TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

Azeem Tariq

CURRICULUM VITAE

PERSONAL INFORMATION

| | |
|---|---|
| Surname | Tariq |
| Name | Azeem |
| Date of birth | 03, October, 1989 |

PRESENT OCCUPATION

| **Appointment** | **Structure** |
|---|---|
| Associate Researcher, voluntary postdoc work | Since achieving my PhD, I continued my research work at Department of Plant and Environmental Sciences, University of Copenhagen, Denmark, on a voluntary base due to lack of research funds, while conducting pilot studies with planar optode, writing papers, submitting proposals for research projects and supervision of a PhD student. |

EDUCATION AND TRAINING

| **Degree** | **Course of studies** | **University** | **year of achievement of the degree** |
|---|---|---|---|
| PhD | Climate Change | Joint PhD from Montpellier SupAgro (France) and University of Copenhagen (Denmark) | 2018 |
| Master | Sustainable Forest and Nature Management | Joint MSc from University of Copenhagen (Denmark) and Georg August University (Germany) | 2014 |
| Master | Agronomy | Faculty of Agriculture, University of Agriculture, Faisalabad (Pakistan) | 2012 |
| Bachelor | Agricultural Sciences | Faculty of Agriculture, University of Agriculture, Faisalabad (Pakistan) | 2010 |

REGISTRATION IN PROFESSIONAL ASSOCIATIONS

| **Date of registration** | **Association** | **City** |
|---|---|---|
| 15-01-2015 | Federation of European Microbiological Societies | Delft, Netherlands |
| 05-01-2014 | Erasmus Mundus Association | Gottingen, Germany |
| 01-10-2014 | PhD Committee of Department of Plant and Environmental Sciences | Copenhagen, Denmark |
| 05-05-2010 | Local village and farmer's society | Faisalabad, Pakistan |
| 01-02-2009 | Society of Young Agronomist | Faisalabad, Pakistan |

FOREIGN LANGUAGES

| **Languages** | **level of knowledge** |
|---|---|
| **English** | Advanced |
| **Danish** | Negotiation level |
| **German** | Basic understanding |
| **French** | Basic understanding |
| **Hindi** | Negotiation level |
| **Urdu** | Native |

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

| **Year** | **Description of award** |
|---|---|
| 2014-2018 | **Erasmus Mundus Joint Doctorate fellowship**, supported by the Agricultural Transformation by Innovation (http://agtrain.eu/), funded by European Commission under grant AGTRAIN-agreement number 2011-0019. (Grant = 129,900 Euro) |
| 2012-2014 | **Erasmus Mundus Joint Master fellowship**, under Sustainable Forest and Nature Management program (https://em-sufonama.eu/), funded by European Commission under grant EMMC-FPA agreement number 2012-0193. (Grant = 48,000 Euro) |
| 2010-2012 | **Silver medalist** due to distinction in academic and research during MSc (Hons) Agronomy at University of Agriculture Faisalabad, Pakistan, in academic batch 2010-2012 |
| 2006-2012 | **University merit scholarship holder** due to distinction in academic in BSc (Hons) and MSc (Hons) at University of Agriculture Faisalabad, Pakistan. |

TRAINING OR RESEARCH ACTIVITY

- Complete a course of instruction "Applied methods in crop physiology" from November 14, 2016 to November 18, 2016 at Department of Food Science, Aarhus University, Denmark.
- Complete a course of instruction "Statistical methods for the Biosciences" from April 28, 2016 to June 02, 2016 at Laboratory of Applied Statistics, Department of Mathematical Sciences, University of Copenhagen, Denmark
- Complete a course of instruction "Introduction to University Pedagogy" in May 2016 at Faculty of Science, University of Copenhagen, Denmark.
- Complete a course of instruction "Agricultural transformation and rural innovations field course" from June 19, 2015 to July 03, 2015 at Department of Extension and Innovation Studies. Makerere University, Kampala Uganda.
- Complete a course of instruction "Plant Nutrients in Terrestrial Ecosystem – acquisition and turnover" from June 01, 2015 to June 05, 2015 at Department of Plant and Environmental Sciences, University of Copenhagen, Denmark.
- Complete a course of instruction "Isotope methods for studying carbon and nutrient dynamics" from October 27, 2014 to October 31, 2014 at Department of Plant and Environmental Sciences, University of Copenhagen, Denmark.
- Complete a course of instruction "Responsible Conduct of Research" on October 20, 2014 at Department of Food and Resource Economics, University of Copenhagen, Denmark.
- Complete a course of instruction "Introductory course to doctorate research within agricultural development, food chains and innovation (generic course)" from September 14, 2014 to September 17, 2014 at Czech University of Life Sciences, Prague.
- Attend the course on "Biometrical Research Methods – Biometric data analysis and experimental design" during summer term 2014. Institute of Forest Biometry and computer science, Georg-August-University of Göttingen, Germany.
- Participate in the Training Course on "Sustainable Wetland Management" February 27th to March 1st, 2012. Organized by Department of Wildlife and Fisheries, Government College University, Faisalabad and Pakistan Wetland Program.

PROJECT ACTIVITY

| **Year** | **Project** |
|---|---|
| 2014-2018 | EU-AGTRAIN project: Agricultural Transformation by Innovation (http://agtrain.eu/). Funded by European Commission, to develop an elite European school within the topic of successful development and transformation of farming systems in the developing world. Involved as PhD researcher in "climate smart rice producing under Intensified farming systems; mitigation and adaptation potential". |
| 2013-2014 | BEST-bioenergy project: Bioenergie-Regionen stärken project (www.best-forschung.de). Funded by German Federal Ministry of Education and Research, to develop regionally adapted concepts and innovative system solutions for biomass production and to evaluate them regarding ecological and economic effects. Involved as MSc researcher in "SOM sequestration and soil changes after plantation of bioenergy crops". |

CONGRESSES AND SEMINARS

| Date | Title | Place |
|---|---|---|
| 15-17 Oct. 2018 | International Rice Congress, | Singapore |
| 06 Dec. 2017 | Climate smart rice production systems | Hanoi, Vietnam |
| 10 Nov. 2017 | Drainage of flooded rice soil influence the residue carbon contribution in methane emissions | Bonn, Germany |
| 03 May 2017 | Quantifying the methane emissions and identifying mitigation options; A static chamber approach | Copenhagen, Denmark |
| 14 Dec. 2016 | Participatory approach of redesigning prototypes and scenario for climate smart rice production systems | Copenhagen, Denmark |
| 23-25 May 2016 | 3rd European Agroforestry Conference | Montpellier, France |
| 20-24 Sep. 2015 | 5th International Symposium on Soil Organic Matter | Gottingen, Germany |
| 16-18 Sep. 2015 | Tropentag, Management of land use systems for enhances food security–conflict, controversies and resolutions | Berlin, Germany |
| 15 June, 2015 | Climate smart rice production under intensified farming systems; mitigation potential and adaptation | Montpellier, France |
| 16-18 Mar. 2015 | Climate-Smart-Agriculture, Global Science Conference | Montpellier, France |
| 17-19 Sep. 2014 | Tropentag | Prague, Czech Republic |

PUBLICATIONS

**Book Chapter**

Parthasarathi, T., M. Kokila, D. Selvakumar, V. Meenakshi, A. Kowsalya, K. Vanitha, **A. Tariq**, A. Surendran and Eli Vered. Dry-seeded and aerobic rice cultivation. In: Sasaki, T. Acheiving Sustainable cultivation of Rice. Volume 2, Burleighs Dodd Publication, UK. (2017).

DOI: 10.19103/AS.2016.0003.15

**Articles in reviews**

**Tariq, A.**, A. Gunina and N. Lamersdorf. Initial changes in soil properties and carbon sequestration potential under monocultures and short-rotation alley coppices with poplar and willow after three years of plantation. Science of the total Environment 634: 963-973. (2018). DOI: https://doi.org/10.1016/j.scitotenv.2018.03.391

**Tariq, A.**, L.S. Jensen, B.O. Sander, S. de Tourdonnet, P.L. Ambus, P.H. Thanh, T.V. Mai, A. de Neergaard. Paddy soil drainage influences the residue carbon contribution to methane emissions. Journal of Environmental Management 225: 168-176. (2018).

DOI: https://doi.org/10.1016/j.jenvman.2018.07.080

**Tariq, A.**, A. de Neergaard, L.S. Jensen, B.O. Sander, T.V. Mai, Q.D. Vu, R. Wassmann, S. de Tourdonnet. Co-design and assessment of mitigation practices in rice production systems: A case study in northern Vietnam. Agricultural Systems 167: 72-82. (2018).

DOI: https://doi.org/10.1016/j.agsy.2018.08.012

**Tariq, A.**, Q.D. Vu, L.S. Jensen, S. de Tourdonnet, B.O. Sander, R. Wassmann, T.V. Mai, A. de Neergaard. Mitigating CH4 and N2O emissions from intensive rice production systems in northern Vietnam: Efficiency of drainage patterns in combination with rice residue incorporation. Agriculture, Ecosystems and Environment 249: 101-111. (2017).

DOI: https://doi.org/10.1016/j.agee.2017.08.011

**Tariq, A.**, L.S. Jensen, S. de Tourdonnet, B.O Sander and A. de Neergaard. Early drainage mitigates methane and nitrous oxide emissions from organically amended paddy soils. Geoderma 304: 49-58. (2017).

DOI: https://doi.org/10.1016/j.geoderma.2016.08.022

**Tariq, A.**, S.A. Anjum, M.A. Randhawa, E. Ullah, M. Naeem, R. Qamar, U. Ashraf and M. Nadeem. Influence of Zinc Nutrition on Growth and Yield Behaviour of Maize (Zea mays L.) Hybrids. American Journal of Plant Sciences 5: 2646-2654. (2014).

DOI: http://dx.doi.org/10.4236/ajps.2014.518279

Ehsanullah, **A. Tariq**, M.A. Randhawa, S.A. Anjum, M. Nadeem, M. Naeem. Exploring the Role of Zinc in Maize (Zea Mays L.) through Soil and Foliar Application. Universal Journal of Agricultural Research, 3(3): 69-75. (2015).

DOI: 10.13189/ujar.2015.030301

Tanveer, A., M.E. Safdar, **A. Tariq**, M. Yasin and I.R. Noorka. Allelopathic inhibition of germination and seedling vigor of some selected crops by Achyranthes aspera L. Herbologia, 14 (2): 35-46. (2014).

DOI: http://dx.doi.org/10.5644/Herb.14.2.04.

Ehsanullah, M. Javed, R. Ahmad and **A. Tariq**. Bio-economic Assessment of Maize-Mash Intercropping System. Proceeding of International seminar on Crop Management: Issues and Options. Crop and Environment, Vol. 2(2): 41-46. (2011).

URL: https://links/5432ae520cf20c6211bc6b53.pdf

**Tariq, A.**, L.S. Jensen, S. de Tourdonnet, B.O. Sander, T.V. Mai, Q.D. Vu, R. Wassmann, A. de Neergaard. Assessment of field water management system at plot scale: challenges and constrains for smallholder rice farmers. Agricultural Systems. Manuscript accepted subject to revision. (2019)

Leghari, S.N., **A. Tariq**, T. Yasmeen, M. Riaz, S. Jessen. Seasonal variation of groundwater nitrate concentrations in the Indus river flood plain aquifer, Punjab province, Pakistan. Journal of Environmental Management. Manuscript accepted subject to revision. (2019)

**Congress proceedings**

Gunina, A., **A. Tariq**, and N. Lamersdorf. Soil organic C sequestration under poplar and willow agroforestry systems. European Geosciences Union General Assembly, held 12-17 April 2015, Vienna, Austria. id.573. (2015).

URL: https://meetingorganizer.copernicus.org/EGU2015/EGU2015-573.pdf

**Tariq, A.**, A. Gunina and N. Lamersdorf. Carbon sequestration in an agroforestry system, including short rotation coppices of poplar and willow. Proceeding of 57th Annual Meeting of the Society for Agronomy e. V. with the Max-Eyth Society for Agricultural Technology. 16-18

September 2014 at the University of Agricultural Sciences in Vienna. Mitt. Ges. Pflanzenbauwiss, 26: 60-61. (2014).

URL: https://www.publication/268149260

OTHER INFORMATION

**Teaching and Supervision experience**

- **Lecturing to Master students** in "Sustainable development of agriculture" course at University of Copenhagen (Denmark).
- **Lecturing to new PhD fellows** in EU-AGTRAIN program in "Introductory course to doctorate research within agricultural development, food chains and innovation" course.
- **Supervision of exchange PhD student**, Shahrukh Nawaz Leghari at University of Copenhagen, Denmark. Guidance on data analysis and synthesis of scientific reports on assessment of nutrient leaching under different nutrient management of agricultural systems.
- **Supervision of visiting junior researcher**, Thanh Phan at University of Copenhagen, Denmark. Guidance in setting and follow up of laboratory experiments, air sample collection for GHG analysis, laboratory analysis such as pH and conductivity, gas chromatography, isotope ratio mass spectrometry and stable isotope labelling.
- **Supervision of Bachelor student** thesis, Vilde Maria Lavoll at University of Copenhagen, Denmark. Guidance in establishing laboratory experiment, analysis with gas chromatography, flux calculation, statistical analysis, review and comments on draft reports.

Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Place and date: Copenhagen, 19-11-2018

SIGNATURE