

Sofia Baig

Assistant Professor

Institute of Environmental Sciences & Engineering

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About

Dr. Sofia Baig is working as Assistant Professor in the Institute of Environmental Sciences & Engineering. Dr. Sofia Baig has a PhD in Plant Eco-Physiology. Dr. Sofia Baig has published 21 research articles & conference papers having a citation count of 641, carried out 1 projects and filed 0 intellectual property.

Qualifications

PhD in Plant Eco-Physiology Macquarie University , Australia	2010 - 2014
MPhil in Environmental Science COMSATS, Abbottabad , Pakistan	2008 - 2010
MSc in Chemistry University of Peshawar , Pakistan	1996 - 1998
BSc in Chemistry, Zoology, Botany University of Peshawar , Pakistan	1994 - 1996

Experience

Assistant Professor Institute of Environmental Sciences & Engineering	2022- Present
Assistant Professor Institute of Environmental Sciences & Engineering	2017 - 2022
Assistant Professor Institute of Environmental Sciences & Engineering	2016 - 2017
Research Assistant Macquarie University , Macquarie University, North Ryde NSW, 2109, Australia	2014 - 2014
Chemistry Teacher Army Public School , PMA Kakul	2000 - 2005

Awards

IMQRES International Macquarie University Research Excellence Scholarship

Research Projects

National Projects	
Carbon Storage and Allocation Pattern in Plant Biomass under Drought Stress and Nitrogen supply Funding Agency: HEC Amount: PKR 489,000.00 Status: Completed	2016

International Projects

Research Articles

Augmented anticancer effect and antibacterial activity of silver nanoparticles synthesized by using Taxus wallichiana leaf extract <i>Aliya Yousaf Muhammad Waseem Aneela Javed Sofia Baig Bushra Ismail Ayesha Baig Irum Shahzadi Shamyla Nawazish Ittikhar Zaman</i>	2022
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Prediction and evaluation of multi epitope based sub-unit vaccine against Salmonella typhimurium

2022

Samavia Zafar Huma Ajab Zaib-un-nisa Mughal Jawaid Ahmed zai Sofa Baig Ayesha Baig Zeshan Habib Farrukh Jamil Muhammad Ibrahim Sumaira Kanwal Muhammad Asif Rasheed

Saudi Journal of Biological Sciences, Volume 29, Issue 2, Pages 1092-1099

Impact Factor: 4.052 | Quartile: 2 | Citations: 20

DOI: 10.1016/j.sjbs.2021.09.061

Climate change projections of terrestrial primary productivity over the Hindu Kush Himalayan forests

2021

Halima Usman Thomas A. M. Pugh Anders Ahlström Sofia Baig

Earth System Dynamics, Volume 12(3), Pages 857–870

Impact Factor: 5.540 | Quartile: 1 | Citations: 7

DOI: <https://doi.org/10.5194/esd-12-857-2021>

Climate Change and Potential distribution of Potato (Solanum Tuberosum) Crop Cultivation in Pakistan

2021

Using Maxent

Tayyaba Khalil Saeed A Asad Nusaiba Khubaib Ayesha Baig Salman Atif Muhammad Umar Jurgen P Kropp Prajal Pradhan Sofia Baig

AIMS Agriculture and Food, Volume 6(2), Issue 2, Pages 663-676

Impact Factor: 0 | Citations: 13

DOI: 10.3934/agrfood.2021039

Predicting areas suitable for wheat and maize cultivation under future climate change scenarios in

2021

Pakistan

Nusaiba Khubab Saeed A. Asad Tayyaba Khalil Ayesha Baig Salman Atif Muhammad Umar Jurgen P. Kropp Prajal Pradhan Sofia Baig

Climate Research, Volume 83, Pages 15-25

Impact Factor: 1.459 | Quartile: 4 | Citations: 9

DOI: <https://doi.org/10.3354/cr01631>

Growth responses and rubisco activity influenced by antibiotics and organic amendments used for

2021

stress alleviation in Lactuca sativa

Fakhria Wahid Sofia Baig Muhammad Faraz Bhatti Maria Manzoor Iftikhar Ahmed Muhammad Arshad

Chemosphere, Volume 264, Article Number 128433

Impact Factor: 7.086 | Quartile: 1 | Citations: 26

DOI: <https://doi.org/10.1016/j.chemosphere.2020.128433>

Effective regeneration and transformation of potato Desiree variety with nucleotide diphosphate Kinase

2021

2 using IAA and BAP

Samiha Rashid Muhammad Saad Sofia Baig Mohammad Maroof Shah Ismat Nawaz Ayesha Baig

Pakistan Journal of Botany, Volume 53(1), Pages 89-96

Impact Factor: 0.972 | Quartile: 4

DOI: [http://dx.doi.org/10.30848/PJB2021-1\(22\)](http://dx.doi.org/10.30848/PJB2021-1(22))

Conservation of an Endangered Medicinal Tree Species Taxus wallichian through Callus Induction and

2020

Shoot Regeneration

Nadia Gul Sofia Baig Raza Ahmed Irum Shahzadi Iftikhar Zaman Mohammad Maroof Shah Ayesha Baig

Plant Tissue Culture and Biotechnology, Volume 30(1), Pages 161-166

Impact Factor: -

DOI: <https://doi.org/10.3329/ptcb.v30i1.47801>

Forecasting CO2 emissions from energy consumption in Pakistan under different scenarios: The

2020

China–Pakistan Economic Corridor

Muhammad Fahim Khokhar Aysha Malik Ejaz Hussain Sofia Baig

Greenhouse Gases: Science and Technology, Volume 10, Issue 2, Pages 380-389

Impact Factor: 2.013 | Quartile: 4 | Citations: 31

DOI: 10.1002/ghg.1968

Exposure-Response of Wheat Cultivars to TiO2 Nanoparticles in Contrasted Soils

2019

Zahra Zahra Muhammad Arif Ali Amna Parveen EunBi Kimd Muhammad Fahim Khokhar Sofia Baig Kiran Hina Hyung-Kyoon Choi Muhammad Arshad

Soil and Sediment Contamination, Volume 28, Issue 2, Pages 184-199

Impact Factor: 1.250 | Quartile: 4 | Citations: 28

DOI: 10.1080/15320383.2018.1561650

Carbon storage and allocation pattern in plant biomass under drought stress and nitrogen supply in eucalyptus camaldulensis and populus deltoides

2019

Saira Kanwal Sofia Baig Imran Hashmi

Pakistan Journal of Botany, Volume 51, Issue 5, Pages 1605-1614

Impact Factor: 0.800 | **Quartile:** 4 | **Citations:** 3

DOI: 10.30848/PJB2019-5(14)

Does the growth response of woody plants to elevated CO2 increase with temperature? A model-oriented meta-analysis

2015

Sofia Baig BELINDA E. MEDLYN LINA M. MERCADO SONKE ZAEHLE

Global Change Biology, Volume 21, Issue 12, Pages 4303-4319

Impact Factor: 8.444 | **Quartile:** 1 | **Citations:** 57

DOI: 10.1111/gcb.12962

Optimal stomatal behaviour around the world

2015

Maarten Op de Beeck Göran Wallin Johan Uddling Lasse Tarvainen Maj-Lena Linderson Lucas A. Cernusak Jesse B. Nippert Troy W. Ocheltree David T. Tissue Nicolask.Martin-StPaul Alistair Rogers Jeff M. Warren Paolo De Angelis Kouki Hikosaka Qingmin Han Yusuke Onoda Teresa E. Gimeno Craig V. M. Barton Jonathan Bennie Damien Bonal Alexandre Bosc Markus Löw Cate Macinins-Ng Ana Rey Lucy Rowland Samantha A. Setterfield Sabine Tausz-Posch Joana Zaragoza-Castells Mark S. J. Broadmeadow John E. Drake Michael Freeman Oula Ghannoum Lindsay B. Hutley Jeff W. Kelly Kihachiro Kikuzawa Pasi Kolarik Kohei Koyama Jean-Marc Limousin Patrick Meir Antonio C. Lola da Costa Teis N. Mikkelsen Norma Salinas Wei Sun Lisa Wingate Yan-Shih Lin Belinda E. Medlyn Remko A. Duursma I. Colin Prentice Han Wang Sofia Baig Derek Eamus Victor Resco de Dios Patrick Mitchell David S. Ellsworth Nature Climate Change, Volume 5, Issue 5, Pages 459-464

Impact Factor: 17.184 | **Quartile:** 1 | **Citations:** 433

DOI: 10.1038/NCLIMATE2550

Sonochemistry & Its Industrial Applications

2010

Sofia Baig Robina Farooq Faiza Rehman

World Applied Sciences Journal, Volume 10, Issue 8

Impact Factor: 0

DOI: -

The effect of ultrasonic irradiation on the anaerobic digestion of activated sludge

2009

Maria Sadique Sajjad Khan Umar Farooq Abdur Rehman Ather Farooq Arshed Pervez Mukhtar-ul-Hassan S.F. Shaukat Farooq R. Faiza Rehman Sofia Baig World Applied Sciences Journal, Volume 6, Issue 2

Impact Factor: 0

DOI: -

Ultrasound in chemical processes

2009

Amir Haider Nadia Baig Uzbek Sofia Baig Robina Farooq

Journal of the Chemical Society of Pakistan, Volume 31, Issue 6, Pages 857-862

Impact Factor: 0.19 | **Quartile:** 4

DOI: -

Conference Proceedings

Predicting the Potential Distribution of Potato (<i>Solanum tuberosum</i>) in Pakistan based on MaxEnt Species Distribution Model <i>Tayyaba Khalil Sofia Baig</i> <i>8th International Conference: Environmentally Sustainable Development – ESDev-VIII, res.country(177,)</i> Citations: N/A DOI: N/A	2019
Climatic Suitability of the Distribution of Wheat (<i>Triticum Aestivum</i>) Production in Pakistan Using Maxent <i>Nusaiba Khubaib Saeed A Asad Sofia Baig</i> <i>8th International Conference: Environmentally Sustainable Development – ESDev-VIII, res.country(177,)</i> Citations: N/A DOI: N/A	2019
Allocation of Carbon & Eucalyptus Species <i>Saira Kanwal Sofia Baig Imran Hashmi</i> <i>7th International and 16th National Conference on "Plant Resources: Current Trends, Challenges and Solutions, res.country(177,)</i> Citations: N/A DOI: https://www.botany.one/2018/01/7th-international-16th-national-conference-plant-resources-current-trends-challenges-solutions/	2018
Early Growth Response of Wheat (<i>Triticum aestivum</i>) Cultivars to Titanium Dioxide (tio2) Nanoparticles <i>Zahra Zahra Naima Waseem Rubab Zahra Muhammad Arshad Hyung-Kyoon Choi Amna Parveen Sofia Baig Muhammad Fahim Khokhar</i> <i>International Conference on Bio-approaches for Environment and Sustainability - ICBES-2017, res.country(177,)</i> Citations: N/A DOI: N/A	2017
Growth Response in Two Main Tree Species of Islamabad Under Drought Stress and Nitrogen Supply <i>Saira Kanwal Sofia Baig Imran Hashmi Muhammad Arshad</i> <i>International Conference on Bio-approaches for Environment and Sustainability - ICBES-2017, res.country(177,)</i> Citations: N/A DOI: N/A	2017

Editorial Activities

Reviewed Papers for Journals Impact Factor: 2.08	2021
Reviewed Papers for Journals Impact Factor: 1.61	2020
Reviewed Papers for Journals Impact Factor: 1.613	2019

Trainings

Switzerland Partner: -- Duration: 07-Nov-2018 to 30-Nov-2018	2018
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