

CURRICULUM VITAE

Masood Iqbal Awan (PhD)

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I am a cropping systems agronomist with a background in agronomy and crop physiology. Currently, I hold a position of Associate Professor (Agronomy) at the Constituent College Depalpur-Okara, University of Agriculture, Faisalabad. My research focus is on cropping systems, specifically understanding how different elements (plants, soils and people) interact and how to improve the robustness, productivity, and sustainability for desirable outcomes. My passion is education that fosters analytical thinking and impactful research that matters for the benefit of farming community.

Personal Details

Date of Birth	7 September 1984
Place of Birth	Khushab, Pakistan
Nationality	Pakistani

Employment History

January 2024 – current (on-going)	University of Agriculture, Faisalabad (UAF), Pakistan Associate Professor (Agronomy) at Constituent College Depalpur, Okara
September 2014 – January 2024	University of Agriculture, Faisalabad (UAF), Pakistan Assistant Professor (Agronomy) at Constituent College Depalpur, Okara
January 2015 – December 2017	University of Tasmania, Australia University Associate in the School of Land and Food - TIA
March – September 2014	Assistant Professor at the department of Environmental Sciences, Vehari campus, COMSATS Institute of Information Technology, Vehari, Pakistan

University Education

2007 – 2013	PhD in Plant Sciences Wageningen University, The Netherlands Centre for Crop Systems Analysis <i>Supervisors:</i> Prof. H. Meinke, Dr. L. Bastiaans and Dr. P. van Oort <i>Thesis:</i> Improving resource-use efficiency in rice-based systems of Pakistan (ISBN 978-94-6173-752-6).
2005 – 2007	MSc (Hons) in Agronomy University of Agriculture, Faisalabad, Pakistan Faculty of Agriculture <i>Supervisor:</i> Prof. Rashid Ahmad <i>Thesis:</i> Sunflower (<i>Helianthus annuus</i> L.) response to foliar fertilisation under water stress conditions (CGPA 3.90/4.00)
2001 – 2005	BSc (Hons) in Agriculture University of Agriculture, Faisalabad, Pakistan

Professional Trainings/Visits**A) Foreign Trainings/Visits**

Title	Year	Organiser	Country	Type
Information literacy including endnote	2008	Wageningen Graduate Schools Phd/Postdoc Training	Netherlands	Competence Strengthening/Skill Course
Interpersonal communication for Phd students	2008	Wageningen Graduate Schools Phd/Postdoc Training	Netherlands	Competence Strengthening/Skill Course
Career assessment	2011	Wageningen Graduate Schools Phd/Postdoc Training	Netherlands	Competence Strengthening/Skill Course
Project and time management	2011	Wageningen Graduate Schools Phd/Postdoc Training	Netherlands	Competence Strengthening/Skill Course
Mobilising your scientific network	2011	Wageningen Graduate Schools Phd/Postdoc Training	Netherlands	Competence Strengthening/Skill Course
Techniques for writing and presenting a scientific paper	2011	Wageningen Graduate Schools Phd/Postdoc Training	Netherlands	Competence Strengthening/Skill Course
Interdisciplinary research: crucial knowledge and skills	2011	Wageningen Graduate Schools Phd/Postdoc Training	Netherlands	Competence Strengthening/Skill Course
Imaging science	2012	C.T. de Wit Graduate School for Production Ecology & Resource Conservation (PE&RC), Wageningen University	Netherlands	Postgraduate Course
Improving the robustness, sustainability, productivity and eco-efficiencies of rice systems throughout Asia funded by Asia-Pacific Network for Global Change Research (APN); Project Reference ARCP-2012-09-NMY-Meinke; Role: Member	2013	University of Tasmania (Australia)	Sri Lanka	Inception Meeting of the APN funded Project
Improving the robustness, sustainability, productivity and	2013	University of Tasmania (Australia)	Indonesia	Mid-Project Meeting of the APN funded Project

eco-efficiencies of rice systems throughout Asia funded by Asia-Pacific Network for Global Change Research (APN); Project Reference ARCP-2012-09-NMY-Meinke; Role: Member				
Improving the robustness, sustainability, productivity and eco-efficiencies of rice systems throughout Asia funded by Asia-Pacific Network for Global Change Research (APN); Project Reference ARCP-2012-09-NMY-Meinke; Role: Member	2016	University of Tasmania (Australia)	Indonesia	Concluding Meeting of the APN funded Project
GHG emissions in rice systems: basics of mechanisms and standards for measurements	2024	The International Rice Research Institute, Philippines	Philippines	Capacity Building Training funded by the Asian Development Bank (ADB)

B) Local Trainings as Trainee

Training	Year	Organiser	Type
Outcome-based education (OBE)	2023-24	University of Agriculture Faisalabad (UAF)	Competence Strengthening/Brush-up
Application of GPS data collection tools and RS/GIS mapping	2023	WRAP Program Component 1 by the International Water Management Institute (IWMI)	Capacity Building Training

C) Local Trainings as Trainer

Training	Year	Organiser	Type
Training on GHG Measurement and Alternate Wetting and Drying (AWD) in Rice-Wheat Cropping	2025	University of Agriculture Faisalabad (UAF), Asian Development Bank (ADB) & Centre for Agriculture and Biosciences International (CABI)	Capacity building training

System of Punjab, Pakistan [08-10 April, WMRF-Okara)			
Modern Production Technology of Rice	2021	In-Service Agricultural Training Institute (IATI), Sargodha	Four Week Mandatory Training under 4Tier Service Structure for Field Investigator
Modern Production Technology of Raya	2021	In-Service Agricultural Training Institute (IATI), Sargodha	Four Week Mandatory Training under 4Tier Service Structure for Field Investigator
Modern Production Technology of Sesame	2021	In-Service Agricultural Training Institute (IATI), Sargodha	Four Week Mandatory Training under 4Tier Service Structure for Field Investigator
Challenges and Opportunities to Enhance Production of Wheat Crop	2021	In-Service Agricultural Training Institute (IATI), Sargodha	Two-Days Online Training of Field Assistants of Agriculture Extension
Challenges and Opportunities for Wheat Production	2021	UAF Sub-Campus Depalpur, Okara under the University Outreach Program	Kissan Convention 2021

Projects

1. Improving the robustness, sustainability, productivity and eco-efficiencies of rice systems throughout Asia funded by Asia-Pacific Network for Global Change Research (APN); Project Reference ARCP-2012-09-NMY-Meinke; Role: Member
2. Eco-efficient nitrogen management for emerging aerobic rice systems funded by Higher Education Commission of Pakistan (HEC); Role: Principal Investigator
3. Assessment and evaluation of forage and seed production of the maize (*Zea mays* L.) fodder crop in the mixed farming systems of central Punjab, Pakistan funded by Higher Education Commission of Pakistan (HEC); Role: Co-Principal Investigator
4. Creating value from waste: Vermicompost enrichment with rock phosphate for sustainable intensification of cropping systems funded by MaxGrow Agrochemicals; Role: Principal Investigator (In-Progress)

Publications

1. Rahman, A., Rehman, H., Alawadi, H.F.N., Awan, M.I., Mahmood, A., Seleiman, M.F., Khan, B.A., Wahid, A., Abdullah, F.N.U. and Wasonga, D.O. 2025. Ameliorative effect of exogenously applied zinc on cadmium-stressed sunflower (*Helianthus annuus* L.) by modulating growth,

- photosynthetic activity, polyphenolic compounds, and yield indices. Polish Journal of Environmental Studies. 1-14. 10.15244/pjoes/193387
2. Muhammad, F., Daji, L., Awan, M.I., Mahmood, A., Sadaf, S., Mukhtar, A., Khan, M.D., Shahzad, H., Aamer, M., Hassan, M.U., Seleiman, M.F., Alotaibi, M. and Iqbal, M.M. 2024. Combined Application of Nitrogen and Sulfur Improves Growth, Oil, and Bio-Diesel Production from Soybean. Polish Journal of Environmental Studies. 1-11. 10.15244/pjoes/192566
 3. Brownlie, W.J., Aziz, T., Sutton, M.A., Shenk, A., Winkler, M.K.H., Robinson, G., Adhya, T.K., Amon, B., Awan, M.I., Bittman, S., Bleeker, A., Borghardt, G., Butterbach-bahl, K., Brandani, S., Constantinescu, M., Dahl, K.R., Dalgaard, T., Delon, C., Döhler, H., ... van Grinsven, H.J.M. (2024). Nitrogen Mitigation: INMS Guidance Document on Measures for Sustainable Nitrogen Management. <https://doi.org/10.5281/zenodo.13831113>.
 4. Awan, M.I., Sohail, M.I., Hussain, S., Maqsood, M.A., Nasim, M., Aziz, T. 2024. Nitrogen Use Efficiency and Agricultural Sustainability. In: Rahman, M.M., Biswas, J.C., Meena, R.S. (eds) Climate Change and Soil-Water-Plant Nexus. Springer, Singapore. https://doi.org/10.1007/978-981-97-6635-2_6
 5. Liao, Y., Awan, M.I., Aamer, M., Liu, J., Liu, J., Gao, Z., Zhu, B., Yao, F. and Cheng, C. 2024. Evaluating Short-Term Effects of Rice Straw Management on Carbon Fractions, Composition and Stability of Soil Aggregates in an Acidic Red Soil with a Vegetable Planting History. *Heliyon* 10(1): e23724.
 6. Ahmad, M., Waraich, E.A., Zulfiqar, U., Yong, J.W.H., Ishfaq, M., Din, K.U., Ullah, A., Abbas, A., Awan, M.I., Moussa, I.M. and Elshikh, M.S. 2024. Thiourea improves yield and quality traits of Brassica napus L. by upregulating the antioxidant defense system under high temperature stress. *Scientific Reports* 14(1), p.12195.
 7. Sarwar, N., Mubeen, K., Rehman, A., Farooq, O., Wasaya, A., Yasir, T.A., Shahzad, M., Javed, M., Hussain, A., Awan, M.I., Dawood, M., Ahmad, S. 2023. Chapter 10 - Impact of Heat Stress on Cereal Crops and Its Mitigation Strategies. In: Ahmed, M., Ahmad, S. (eds) Disaster Risk Reduction in Agriculture. Disaster Resilience and Green Growth. Springer, Singapore, pp. 191-210. ISBN 978-981-99-1762-4; ISBN 978-981-99-1763-1 (eBook) https://doi.org/10.1007/978-981-99-1763-1_10
 8. Farooq, O., Imran, M., Awan, M.I., Sarwar, N., Mubeen, K., Ahmed, M., Ahmad, S. 2023. Chapter 11 - Causes of Soil Erosion, Its Measurements, and Management. In: Ahmed, M., Ahmad, S. (eds) Disaster Risk Reduction in Agriculture. Disaster Resilience and Green Growth. Springer, Singapore, pp. 211-232. https://doi.org/10.1007/978-981-99-1763-1_11
 9. Hussain, S., Awan, T.H., Waraich, E.A., Awan, M.I. (Eds.). 2023. Plant Abiotic Stress Responses and Tolerance Mechanisms. IntechOpen, London, United Kingdom. pp. 158. ISBN 978-1-80356-956-7
 10. Liang, L., Huang, W., Awan, M.I., Parveen, A., Li, R.P., Bi, F.G., Shao, J.H., Liang, X.Y., Wu, C.H., Liu, Z.Q. 2023. Study and application of image water level recognition calculation method based on mask R-CNN and faster R-CNN. *Applied Ecology and Environmental Research* 21(6):5039-5053. DOI:
 11. Wan, Z., Wang, L., Huang, G., Rasul, F., Awan, M. I., Cui, H., Liu, K., Yu, X., Tang, H., Wang, S., Xu, H. 2023. nirS and nosZII bacterial denitrifiers as well as fungal denitrifiers are coupled with N₂O emissions in long-term fertilized soils. *Science of The Total Environment*:165426. **IF 9.8** <https://doi.org/10.1016/j.scitotenv.2023.165426>

12. Ali, A., Shah, T., Haider, G., Awan, M.I., Gohar, M., Munsif, F., Ahmad, I. 2023. Strigolactone-mediated oxidative stress alleviation in *Brassica rapa* through upregulating antioxidant system under water deficit conditions. J Plant Growth Regul 2023. <https://doi.org/10.1007/s00344-023-10925-0> Journal of Plant Growth Regulation:1-13 (Available Online). **IF 4.64.**
13. Rehman, H.u., Ali, I., Ali, F., Awan, M.I., Wakeel, A., Farooq, M., Hussain, M. 2023. Nitrogen management strategies to improve crop performance, recovery efficiency and their relationship with physiological indices in dry direct-seeded rice. Int. J. Plant Prod. <https://doi.org/10.1007/s42106-023-00239-2> (Available Online) **IF 2.609.**
14. Khan, I., Mahmood, S., Chattha, M.U., Chattha, M.B., Ahmad, S., Awan, M.I., Alqahtani, F.M., Hashem, M., Alhaithloul, H.A.S., Qari, S.H., Mahmood, F., Hassan, M.U. 2023. Organic amendments improved the productivity and bio-fortification of fine rice by improving physiological responses and nutrient homeostasis under salinity stress. Plants 12(8):1644. <https://doi.org/10.3390/plants12081644> **IF 4.658**
15. Aslam, M., Sarwar, A., Khan, S.Z., Awan, M.I., Munir, M., Mushtaq, M.N., Ahmad, S., Hanif, A., Masroor, A., Ashraf, M.R. 2023. The effectiveness of botanicals and fungus isolates from fish pound on the population reduction of Bemisia tabaci. Journal of Survey in Fisheries Sciences 10:3974-3985. **IF 0.93**
16. Haider, G., Farooq, M.A., Shah, T., Malghani, S., Awan, M.I., Rahman, M.H., Khalid, A.R., Ghaffar, A. 2023. Chapter 5 - Cereal Responses to Nutrients and Avenues for Improving Nutrient Use Efficiency. In: Shah, T., Nie, L., Filho, M.T., & Amir, R. (eds.). Cereal Crops. CRC Press, Taylor & Francis Group, pp. 28. eBook ISBN 9781003250845 <https://doi.org/10.1201/9781003250845>
17. Brownlie, W.J., Aziz, T., Sutton, M. 2023. Chapter 24 - Key actions for better nitrogen management. In: International Nitrogen Assessment. Cambridge University Press (In press).
18. Zhang, X., Long, H., Huo, D., Awan, M.I., Shao, J., Mahmood, A., Liu, S., Huang, J., Parveen, A., Aamer, A., Hassan, M.U. 2022. Insights into the functional role of tea microbes on tea growth, quality and resistance against pests and diseases and resistance against pests and diseases. Notulae Botanicae Horti Agrobotanici Cluj-Napoca 50(4): 12915. **IF 1.1444.**
19. Mukhtar, A., Awan, M.I., Sadaf, S., Mahmood, A., Javed, T., Shah, A.N., Shabbir, R., Alotaibi, S., Shah, A.A., Adamski, R., Siuta, D., 2022. Sulphur enhancement for the improvement of castor bean growth and yield, and sustainable biodiesel production. Front. Plant Sci. 13 DOI: <https://doi.org/10.3389/fpls.2022.905738> **IF 6.627**
20. Hassan, M.U., Mahmood, A., Awan, M.I., Maqbool, R., Aamer, M., Alhaithloul, H.A.S., Huang, G., Skalicky, M., Brestic, M., Pandey, S., Sabagh, A.E., Qari, S.H., 2022. Melatonin-induced protection against plant abiotic stress: mechanism and prospects. Front. Plant Sci. 13:902694. DOI: <https://doi.org/10.3389/fpls.2022.902694> **IF 6.627**
21. Hassan, M.U., Aamer, M., Mahmood, A., Awan, M.I., Barbanti, L., Seleiman, M.F., Bakhsh, G., Alkharabsheh, H.M., Babur, E., Shao, J., Rasheed, A., Huang, G. 2022. Management Strategies to Mitigate N2O Emissions in Agriculture. Life 12(3):439. DOI: 10.3390/life12030439 **IF 3.251**
22. Shao, J., Wu, W., Rasul, F., Munir, H., Huang, K., Awan, M.I., Albishi, T.S., Arshad, M., Hu, Q., Huang, G., Hassan, M.U., Aamer, M., Qari, S.H. 2022. Trehalose induced drought tolerance in plants: physiological and molecular responses. Not. Bot. Horti. Agrobot. Cluj Napoca. 50(1):12584 DOI: 10.15835/nbha50112584 **IF 1.249**
23. Mahmood, A., Wang, X., Awan, M.I., Ali, L., Fiaz, S., Naqve, M., Hassan, M.U., Javed, M.M., Wang, H., Shoujun, Y., Ma, Z. 2022. Bio-Methane production from maize with varying nitrogen

levels and harvesting times under semi-arid conditions of Pakistan. Pol. J. Environ. Stud. 2022;31(3):2213–2221 DOI: <https://doi.org/10.15244/pjoes/143506>

IF 1.871

24. Hanif, A., Ashraf, M.R., Masroor, A., Awan, M.I., Mustafa, G., Ahmad, S., Zaman, S., 2022. Botanical description of six brassica species with relevance to their quantitative and morphological characteristics. 2022. Xi'an Shiyou Daxue Xuebao (Ziran Kexue Ban)/Journal of Xi'an Shiyou University 65(6):89-101. DOI 10.17605/OSF.IO/M8GVU **IF 0.33**
25. Nawaz, A., Maqsood, M.A., Zia, M.H., Awan, M.I., Bordoloi, N., Shoukat, A., Farooq, A., Rasheed, N., Ashraf, M.I., Saleem, I., Ehsan, S. 2022. Nitrification inhibitors impact on nitrous oxide emission and ammonia volatilization: a sustainable measure toward a hygienic environment. SABRAO J. Breed. Genet. 54(2):376-388. DOI:10.54910/sabrao2022.54.2.13 **IF 1.41**
26. Awan, M.I., Raza, S., Farooq, A., Nawaz, A. , Aziz, T. 2022. Chapter 4 - Drivers of increased nitrogen use in Pakistan. In: Aziz, T., Wakeel, A., Watto, M. A., Sanauallah, M., Maqsood, M. A. & Kiran, A. (eds.) Nitrogen Assessment. Academic Press, pp. 53-71. <https://doi.org/10.1016/B978-0-12-824417-3.00004-6>
27. Nawaz, A., Maqsood, M.A., Awan, M.I., Aziz, T. 2021. Comparative efficacy of natural and synthetic nitrification inhibitors for nitrogen release in alkaline calcareous soils. Pak. J. Agric. Sci. 58(5):1473-1482. DOI: 10.21162/PAKJAS/21.xxx **IF 0.856**
28. Mahmood, A., Awan, M.I., Sadaf, S., Mukhtar, A., Wang, X., Fiaz, S., Khan, S.A., Ali, H., Muhammad, F., Hayat, Z., Gul, F., Fahad, S. 2021. Bio-diesel production of sunflower through sulphur management in a semi-arid subtropical environment. Environ. Sci. Pollut. Res. 29(9):13268-13278. doi: 10.1007/s11356-021-16688 **IF 5.19**
29. Javaid, M.M., Saeed, M.A., Waheed, H., Nadeem, M.A., Ahmad, F., Aziz, A., Wasaya, A., Awan, M.I., Mahmood, A., Balal, R.M., Nadeem, M., Amin, M.A., Khan, B.A. 2021. Optimizing the rate of phosphorus to enhance grain yield and quality in two *Camelina sativa* (L.) crantz accessions. Semina: Ciências Agrárias 42(5):2735-2750. **IF 0.595**
30. Ali, M., Maqsood, M.A., Aziz, T., Awan, M.I. 2020. Neem (*Azadirachta indica*) oil coated urea improves nitrogen use efficiency and maize growth in an alkaline calcareous soil. Pakistan Journal of Agricultural Sciences 57(3): 675-684. **IF 0.856**
31. Rehman, H., Nawaz, A., Awan, M.I., Ijaz, M., Hussain, M., Ahmad, S., Farooq, M. 2019. Direct Seeding in Rice: Problems and Prospects. In: Hasanuzzaman M. (eds) Agronomic Crops. Springer, Singapore. pp. 199-222. ISBN 978-981-32-9150-8 (https://doi.org/10.1007/978-981-32-9151-5_11).
32. Perveen, S., Mushtaq, M.N., Yousaf, M., Waqas, M.R., Ashraf, M.R., Awan, M.I., Hashim, S., Koodkaew, I. 2019. Potent phenolic allelochemicals from *Celosia argentea* var. *cristata* L. leaf extract based on bioactive fractions. Allelopathy Journal. 48(1): 27-34. **IF 0.95**
33. Rehman, H., Rasool, F., Awan, M.I., Mahmood, A., Wakeel, A., Hajiboland, R., 2018. Irrigation and Zn fertilizer management improves Zn phyto-availability in various rice production systems. 2018. Journal of Plant Nutrition and Soil Science. 181(3):374-381. **IF 2.566**
34. Saleem, M.A., Amjid, M.W., Ahmad, M.Q., Noor, E., Qayyum, A., Awan, M.I., Asif, M., Nauman, M., 2018. Marker assisted selection for relative water content, excised leaf water loss and cell membrane stability in cotton. Adv. Life Sci. 5(2): 56-60. **IF 0.63**
35. Shabbir, R.N., Waraich, E.A., Ali, H., Nawaz, F., Ashraf, M.Y., Ahmad, R., Awan, M.I., Ahmad, S., Irfan, M., Hussain, S., Ahmad, Z. 2016. Supplemental exogenous NPK application alters

biochemical processes to improve yield and drought tolerance in wheat (*Triticum aestivum* L.). Environ. Sci. Pollut. Res. 23(3):2651-62. doi: 10.1007/s11356-015-5452-0. **IF 5.19**

36. Awan, M.I., van Oort, P.A.J., Ahmad, R., Bastiaans, L., Meinke, H., 2015. Farmers' views on the future prospects of aerobic rice culture in Pakistan. Land Use Policy 42: 517-526. **IF 6.189**
37. Awan, M.I., van Oort, P.A.J., Bastiaans, L., van der Putten, P.E.L., Yin, X., Meinke, H., 2014. A two-step approach to quantify photothermal effects on pre-flowering rice phenology. Field Crops Research 155: 14-22. **IF 6.145**
38. Awan, M.I., Bastiaans, L., van Oort, P.A.J., Ahmad, R., Ashraf, M.Y., Meinke, H., 2014. Nitrogen use and crop performance of rice (*Oryza sativa* L.) under aerobic conditions in a semi-arid subtropical environment. Agronomy Journal 106: 199-211. **IF 2.65**
39. Ahmad, J.N., Jafir, M., Ahmad, S.J.N., Javed, M.W., Majeed, D., Shareef, M.Z., Ghaffar, A., Awan, M.I., 2017. Quality characterization of 40 abiotic stress tolerant CIMMYT synthetic hexaploid wheat (*Triticum aestivum*) lines with respect to pest resistance. Academic Journal of Entomology 10(2): 19-24.
40. Ullah, H., Mahmood, A., Awan, M.I., Honermeier, B., 2015. Effect of row spacing and seed rate on fruit yield, essential oil and composition of anise (*Pimpinella anisum* L.). Pakistan Journal of Agricultural Sciences 52(2): 349-357. **IF 0.856**
41. Ahmad, Z., Waraich, E.A., Ahmad, T., Ahmad, R., Awan, M.I., 2015. Yield response of maize as influenced by supplemental foliar applied phosphorus under drought stress. International Journal of Food and Allied Sciences 1(2): 45-55.
42. Ahmad, Z., Waraich, E.A., Ahmad, R., Iqbal, M.A., Awan, M.I., 2015. Studies on screening of maize (*Zea mays* L.) hybrids under drought stress conditions. Advanced Botany and Zoology 2(4): 1-5.
43. Hussain, A., Nadeem, A., Ashraf, I., Awan, M., 2009. Effect of weed competition periods on the growth and yield of Blackseed (*Nigella sativa* L.). Pakistan Journal of Weed Sciences Research 15(1): 71-81.
44. Meinke, H., Parsons, D., Awan, M., 2014. Improving the robustness, sustainability, productivity and eco-efficiencies of rice systems throughout Asia. APN Science Bulletin 4: 64-65.

Conferences/Symposia/Seminars/Workshops

1. AWD for improving climate resilience and resource use efficiency in rice systems of Pakistan: a SWOT analysis. Oral Presentation in "International Conference on Food and Applied Sciences (ICFAS-25)" organized by Evolution at the University of Okara on 07-08 April, 2024. (Oral Presentation)
2. Entry Points of Climate-smart Practices for Sustainable Rice Production. Oral Presentation in "International Conference of New Trends in Biological Sciences" organized by the Institute of Pure and Applied Zoology (IPAZ) School of Applied Biology (SAB), University of Okara on 16-17 January, 2023. (Oral Presentation)
3. The Art of Scientific Writing. Invited Keynote Speaker in One-Day Workshop "Maximizing Chances of Publication; Data Handling, Manuscript Write-up and Graphs/Figures Preparation" organized by UAF Sub-Campus Depalpur, Okara on 13 July 2023.
4. Transforming Our Agri-Food Systems. Invited Keynote Speaker in One-Day Seminar Sustainable Food Systems - Need of the Hour organized by the Department of Biology, University of Okara on 29 November 2022.
5. Modern Crop Breeding for Future Food Security. Webinar Organized by UAF Sub-Campus Depalpur, Okara on 22 December 2022.

6. International Webinar on Nutrients and Pesticide Pollution; A Potential Threat to Biodiversity. Webinar Organized by UAF Sub-Campus Depalpur, Okara in Connection with International Biodiversity Day on 13 July 2023.
7. Awan, M.I., Mahmood, A., Rehman, H., Aziz, T., 2022. Climate-smart practices for improving sustainability of rice systems: potential and prerequisites. In: Abstract Book of 1st International Conference on 'Recent Trends in Environmental Sustainability', Vehari Campus, Comsats University, Islamabad, 21-23 February 2022, Vehari, Pakistan, pp. 15.
8. Shah, G.M., Farooq, U., Shabbir, Z., Awan, M.I., Bakhat, J.F., Guo, J., Dong, R., 2022. Soil cadmium contamination reduce fertilizer values and increase associated health risks after application of anaerobic digestate to various soil types. In: Abstract Book of 1st International Conference on 'Recent Trends in Environmental Sustainability', Vehari Campus, Comsats University, Islamabad, 21-23 February 2022, Vehari, Pakistan, pp. 115.
9. Member Organizing Committee, One Day ZTBL Zarai Baithak Held on 27th May, 2022 at the UAF Sub-Campus Depalpur, Okara.
10. Member Organizing Committee, Spring Festivals, 2022-24 at the UAF Sub-Campus Depalpur, Okara.
11. Awan, M.I., Mahmood, A., Rehman, H., Maqsood, M.A., Mehmood, F., 2019. Crop performance, water and nitrogen use in partial and full aerobic rice systems. In: Abstract Book of 1st International Conference on 'Agricultural and Biological Sciences Focusing Food Security and Climate Change', University of Haripur, 27-30 March, 2019, Haripur, Pakistan, pp. 36.
12. Awan, M.I., Mahmood, A., Rehman, H., Maqsood, M.A., Saeed, S., 2019. Exploring options for economising nitrogen and land use in soybean-cereals intercropping systems. In: Abstract Book of 1st International Conference on 'Agricultural and Biological Sciences Focusing Food Security and Climate Change', University of Haripur, 27-30 March, 2019, Haripur, Pakistan, pp. 35.
13. Mahmood, A., Ahmad, N., Awan, M.I., Rehman, H., 2019. Effect of irrigation regimes and genotypes on growth and yield of rice under direct seeded conditions. In: Abstract Book of 1st International Conference on 'Agricultural and Biological Sciences Focusing Food Security and Climate Change', University of Haripur, 27-30 March, 2019, Haripur, Pakistan, pp. 31.
14. Mahmood, A., Ali, A., Awan, M.I., Rehman, H., 2018. Impact of different harvest times and nitrogen rates on biomass yield and quality implication for bioenergy production of maize. In: Abstract Book of 1st International Conference on 'Soil and Crop Health in Changing Climate', MNS-University of Agriculture Multan, 28-29 November, 2018, Multan, Pakistan, pp. 82.
15. Kamran, K., Saleem, F., Awan, M.I., Rehman, A., 2018. Electro-reclamation of salt affected soils by pulsed electric field. In: Abstract Book of 1st International Conference on 'Soil and Crop Health in Changing Climate', MNS-University of Agriculture Multan, 28-29 November, 2018, Multan, Pakistan, pp. 83.
16. Awan, M.I., Ullah, M.H., Rehman, H., Mahmood, A., Aziz, T., 2017. Response of camelina (*Camelina sativa* Crantz L.) to irrigation levels and sulphur supply rates. In: Abstract Book of National Conference on Challenges and Opportunities to Boost Agriculture in Changing Climate, College of Agriculture, Bahauddin Zakariya University, Bahadur Sub-campus, Layyah, 29-30 March, 2017, Layyah, Pakistan, p. 32.
17. Awan, M.I., Meinke, H., van Oort, P., Bastiaans, L., 2015. Entry points for eco-efficient aerobic rice production system in Punjab, Pakistan (Oral presentation). In: proceedings of the 17th ASA (Australian Society of Agronomy) Conference 'Building Productive, Diverse and Sustainable Landscapes', 20-24 September 2015, Hobart, Australia, pp: 534-538. www.agronomy2015.au
18. Rehman, H., Awan, M., Mahmood, A., Rehman, S., Wakeel, A., Aziz, T., 2015. Nutrients interaction, an efficient strategy to improve micronutrients bioavailability in soil-plant system.

In: Proceedings of International Conference on Soil Sustainability for Food Security, Institute of Soil & Environmental Sciences, University of Agriculture, Faisalabad, 15-17 November, 2015, Faisalabad, Pakistan, pp: 168-169.

19. Meinke, H., Bastiaans, L., Bouman, B.A.M., Dingkuhn, M., Gaydon, D.S., Hasegawa, T., Heinemann, A.B., Kiepe, P., Lafarge, T., Luquet, D., Masood, A., Möller, C., van Oort, P., Rodenburg, J., Yan, J., Yin, X., 2009. An international collaborative research network helps to design climate robust rice systems, Keynote Paper from International Workshop on Crop Production under Heat Stress – Monitoring, Impact Assessment, and Adaptation, Tsukuba International Congress Centre, Tsukuba, Ibaraki, Japan, 5-9 October 2009. Published in Hasegawa T. and Sakai H., eds. 2009. Crop Production under Heat Stress: Monitoring, Impact Assessment and Adaptation. Proceedings of the MARCO Symposium 2009 held in Tsukuba, Japan, 5-9 October 2009. Tsukuba (Japan): National Institute for Agro-Environmental Sciences (NIAES).
20. Meinke, H., Bastiaans, L., Bouman, B.A.M., Dingkuhn, M., Gaydon, D.S., Hasegawa, T., Heinemann, A.B., Kiepe, P., Lafarge, T., Luquet, D., Masood, A., Möller, C., van Oort, P., Rodenburg, J., Yan, J., Yin, X., 2009. Adaptation of rice production under climatic constraints, EU-ASEAN Science and Technology Dialogue, Bogor, Indonesia, 11-12 November 2009.
21. Awan, M., Meinke, H., 2008. Adapting to a changing climate: Aerobic rice for better resource use efficiency. Poster Presentation; In: Resource Capture by Crops: Integrated Approaches, University of Nottingham, 10-12 September, 2008.

Academic & research activities

Student supervision

- As Major Supervisor: 25 completed; 05 in progress
- As Co-supervisor/thesis committee member: 20 completed; 3 in progress
- HEC-approved PhD Supervisor since 28-01-2016

Teaching responsibilities for major and minor courses of agronomy such as Field Crop Physiology, Irrigation Agronomy, Field Crop Nutrition, Agro-technology of Major Field Crops, and Basic Agriculture.

University Associate (2014-2017), University of Tasmania (Australia) in the APN-funded research project on rice

Reviewer of International Journals such as Field Crops Research, European Journal of Agronomy, Agronomy for Sustainable Development, Industrial Crops and Products, Journal of Soil Science and Plant Nutrition

Member of UAF team for interpreting guidelines on national chapter of the Sustainable Rice Platform (SRP)

Administrative Responsibilities

- Deputy Hall Warden
- Associate Tutor
- Associate DSA
- Incharge Student Record Branch
- Incharge Farms