



CURRICULUM VITAE SAHIB ALAM, PhD

Associate Professor:
(Agricultural Chemistry & Biochemistry)

The University of Agriculture Peshawar, KPK 25130, Pakistan.

Date of Birth:

01-01-1979

Postal Address:

Office # 135, Plant Science Building, Department of Agricultural Chemistry, The University of Agriculture Peshawar, KPK 25130, Pakistan.

Permanent Address:

Village & P.O. Miandam, District Swat, Khyber Pakhtunkhwa, Pakistan.

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EDUCATION

- **Post doctorate-II:** Plants and Food Sciences, University of Sydney, Australia **Apr, 2014**
- **Post doctorate-I:** Medicinal Chemistry, University of Minnesota, USA. **Aug, 2013**
- **PhD:** Agricultural Chemistry, The University of Agriculture Peshawar, Pakistan. **Nov, 2009**
- **M.Sc. (Hons):** Agricultural Chemistry, The Univ. of Agriculture Peshawar, Pakistan. **Jan, 2005**
- **B.Sc. (Hons):** Agricultural Chemistry, The Univ. of Agriculture Peshawar, Pakistan. **Jan, 2003**

PROFESSIONAL EXPERIENCE

- **Associate Professor:** The University of Agriculture Peshawar, Pakistan. **(2017-Cont...)**
- **Assistant Professor:** The University of Agriculture Peshawar, Pakistan. **(2009 to 2017)**
- **Lecturer:** The University of Agriculture Peshawar, Pakistan. **(2008 to 2009)**
- **Postdoctoral Research Fellow:** University of Sydney, Australia **(2013 to 2014)**
- **Postdoctoral Research Fellow:** University of Minnesota, USA. **(2012 to 2013)**
- **Business Support Officer:** Pakistan Tobacco Company (Ltd). **(2004 to 2006)**
- **Research Assistant** The University of Agriculture Peshawar, Pakistan. **(2003 to 2004)**

HONORS AND AWARDS

1. **Endeavour Research Fellowship (2013-14)** at University of Sydney, by Govt of Australia.
2. **Postdoctoral Research Fellowship (2012-13)** at University of Minnesota, USA by HEC, Pakistan.
3. **Research Productivity Award (2011)** by Pakistan Council for Science and Technology.
4. **Talented Researcher Exchange Fellowship (2009)** at the Uni. of Bristol, UK by British Council.
5. **Visiting Research Fellowship (2007)** at Cranfield University, UK by HEC Pakistan.
6. **Indigenous PhD Fellowship (2005-2009)** by HEC Pakistan.
7. **Star Laureate Award (2004)** by South Asia Publications.
8. **Gold Medal, M.Sc. (Hons) (2004)** by The University of Agriculture, Peshawar.
9. **Presidential Award (2002)**, by The University of Agriculture, Peshawar.
10. **Gold Medal, B.Sc. (Hons) (2002)** by The University of Agriculture, Peshawar.
11. **Annual Merit Scholarship (1998-2004)** by The University of Agriculture, Peshawar.

RESEARCH STUDENTS SUPERVISED/BEING SUPERVISED

- PhD Students = 9 (Major Supervisor 4 + Member 5)
- M. Sc. (Hons)/M.Phil. students = 30
- B. Sc. (Hons) Students = 22

RESEARCH GRANTS/PROJECTS EARNED

- "Exploring non-toxicogenic fungal strains for control of aflatoxin contamination in maize crop" (Rs. 3.50 million) by Higher Education Commission, Pakistan. *Status: In progress*
- "Utilization of high oil yielding algal species for biodiesel production" (Rs. 0.360 million) **By:** Directorate of Science and Technology, Government of Khyber Pakhtunkhwa (20/06/2011-20/06/2012). *Status: Completed*

COURSES TAUGHT

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|---|------------------------------|
| 1. Introduction to Agricultural Chemistry | 2. Applied Biochemistry |
| 3. Agricultural Microbiology | 4. Bio-Organic Chemistry |
| 5. Molecular Biology | 6. Protein Chemistry |
| 7. Advanced Biochemistry | 8. Elements of Biotechnology |
| 9. Biochemical Techniques | 10. Radiochemical Techniques |

ADMINISTRATIVE AND ACADEMIC SERVICES

1. Secretary Board of Studies, Deptt. of Agric. Chem & BioChem, The Univ. of Agric., Peshawar.
2. Member, Departmental Discipline Committee.
3. Member of Ethical Committee of Deptt of Agricultural Chemistry & BioChemistry.
4. Resource person (2009-10), Pakistani Howsalamand Khawateen Network (PHKN) and FATA Development Program Livelihood Development (FDPLD).

EDITORIAL & PEER-REVIEWING SERVICES

1. Editorial Board Member of Journal of Applied Microbiology: Theory & Technology
2. Reviewer, Food and Chemical Toxicology
3. Reviewer, International Journal of Food Microbiology.
4. Reviewer, Toxicology and Industrial Health Journal.
5. Reviewer, Scientia Horticulturae
6. Reviewer, Soil and Tillage Research
7. Reviewer, Journal of Food Science.
8. Reviewer, Journal of Food Science and Technology.
9. Reviewer, Journal of Food Biochemistry.
10. Reviewer, Frontier in Agronomy.

PROFESSIONAL RECOGNITION

i. Membership of National/International Bodies

1. Executive member of Federation of Asian Nutrition Societies (FANS)-Pakistan Chapter.
2. Member of International Society for Zoological Sciences, China.
3. Member of International Association for Plant Biotechnology.
4. Life-member of Chemical Society of Pakistan
5. Member of Soil Science Society of Pakistan.
6. Member of Australia Global Alumni Network.
7. Member of Humboldt Life, Germany.

ii. Workshops/Trainings Organized

1. Two days Workshop on “Development of Sustainable and Collaborative Research Networks” Under the Talented Researchers Exchange Program (TRXP) of British Council and HEC at Dept. of Agricultural Chemistry, Agricultural University Peshawar, Pakistan, 22nd – 23rd December 2010.

iii. Workshops/Trainings Imparted (Resource Person)

1. Two days Workshops on “Development of Sustainable and Collaborative Research Networks” Under the Talented Researchers Exchange Program (TRXP) of British Council and HEC at Dept. of Agronomy, The University of Agriculture, Peshawar, 29th – 30th September 2010.
2. Two days’ Workshop on “Development of Sustainable and Collaborative Research Networks” Under the Talented Researchers Exchange Program (TRXP) of British Council and HEC at Dept. of Agricultural Chemistry, The University of Agriculture Peshawar, Pakistan, 21st – 22nd October 2010.
3. Four days training on “Honeybee Keeping” organized by FDPLD/PHKN at Kurram Inn, Bannu, Pakistan, 16th-19th October 2010.
4. Two-day Workshop on “Development of Sustainable and Collaborative Research Networks” Under the Talented Researchers Exchange Program (TRXP) of British Council and HEC at Dept. of Agricultural Chemistry, The University of Agriculture Peshawar, Pakistan, 10th – 11th November 2010.

iv. Conferences/Workshops/Trainings/Symposia Participated

- 2018 International conference on “Biofortification of staple food crops” at Department of Agronomy, the University of Agriculture, Peshawar-Pakistan. September 24-26, 2018.
- 2018 Commodity based workshop on “Implementation of 4R Nutrient Stewardship for Sustainable Maize Production in Khyber Pakhtunkhwa” organized by Food and Agricultural Organization (FAO) of United Nation and United States Department of Agriculture (USDA) at Pearl Continental Hotel, Peshawar. April 28, 2018.
- 2017 One day “National Policy Dialogue on salt-affected soil” organized by Food and Agricultural Organization (FAO) of United Nation and United States Department of Agriculture (USDA), Ramada Hotel, Islamabad-Pakistan, March 7, 2017.
- 2016 One day workshop on “4R Nutrient Stewardship for food and economic security-more than balanced use of fertilizers” organized by Food and Agricultural Organization (FAO) of United Nation and United States Department of Agriculture (USDA), Shelton House, Peshawar-Pakistan. December 23, 2016.
- 2016 International Workshop on “4R Nutrient Stewardship for Food, Economic and Environmental Security” Organized by Food and Agricultural Organization (FAO) of United Nation and United States Department of Agriculture (USDA), Serena Hotel, Islamabad-Pakistan, 4-5 April 2016.
- 2014 Workshop on “National Consultation on Establishment of SUN-Civil Society Alliance in Pakistan”, Margala Hotel, Islamabad, June 11, 2014.
- 2013 Workshop on “Mass Spectrometry and Proteomics” Center for Mass Spectrometry and Proteomics, University of Minnesota, USA, August 13-15, 2013.
- 2013 Workshop on “Zotero: Basics” University of Minnesota, USA, June 18, 2013.
- 2013 Workshop on “EndNote: Basics” University of Minnesota, USA, June 17, 2013.
- 2013 Workshop on “Mendeley: Get Organized” University of Minnesota, USA, June 11, 2013.
- 2013 Workshop on “Creating Posters Using PowerPoint” University of Minnesota, USA, March 26, 2013.

- 2013 Workshop on “RefWorks: Basics” University of Minnesota, USA, February 21, 2013.
- 2013 Conference on "Minnesota Green Chemistry 2013: Beakers to Business Plans" University of Minnesota, USA, January 25, 2013.
- 2012 Workshop on "Google: Advance Searching for Researchers" University of Minnesota, USA, November 9, 2012
- 2012 Seminar on "Turnitin Teacher Tour-Minneapolis" University of Minnesota, USA, October 5, 2012
- 2012 Workshop on "Better Data Searching" University of Minnesota, USA, September 13, 2012.
- 2010 International Symposium on Institutional Linkages for Agricultural Development in Pakistan, Khyber Pakhtunkhwa Agricultural University Peshawar Pakistan, 20th – 21st December 2010.
- 2010 Cascading Workshop of Windsor UK Chapter, Learning Innovation Division, Higher Education Commission Islamabad, 17th – 18th June 2010.
- 2010 Training workshop on “Project Management” Agricultural University Peshawar, 2nd -3rd April 2010.
- 2010 Workshop on “Building a Successful International Research Career” organized by British Council at Beaumont House, Windsor, UK, 22nd-24th February 2010.
- 2009 Seminar on “Spectroscopic Investigation of Quantum Solvation” School of Chemistry, University of Bristol, UK, 22 October 2009.
- 2009 Seminar on “Nanostatistical Dynamics of Reactive Intermediates in Organic Chemistry” University of Bristol, UK, Wednesday, 28 October 2009.
- 2009 Seminar on “Using Quantum Dynamics Simulations to Obtain the Molecular Picture Underlying Spectroscopy” School of Chemistry, University of Bristol, UK, 28 October 2009.
- 2007 Guidance Workshop on “Prime Minister Initiative 2 (PMI2), British Council-Higher Education Strategic Partnerships” Organized by British Council at Best Western Hotel, Islamabad, 22 November 2007.
- 2006 Training course on “Biodiversity & Weed Science” organized by Higher Education Commission Pakistan at Dept. of Weed Science NWFP Agricultural University Peshawar, 11th -16th December 2006.
- 2006 2nd International workshop on “Agricultural Research and Methodology” organized by joint HEC-BC Link Programme at British Council Islamabad and Department of Agronomy NWFP Agricultural University Peshawar, December 1 & 4, 2006.

PUBLICATIONS

1. Nazir A. Khan, M. Suleman, Sahib Alam, A. Khan, W. Ali, M. Bezabih, W. H. Hendriks. 2021. Effect of repeated frying on changes in fatty acid composition and trans fatty acids formation in edible oils and fats. *European Journal of Lipid Science and Technology*. Under Review.
2. Ullah, H., Sahib Alam, S. Morrow, Y. Hemar. W. Ahmad. 2021. Impact of biochar and nitrogen applications on the mineral profile of maize (*Zea mays* L.) grains. *Sustainability*. Under Review
3. **Sahib Alam**, S. Bibi, M. Ali. 2020. Fungal diversity and physicochemical changes in fresh fruits during storage at ambient room conditions. *Applied Microbiology: Theory and Technology*. 1:18-31.
4. Younis, M., A. Muhammad, **Sahib Alam**, A. Jalal. 2020. Sulphur doses and application times on yield and oil quality of canola grown in calcareous soil. *Grasas Y Aceites* 71 (1), e341.
5. **Sahib Alam**, N. A. Khan, A. Muhammad, I. Jan, M.S. Hashmi, A. Khan, M.O. Khan. 2020. Carryover of aflatoxin B₁ from feed to broilers’ tissues and its effect on chicken performance. *Fresenius Environmental Bulletin*. 29(01/2020): 214-221.

6. Jabeen, S., **Sahib Alam**, M. Saleem, W. Ahmad, R. Bibi, F.S. Hamid, H.U. Shah. 2019. Withering timings affect the total free amino acids and mineral contents of tea leaves during black tea manufacturing. *Arabian Journal of Chemistry*. 12:2411-2417.
7. Akbar, F., **Sahib Alam**. 2019. Influence of water activity and time duration on Fusarium mycotoxins production in maize grains during post-harvest storage. *Sarhad Journal of Agriculture* 35 (4): 1326-1335.
8. Ahmad, M., **Sahib Alam**, W. Ahmad, I. Jan, A. Zia. 2018. Application of the 4R nutrient stewardship concept for growing off-season tomatoes in high tunnels. *Journal of Soil Science and Plant Nutrition*. 18 (4): 989-1001.
9. Siddiq, M., **Sahib Alam**, H. U. Shah, Z. Iqbal, K. Siddiq and T. Ahmad. 2018. Sensory Evaluation of Olive and Palm Oil Blends During Frying of Potato Chips. *Sarhad Journal of Agriculture*. 34(3): 690-695.
10. Habibullah, **Sahib Alam**. 2018. Impact of Biochar and Nitrogen Application on Soil Physicochemical Attributes at Various Growth Stages of Maize and Subsequent Wheat Crop. *Sarhad Journal of Agriculture*. 34(2): 368-377.
11. Gulsanga, Z. Anjum, **S. Alam**, F. Shehzad. 2018. Heavy metals and mineral contents of beef sold at University Campus, Peshawar. *Sarhad Journal of Agriculture*. 34(2): 471-477.
12. Zeb, F., M. Safdar, S. Khan, **S. Alam**, M. Muhammad, A. Syed, P.R. Nasrullah, F. Habib and H. Shakoor. 2018. Supplementation of garlic and coriander seed powder: Impact on body mass index, lipid profile and blood pressure of hyperlipidemic patients. *Pakistan Journal of Pharmaceutical Sciences*. 31 (5): 1935-1941.
13. Manzoor, N., A. Zia, M. N. Ahmad, R. Ullah, **S. Alam**, S. Jalil, D. Zia. 2018. Assessing foliar application of chitosan and humic acid on soil solution partitioning of *Pisum sativum*. *International Journal of Biosciences*. 12(1):252-265.
14. Alam, A, S. Ullah, S. Aftab, **S. Alam**, Y. Khan, K. Rahman, Zahoor. 2016. Evaluation of *Sirogonium sticticum*, *Uronema elongatum*, *Chroococcus turgidus* and *Temnogyra reflexa* for biodiesel production in Pakistan. *Biofuels*. 8: 391-399.
15. Ullah, H., **S. Alam**, H.U. Shah, M. Ullah, A. Zeb, S. Kamran, G.R. Khan, R. Gul. 2016. Biochemical screening of advanced potato lines for tolerance against *Rhizoctonia solani*. *International Journal of Development Research*. 6: 9064-9068.
16. Ullah, H., **S. Alam**, H.U. Shah, M. Ullah, A. Zeb, S. Kamran, A. Sami. 2016. Analysis of physicochemical attributes of potato lines infected with *Rhizoctonia solanai*. *International Journal of Biosciences*. 9:415-420.
17. Humaira, T. Samreen, M. Javid, M. Amin, H.U. Shah, S. Ullah, **S. Alam**. 2015. Effect of Zinc on Physico-chemical Parameters of Hydroponically grown Rice Varieties. *Middle East Journal of Agriculture Research*. 4: 395-403.
18. Alam, A., S. Ullah, **S. Alam**, H.U. Shah, S. Aftab, M. Siddiq, N. Manzoor. 2015. Influence of culture media and carbon sources on biomass productivity and oil content of algae *Sirogonium sticticum*, *Temnogyra reflexa*, *Uronema elongatum* and *Chroococcus tergidus*. *Turkish Journal of Botany*. 39:599-605.
19. Khan, A.A., M. Sajid, A. Rab, **S. Alam**, A. Bari. 2014. Effect of Potassium sources on the growth, yield and fruit quality of tomato cultivars. *Sarhad Journal of Agriculture*. 30(4): 442-450.
20. Khan, N.A., S. Hussain, N. Ahmad, **S. Alam**, M. Bezabhi, W.H. Hendriks, P. Yu, J.W. Cone. 2014. Improving the feeding value of straws with *Pleurotus ostreatus*. *Animal Production Science*. 55(2): 241-245.
21. **Alam, S.**, H. U. Shah, N. A. Khan, A. Zeb, A. S. Shah, N. Magan. 2014. Water availability and calcium propionate affect fungal population and aflatoxins production in broiler finisher feed during storage. *Food Additives and Contaminants: Part A*. 31(11):1896-1903.

22. **Alam, S.,** H.U. Shah, M. Afzal, N. Magan. 2014. Influence of calcium propionate, water activity and storage time on mold incidence and aflatoxins production in broiler starter feed. *Animal Feed Science and Technology*. 188:137-144.
23. **Alam, S.,** H. U. Shah, H. Khan, N. Magan. 2012. The effect of substrate, season and agroecological zone on mycoflora and aflatoxin contamination of poultry feed from Khyber Pakhtunkhwa, Pakistan. *Mycopathologia*. 174(4):341-349.
24. Saleem, U., H. U. Shah, A. A. Shad, **S. Alam**. 2012. The role of rhizospheric *Aspergillus flavus* in standing maize crop contamination in different ecological zones of Khyber Pakhtunkhwa, Pakistan. *African Journal of Biotechnology*. 11 (34): 8433-8440.
25. Zulqarnain, F. Mahmood, H. U. Shah, **S. Alam**, M. Khan and M. A. Sabir. 2012. Comparison of various preservation technologies on physicochemical and organoleptic characteristics of Oyster mushrooms. *Journal of the Chemical Society of Pakistan*. 34 (1): 173-176.
26. Parveen, N., **S. Alam**, S. Rahman, Q. Khan. 2012. Comparative lipid profile and blood pressure studies in diabetic non-proliferative and proliferative retinopathic male patients. *Journal of Medical Sciences*. 20 (1):37-40.
27. Shah, H. U., U. L. Khan, **S. Alam**, A. A. Shad, Z. Iqbal and S. Parveen. 2011. Effect of home cooking on the retention of various nutrients in commonly consumed pulses in Pakistan. *Sarhad Journal of Agriculture*. 27 (2): 279-284.
28. Shah, H. U., T. J. Simpson, **S. Alam**, K. F. Khattak, S. Parveen, 2010. Mould incidence and mycotoxin contamination in maize kernels from Swat Valley, North West Frontier Province of Pakistan. *Food and Chemical Toxicology*. 48:1111-1116.
29. **Alam, S.,** H. U. Shah, N. Magan. 2010. Effect of calcium propionate and water activity on growth and aflatoxins production by *Aspergillus flavus*. *Journal of Food Science*. 75: 61-64.
30. **Alam, S.,** H. U. Shah, N. Magan, J. I. Qazi, M. Arif. 2010. Effect of calcium propionate and water activity on growth and aflatoxins production by *Aspergillus parasiticus*. *Pakistan Journal of Zoology*. 42:57-62.
31. **Alam, S.,** H. U. Shah, N. Magan. 2009. Water availability affects extracellular hydrolytic enzyme production by *Aspergillus flavus* and *Aspergillus parasiticus*. *World Mycotoxin Journal*. 2(3): 313-322.
32. **Alam, S.,** H. U. Shah, Saleemullah and A. Riaz. 2007. Comparative studies on storage stability of ferrous iron in whole-wheat flour and flat bread (Naan). *International Journal of Food Science and Nutrition*. 58(1): 54-62.
33. Shah A. S., A. Zeb, M. Khan, M.M. Hashim, **S. Alam**, I. Hassain. 2008. Effect of irradiation on the microbial and physicochemical quality and storage stability of dehydrated bitter gourd. *Advances in Food Sciences*. 30 (4): 218-222.
34. Shah, A.S., **S. Alam**, M. M. Hashim, M. S. Hashmi and A. Riaz. 2007. Effect of stabilizers and storage time on the overall quality of tomato paste. *Sarhad Journal of Agriculture*. 23 (4): 1137-1140.
35. **Alam, S.,** M.S. Hashmi, A. S. Shah, U. L. Khan. 2007. Comparative storage studies on the organoleptic attributes of iron fortified whole wheat flour. *Sarhad Journal of Agriculture*. 23 (4): 1121-1126.
36. Shah, A.S., A. Zeb, **S. Alam**, M.M. Hashim, M.S. Hashmi and A. Riaz. 2007. Effects of dehydration, packaging and irradiation on the microbial and sensory quality of bitter gourd. *Sarhad Journal of Agriculture*. 23 (3): 781-785.
37. Khan, R., **S. Alam**, S. Ali, S. Bibi, and I. A. Khalil. 2007. Dietary fiber profile of food legumes. *Sarhad Journal of Agriculture*. 23 (3): 763-766.
38. Hashmi, M.S., **S. Alam**, A. Riaz and A. S. Shah. 2007. Studies on microbial and sensory quality of mango pulp storage with chemical preservatives. *Pakistan Journal of Nutrition*. 6(1): 85-88.
39. **Alam, S.,** H. U. Shah, M. S. Hashmi and M. Suleman. 2006. Biochemical and microbiological studies of iron fortified whole wheat flour. *Sarhad Journal of Agriculture*. 22: (4) 673-679.

40. Hashmi, M.S., M. Ayub, A. Zeb, M. M. Hashim, **S. Alam** and A. Riaz 2006. Effect of chemical preservatives on the physico-chemical and nutritional evaluation of mango pulp stored at ambient temperature. *Sarhad Journal of Agriculture*. 22: (4) 685-687.
41. Khan, A., A. Jan and **S. Alam**. 2005. Effect of nitrogen and seed size on maize crop II: Yield & yield components. *Journal of Agriculture & Social Sciences*. 1 (4): 378-379.
42. Amanullah, A. khan, **S. Alam** and H. Khan. 2005. Performance of berseem varieties at Peshawar. *Sarhad Journal of Agriculture*. 21(3): 317-322.

CONFERENCE PAPERS

43. Ahmad, W., M. Umar, **S. Alam**, M.H. Zia, M.I. Afzal, H. Ahmad. 2014. Need for Sustainable Land Management in Pakistan under the Changing Scenario of Climate. 5th International Conference on Agriculture, Food Security and Climate Change. September 9-11, 2014, Rawlakot Pakistan. DOI: [10.13140/2.1.2673.7921](https://doi.org/10.13140/2.1.2673.7921)
44. Zeb, F., M. Safdar, S. Khan, M. Muhammad, **S. Alam**, H. Shakoor. 2015. Effect of garlic (*Allium sativum*) and coriander (*Coriandrum sativum*) on lipid profile of cardiovascular patients. 4th Annual Middle East Congress on Clinical Nutrition. March 5-7, 2015, Ajman, United Arab Emirates. *Diabetes Care (Middle East Edition)* 12 (2): 105-106.

RESEARCH THESIS/DISSERTATION

- | | |
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| 2005-2009 | Fungal diversity and aflatoxins in poultry feed: ecology and implications for the control of aflatoxins ingestion and distribution in broiler's tissues. Ph.D. , Agricultural Chemistry, NWFP Agricultural University Peshawar. |
| 2002-2004 | Effect of whole wheat flour fortified with iron through small-scale grinders "Chakkis" on Anemia. M.Sc. (Hons) , Agricultural Chemistry, NWFP Agricultural University Peshawar. |
| 2002 | "Iron content of fortified wheat flour in NWFP" (Special Problem), B.Sc. (Hons) , Agricultural Chemistry, NWFP Agricultural University Peshawar. |
| 2002. | "Tea in the Prevention of Cancer" (Review Paper), B.Sc. (Hons) , Agricultural Chemistry, NWFP Agricultural University Peshawar. |

COMPUTER SKILLS

1. MS-Office, M-StatC, SPSS, Minitab, Statistix, LaTeX, Endnote, RefWork, Zotero, ChemDraw.
2. Google Scholar, Web of Knowledge, Pubmed, NCBI, Maize GDB, SciFinder, Reaxy etc.