

Nafeesa Samad

Research Interests: Climate Change, Forest Ecology, Ecophysiology, IoT in Environmental Monitoring, Sustainable Agriculture.

WORK EXPERIENCE

Data Analyst

Fondazione Centro Euro-Mediterraneo sui Cambiamenti Climatici [1 Jan 2025 – Continue]

City: Viterbo

Country: Italy

Trainee

Faculdade de Ciências da Universidade de Lisboa [1 Jul 2017 – 31 Aug 2017]

City: Lisbon

Country: Portugal

1. Carry out all the experimental activities in greenhouse to investigate the response of maize plant to drought
2. Investigate the phytoremediation potential of fungi

Research Associate

PMAS-Arid Agriculture University [1 Oct 2012 – 15 Oct 2014]

City: Rawalpindi

Country: Pakistan

Project: Training and capacity building in sustainable agriculture water management: addressing food security and social instability in Pakistan (SAWaM-Pak)

- Carry out research activities and specific tasks for project implementation
- Organize training workshops for installation and demonstration of equipment for trainees
- Support project coordinator/ principal investigator in preparing necessary project documents and correspondences
- Make monitoring trips to follow up project progress

EDUCATION AND TRAINING

Bachelor of Science

University of the Punjab [1 Sep 2007 – 31 Aug 2009]

Address: Lahore (Pakistan)

Website: <http://www.pu.edu.pk/>

Field(s) of study: Botany | Zoology | Chemistry

Master of Science (MSc)

PMAS-Arid Agriculture University [12 Sep 2009 – 5 Sep 2011]

Address: Rawalpindi (Pakistan)

Website: www.uaar.edu.pk/

Field(s) of study: Environmental Sciences

Thesis: An Assessment of Natural Springs of Margalla Hills Islamabad Zone-III

Master of Philosophy (MPhil)

PMAS-Arid Agriculture University [1 Sep 2011 – 31 Aug 2013]

Address: Rawalpindi (Pakistan)

Website: www.uaar.edu.pk/

Field(s) of study: Environmental Science

Thesis: Effect of Accelerated Aging on genotypic expression and stability of Bt. gene in genetically modified *Gossypium hirsutum*

Laurea Magistrale (MS)

University of Tuscia [1 Nov 2015 – 27 Oct 2017]

Address: Viterbo (Italy)

Website: <http://www.unitus.it/>

Field(s) of study: Forestry & Environmental Science

Thesis: Rehabilitation of contaminated pond using *carex spp.*: Mesocosms test on transformed sludge using biochar

Doctor of Philosophy (PhD)

UNIVERSITY OF TUSCIA [1 Nov 2018 – Current]

Address: VITERBO (Italy)

Website: <http://www.unitus.it/>

Field(s) of study: Forest ecology and environmental technology

Thesis: Ecophysiology of Mediterranean Chestnut (*Castanea sativa Mill.*) Forests: Effects of Pruning Studied through an Advanced IoT System.

LANGUAGE SKILLS

Mother tongue(s): Urdu Other

language(s):

English

LISTENING C1 READING C1 WRITING C2

SPOKEN PRODUCTION C1 SPOKEN INTERACTION C1

Italian

LISTENING A1 READING A1 WRITING A1

SPOKEN PRODUCTION A1 SPOKEN INTERACTION A1

DIGITAL SKILLS

Data analysis and interpretation

Proficient in Microsoft Word / linguaggi di programmazione Python / Microsoft Powerpoint / Microsoft Excel

Beginner in R/R.Studio (Basic) / QGIS / HPC / ML / ANN

Management and communication

Good listener and communicator / Organizational and planning skills / Team-work oriented / Decision-making / Reliability

COMMUNICATION AND INTERPERSONAL SKILLS

Communication skills

- Effective communication and presentation skills

Job-related skills

1. Research activities and project documentation
2. Laboratory experiments and field work expertise

PUBLICATIONS

Chiriaco, Maria Vincenza, **Nafeesa Samad**, Federico Magnani, Gilmo Vianello, Livia Vittori-Antisari, Ilaria Mazzoli, Roberto Ranieri, and Riccardo Valentini. 2024. "Ecophysiology of Mediterranean Chestnut (*Castanea sativa* Mill.) Forests: Effects of Pruning Studied through an Advanced IoT System" *Forests* 15, no. 9: 1579. <https://doi.org/10.3390/f15091579>

Dario Liberati, Syed Wasif Ahmed, **Nafeesa Samad**, Roberta Mugnaioni, Sundas Shaukat, Muhammad Muddasir, Sara Marinari, Paolo De Angelis. 2023. Biochar amendment for reducing the environmental impacts of reclaimed polluted sediments. *Journal of Environmental Management* 344, <https://doi.org/10.1016/j.jenvman.2023.118623>

Batool A, **Nafeesa Samad**, Kazmi SS, Ghufra MA, Imad S, Shafqat M, Mahmood T. 2018 Spring Water Quality and Human Health: An Assessment of Natural Springs of Margalla Hills Islamabad Zone-III. *Int J Hydro* 2(2): 00049. DOI: 10.15406/ijh.2018.02.00049

Samia Qadeer, Anika Batool, Audil Rashid, Azeem Khalid, **Nafeesa Samad** and Muhammad Asad Ghufra. 2014. Effectiveness of biochar in soil conditioning under simulated ecological conditions. *Soil Environ.* 33(2): 149 -158

Conference Presentation

Maria Vincenza CHIRIACO', **Nafeesa Samad**, Riccardo Valentini. 2022. IoT real-time data from Tree Talkers to assess and monitor the effects of climate smart forestry applied to recover a chestnut forest (*Castanea sativa* Mill.) for fruits production in central Italy. AGU22 fall meeting. Chicago, 12-16 December 2022. (Oral presentation)

Maria Vincenza CHIRIACO', **Nafeesa Samad**, Riccardo Valentini. 2022. Climate-smart forest management to recover a chestnut forest monitored through IoT technologies. 10th SISC annual conference "Governing the future" Conference. Rome, 19-21 October 2022. (Oral presentation)

Nafeesa Samad, Chiriaco, MV, Cagnarini, C & Valentini, R, 2021, 'Pre-processing and Analysis of TreeTalker's Data: An Example from Chestnut Forest', '9th SISC annual conference "Accelerating Climate Action: A just transition in a post-Covid era" Conference (online, 22-24 September 2021) (Oral presentation)

Nafeesa Samad, Tariq Mahmood, Madiha Aslam, Samia Qadeer. 2013. Effect of Accelerated Aging on Physiology of Genetically Modified *Gossypium hirsutum*. In *Proceeding of 5th International Conference: Environmentally Sustainable Development*. 25-27 August 2013, COMSAT Abbottabad, Pakistan. 161-167

Samia Qadeer, Anika Batool, Audil Rashid, Nafeesa Samad. 2013. Soil pH Fluctuations under Biochar Amendment during Coarse of Incubation. In *Proceeding of 5th International Conference: Environmentally Sustainable Development*. 25 -27 August 2013. COMSAT Abbottabad, Pakistan. 252-257.