zeb** (2007). *Journal of the Chemical Society of Pakistan* 29 (3): 236-238
28. I Khan, & **Alam Zeb** (2007). *Journal of Zhejiang University SCIENCE B*. 8(8): 555-559.
29. M. Shuaib, **Alam Zeb**, Z. Ali, W. Ali, T. Ahmad & I. Khan (2007). *African Journal of Biotechnology* 6 (5): 497-500
30. **Alam Zeb**, Z. Ali, T. Ahmad, & A. Abdumanon (2006). *Pakistan Journal of Biological Sciences* 9 (9): 1823-1828.
31. **Alam Zeb**, A. Rasool & S. Nasreen (2006). *Asian Pacific Journal of Cancer Prevention* 7 (3): 483-484.
32. **Alam Zeb** (2006). *Asian Pacific Journal of Cancer Prevention* 7 (1): 32-35.
33. **Alam Zeb** & G. Lutfullah. (2005). *Journal of the Chemical Society of Pakistan* 27 (2): 205-212
34. F. Khan, T. Ahmad, S. Atta, & **Alam Zeb** (2004). *Journal of the Chinese Chemical Society* 51 (5): 991-995.
35. **Alam Zeb** & T. Ahmad (2004). *Pakistan Journal of Biological Sciences* 7 (6): 943-946.
36. **Alam Zeb** & S. Mehmood (2004). *Pakistan Journal of Nutrition* 3 (3): 199-204.
37. **Alam Zeb** (2004). *Journal of Biological Sciences* 4(5): 687-693.
38. **Alam Zeb** (2004). *Pakistan Journal of Nutrition* 3 (2): 99-106.
39. G. Lutfullah, **Alam Zeb**, T. Ahmad, S. Atta & F. Khan (2003). *Journal of the Chemical Society of Pakistan* 25 (4): 269-275.

## CONFERENCES PRESENTATIONS & TALKS

### *Oral Presentations*

1. **Ist European Food Congress**, 4-9 November 2008, Ljubljana, Slovenia.
2. **TEMPUS Joint European Project 'New Bologna Oriented Doctoral Study Programme in BA'**, 26-30 January 2009, Graz Austria.
3. **Young Investigators' Seminar on Analytical Chemistry**, 29 June-2 July 2009, Graz Austria.
4. **Österreichische Lebensmittel Chemikertage**, 19-21 May 2010, Schloss Seggau, Austria.
5. **4th Doctoral Day. NAWI Graz Doctoral School of Molecular Biosciences and Biotechnology**, 9th July 2010, Graz, Austria.
6. **8th Euro Fed Lipid Congress, Fats, Oils and Lipids**, 21-24 November 2010, Munich, Germany.

### *Poster Presentations*

1. **Österreichische Lebensmittel Chemikertage**, 28-30 May 2008, Eisenstadt, Austria.
2. **9th International Symposium on Instrumental analysis**, 29 June-2 July 2008, Pecs Hungary.
3. **3rd International IUPAC Symposium on Trace Elements in Foods**, 1-3 April 2009, Rome Italy.
4. **7th Euro Fed Lipid Congress, Lipids, Fats and Oils**, 18-21 October 2009, Graz Austria.
5. **Ist Styrian Conference on Lipid Mass Spectrometry**, 21-22 October 2009, Graz Austria.
6. **Österreichische Lebensmittel Chemikertage**, 19-21 May 2010, Schloss Seggau, Austria.
7. **7th International Conference, Trends in Biochemistry and Molecular Biology**, 2-5 April 2003, IBB University of Punjab, Lahore, Pakistan.

### *Abstracts*

1. **7th Euro Fed Lipid Congress, Lipids, Fats and Oils**, 18-21 October 2009, Graz Austria.

## **INSTRUMENTAL SKILLS**

Lipids (Carotenoids and Triacylglycerols) and Phytochemicals analysis by HPLC/DAD/ELSD or HPLC-MS, HPTLC, GC, or GC-MS & UV Spectroscopy; Elemental analysis by Atomic Adsorption Spectrometer & Flame Photometer; and other related Chemical/Instrumental techniques.

## **REFERENCES**

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(PhD Supervisor)  
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