Curriculum Vitae (CV)

Dr. Ali Asghar Shah, M.Phil, Ph.D. FZSI, FIASN

Personal Details:

Father's Name:	Sayed Sadiq Hussain Shah	25
Nationality:	Indian	
Sex:	Male	
Mailing address:	Nematode Genomics Research lab, Department of Zoology, School of Biosciences Biotechnology, Baba Ghulam Shah Badshah U Rajouri-185131	& niversity,
Mobile No.:	+916005720071, +919419175567	
Email:	aashah@bgsbu.ac.in/sherazizoo@gmail.com	

Present Status :

Head / Associate Professor at Department of Zoology, School of Biosciences and Biotechnology, BGSB University, Rajouri-185131

Positions held:

- 1. Dean Students' Welfare (DSW) at BGSB University Rajouri (Since March 15, 2024).
- 2. Associate Dean of School of Biosciences & Biotechnology at BGSB University Rajouri (Since February 18, 2022).
- 3. Associate Dean of School of Mathematical & Computer Sciences at BGSB University, Rajouri (Since August 30, 2023).
- 4. Associate Dean of School of Material Sciences & Nanotechnology at BGSB University, Rajouri (Since August 30, 2023).
- 5. Chairman Recruitment Cell at BGSB University Rajouri (Since November 25, 2021).
- 6. **Associate Dean Academic Affairs** at BGSB University Rajouri w.e.f. 09.05.2023 to 31.01.2025.

- 7. **Associate Dean of School of Engineering & Technology** at BGSB University, Rajouri w.e.f. 30.08.2023 to 15.04.2025.
- 8. **Associate Dean of School of Education** at BGSB University, Rajouri w.e.f. 30.08.2023 to 16.02.2024.
- 9. Associate Dean of School of Management Studies at BGSB University, Rajouri w.e.f. 16.02.2024 to 17.02.2025.
- 10. **Associate Dean of School of Social Sciences** at BGSB University, Rajouri w.e.f. 16.02.2024 to 17.02.2025.
- 11. **Director Centre for Hospitality and Tourism** at BGSB University, Rajouri w.e.f. 16.02.2024 to 24.02.2025.
- 12. **Officer Incharge University Works Wing** at BGSB University Rajouri w.e.f. 15.03.2024 to 24.02.2025.
- 13. Associate Dean of Students at BGSB University Rajouri w.e.f. 18.02.2013 to 14.03.2024.
- 14. **Coordinator PG Programme in Gojri and Pahari** at BGSB University Rajouri w.e.f. 16.02.2024 to 03.03.2025.
- 15. **Officer Incharge University Works Wing** at BGSB University Rajouri w.e.f. 27.07.2022 to 09.05.2023.
- 16. Officer Incharge University Health Centre at BGSB University Rajouri w.e.f. 20.09.2022 to 09.05.2023.
- 17. I/c librarian Central library at BGSB University Rajouri w.e.f. 13.04.2022 to 09.05.2023.
- 18. **Scientist** at School of Biosciences and Biotechnology, BGSB University Rajouri w.e.f. 22.08.2007 to 27.10.2009.
- 19. **Reader** at School of Biosciences and Biotechnology, BGSB University Rajouri w.e.f. 28.10.2009 to 27.10.2012.
- 20. **Associate Professor** at School of Biosciences and Biotechnology, BGSB University Rajouri (Since October 27, 2012).
- 21. **Provost Sir Syed Hall of Residence** at BGSB University w.e.f. 02.12.2015 to 09.04.2018.
- 22. **Provost Fatima Zahra Hall of Residence** at BGSB University w.e.f. 02.12.2015 to 09.04.2018.
- 23. Coordinator Zoology 2014 to 2018

24. Coordinator Biotechnology 2017 to 2018

Collaboration with scholars abroad:

Natalie Farny, WPI, Worcester, MA, USA.

Zafar A. Handoo, USDA ARS Nematology Laboratory, Bldg. 010A, Rm. 111, BARC-West, 10300 Baltimore Avenue, Beltsville, MD 20705, USA

M. Rafiq Siddiqi, Nematode Taxonomy Laboratory, 24 Brantwood Road, Luton, LU1 1JJ, England, U.K.

Member of Apex Bodies of the Universities:

- 1. Member Executive Council of BGSB University, Rajouri w.e.f. 15.03.2024 to till date.
- 2. Member Academic Council of Shere-e-Kashmir University of Agricultural Sciences & Technology of Kashmir w.e.f. 16.01.2024 to till date.
- 3. Member Academic Council of BGSB University, Rajouri w.e.f. 15.03.2024 to till date.

Academic Qualifications:

Ph.D	Aligarh India	Muslim	University,	Aligarh,	2005	Zoology
M. Phil	Aligarh India	Muslim	University,	Aligarh,	2002	Zoology
M.Sc	Aligarh India	Muslim	University,	Aligarh,	1999	Zoology
B.Sc	Universit	ty of Jamn	nu, India		1997	Zoology

Research Experience:

Twenty six years as on date i.e. March, 2025

Teaching Experience:

<u>Twenty four Years</u> of Post graduate teaching at University Level as on date i.e. March, 2025

<u>Awards/Fellowships Received:</u>

- 1. <u>**Prof. S. P. Gupta Award-2025**</u> By ZSI for outstanding research contribution in the field of Zoology & Biotechnology
- 2. <u>BGSBU</u> Outstanding Researcher of the year Award in Sciences/Biological Sciences/Engineering, 2017
- 3. <u>Fellowship Award of Indian Academy of Science and Nature</u>, 2013
- 4. Fellowship Award of Zoological Society of India, 2012
- 5. <u>Awarded Fast Track Fellowship</u> of Department of Science and Technology, Govt. of India to carry out research independently in 2007.
- 6. <u>Worked as JRF</u> (In MoEF, New Delhi Sponsored ProjectAICOPTAX 2004)

<u>Fellow of Academies / Board/Association/Institute of</u> <u>repute:</u>

- 1. Fellow Zoological Society of India.
- 2. Fellow Indian Academy of Science and Nature, India.
- 3. Member Society of Nematolgists, USA.
- 4. Member Nematological Society of India.
- 5. Member Indian Society for Parasitology.

Significant Contribution to the Field of Knowledge:

Dr. A. A. Shah earned his M.Sc., M.Phil., and Ph.D. degrees from Aligarh Muslim University, Aligarh. He began his academic career in 2007 as Assistant Professor of Zoology in the Higher Education Department of the Government of Jammu & Kashmir, having been selected through the J&K Public Service Commission. Subsequently, he joined Baba Ghulam Shah Badshah University (BGSBU), Rajouri, J&K, where he has served in various capacities including Scientist, Reader, Associate Professor, and currently as Head of the Department of Zoology at the School of Biosciences and Biotechnology.

Dr. Shah has carved a niche for himself in the field of Biological Sciences, conducting pioneering research in genomics, proteomics, ecology, and biodiversity, particularly focusing on free-living roundworms (nematodes) of the Himalayan region and across India.

His exceptional work has earned national recognition, including the **prestigious** *Prof. S. P. Gupta Award 2025* for outstanding research in Zoology and Biotechnology by the ZSI, and the *Outstanding Researcher of the Year Award* by BGSBU in 2017. In 2007, the Department of Science and Technology (DST), Government of India, honored him with the *Young Scientist Award* and the *FAST Track Fellowship*.

Dr. Shah has described 61 nematode species under 21 genera, encompassing three superfamilies, four families, and eight subfamilies. Notably, 37 of these species and seven genera are novel to science. In recognition of his contributions, renowned UK-based nematologist Dr. M. R. Siddiqi named a genus *Shahnema*, a subfamily *Shahnematinae*, and a family *Shanematidae* in his honor.

He has also been a recipient of fellowship Awards from the Indian Academy of Sciences & Nature (FIASN), and the Zoological Society of India (FZSI). Dr. Shah has collaborated with eminent scientists from the UK and the USA on several research projects and has successfully completed five major research projects funded by prestigious funding agencies. Among them is a notable project titled "*Development of DNA Barcode for Rapid Identification of Rhabditid Nematodes*," funded by the Department of Biotechnology (DBT), Government of India. He also played a pivotal role in conceptualizing, defending, and securing the highly competitive DST-FIST grant for the Department of Zoology at BGSBU.

As a dedicated mentor, Dr. Shah has supervised 15 Ph.D. candidates, five M.Phil. scholars, and over 50 M.Sc. dissertations. He has published numerous research papers in reputed international journals, contributed around 20 book chapters, and authored five books. He is a frequent contributor to national and international conferences, where he has delivered invited talks, chaired sessions, and participated in seminars, symposia, and workshops.

Dr. Shah is an active member and fellow of several esteemed scientific societies worldwide. In addition to his academic and research achievements, he has held numerous prestigious administrative roles at BGSBU, including Dean Academic Affairs, Dean of multiple Schools (Engineering, Management Studies, Social Sciences, Education), Director of the Centre for Hospitality and Tourism, Officer Incharge of the Health Centre and Works Wing, University Librarian (I/c), Provost of Sir Syed Hall and Fatima Zahra Hall, and Coordinator of Gojri & Pahari.

Dr. Shah is an esteemed member of several apex academic and executive bodies in higher education. He currently serves as a Member of the Executive Council of Baba Ghulam Shah Badshah University (BGSBU), Rajouri (since March 15, 2024), a Member of the Academic Council of Sher-e-Kashmir University of Agricultural Sciences & Technology of Kashmir (since January 16, 2024), and a Member of the Academic Council of BGSBU, Rajouri (since March 15, 2024). In addition to these significant roles, currently, Dr. Shah serves as the Dean of Students' Welfare, Dean of the School of Biosciences & Biotechnology, Dean of the School of Mathematical and Computer Sciences, Dean of

Material Sciences and Nanotechnology, Chairman of the Recruitment and Promotion Cell, and Head of the Department of Zoology at BGSBU, Rajouri, Jammu & Kashmir, India.

Impact of the contributions in the concerned field:

- 1. Trained manpower in the form of M.Sc., M.Phil and doctoral students (15 Ph.Ds & 05 M.Phil students have been supervised).
- 2. 38 new species and 7 new genera have been described.
- 3. DNA barcode of 15 species have been developed.
- 4. Research papers have been published in Journals of international repute.

Research Guidance:

S. No.	Number enrolled	Thesis submitted	Degree awarded
Ph.D.	08	03	15
M.Phil.	-	_	05

Doctor of Phylosophy (Ph.D) Awarded: 15

Serial No.	Name	Ph.D Topic
1.	Dr. Shavish Vaid	Studies on Taxonomy and Ecology of
		Rhabditid Nematodes of upper and lower
		climatic zones of district Poonch.
2.	Dr. Abid Hussain	Studies on Taxonomy of nematodes of the
		order Mononchida in Jammu division of
		Jammu and Kashmir State, India.
3.	Dr. Rakeeb Ahmad Mir	Molecular Characterization of Rhabditid
		Nematodes of Pir Panjal Range in J&K State.
4.	Dr. Rawhat Un Nisa	Studies on Taxonomy and Ecology of
		Rhabditid Nematodes of Kashmir division of
		J&K State, India.
5.	Dr. Kaisar Ahmad Allie	Studies on Taxonomy of Rhabditid
		Nematodes of Jammu & Kashmir State, India.
6.	Dr. Nazia Kouser	Studies on Taxonomy of Free-living
		nematodes of Jammu division of J&K State,
		India.
7.	Dr. Yasmeen Kouser	Studies on Diversity and Ecology of Free-
		living nematodes of Alpine and sub-Alpine
		zones of district Rajouri.

8.	Dr. Shaheen Majeed	Studies on Taxonomy and Ecology of
	Wani	Mononchid Nematodes of Kashmir division,
		Jammu and Kashmir, India.
9.	Dr. Kaisar Ahmad Bhat	Molecular Analysis to identify the stress
		responsive Gene(S) of Free-living nematodes
		and their DNA Barcoding.
10.	Dr. Sarshad Hussain	Studies, distribution and Ecology of Snakes
		of district Poonch, Jammu and Kashmir,
		India.
11.	Dr. Imtiaz Shahid	Biomonitoring of Subtropical Stream-Devika
		from district Udhampur of Jammu &
		Kashmir.
12.	Dr. Mudasir Ahmad	Molecular Characterization and screening of
	Bhat	bacterial species for the production of
		secondary metabolites from Rajouri district
		of Jammu & Kashmir, India

Master of Phylosophy (M.Phil) Awarded: 05

		,			
Serial No.	Name	M.Phil Topic			
1.	Mr. Rakeeb Ahmad Mir	Molecular Characterization of some			
		nematodes of Subfamily Mesorhabditinae			
		using RAPD markers.			
2.	Mr. Kaisar Ahmad Allie	Studies on the Taxonomy of nematodes of			
		Superfamily Rhabditoidea from Jammu &			
		Kashmir, India.			
3.	Ms. Sumera Rasool	Studies on the Taxonomy of Nematodes of			
		Sub-order Rhabditina of district Budgam,			
		J&K, UT, India.			
4.	Mr. Waseem Rashid Lone	Molecular Characterization of some			
		nematodes of Superfamily Rhabditoidea			
		using RAPD Markers.			
5.	Mr. Tashook Ahmad Dar	Studies on the Taxonomy of Nematodes of			
		Sub-order Rhabditina of district Baramulla,			
		J&K, UT, India.			

Research Grants Received as Principal Investigator:

S. No.	Title	Agency	Period	Grant/Amou
				nt mobilized
				(Rs. In
				lakhs)
1	DST-FIST, (Life Sciences)	Department of	2021	Rs. 300 Lakhs
	Level-1	Science and	onwards	for level-1
		Technology (DST),		

		Govt. of India		
2	Development of DNA	Department of	2014-2017	Rs. 43.25 lakhs
	Barcode for the rapid	Biotechnology		
	identification of Rhabditid	(DBT), Govt. of		
	Nematodes.	India, New Delhi		
3	Studies on ecology and	Ministry of	2012 - 2015	Rs. 31.17 lakhs
	diversity of nematodes of Pir	Environment and		
	Panjal range in Jammu and	Forests, Govt. of		
	Kashmir	India, New Delhi		
4	Studies on the Biodiversity of	Department of	2008 - 2011	20.40 lakhs
	nematodes of Alpine and	Science and		
	sub-alpine zones of	Technology (DST),		
	Himalayan range in Jammu	Govt. of India		
	and Kashmir			
5	Capacity building	Ministry of	2009-12	Rs. 26.06 lakhs
	programme (All India	Environment and		
	Coordinated project on	Forests, Govt. of		
	Taxonomy of Helminths and	India		
	Nematodes)			
6	Studies on Nematodes of	GBPHED Kosi-	2010-13	8.35 lakhs
	Forest trees of Pir Panjal	Katarmal, Almora,		
	Biodiversity Park.	Uttarakhand, India		

Submitted Research Projects for funding:

- 1. Ecomonitory status of Biodiversity in Nanan Sar lake of Pir Panjal range in Jammu and Kashmir. (Rs. 76.5 lakhs)
- 2. Studies on Faunal diversity of cold deserts in Jammu and Kashmir. (Rs. 1.54 crore)

New Genera described:

- 1. Loffienema dhanoriensis gen. n., sp. n.
- 2. Quercorhabditis rajouriensis gen. n., sp. n.
- 3. Kashmira dimorphicauda gen. n., sp. n.
- 4. Stegorhabditis abursata gen. n., sp. n.
- 5. Distorhabditis poonchiana gen. gen., n. sp.
- 6. Sclerorhabditis tridentatus gen. n., sp. n.
- 7. Metarhabditis andrassyana gen.n., sp.n.

New species described: 37

Invited Lectures Delivered:

S.	Title of Paper	Year	Title of Conference/	Organized by
No	presented		seminar	
1	Genome organization and Gene Structure in <i>Caenorhabditis</i> <i>elegans</i> .	2019	3 rd National conference on "Recent Trends in Sciences, Social Sciences and Humanaties".	Government Post Graduate College, Rajouri, Jammu and Kashmir, India.
1	Nematodes as indicators of Environmental changes	2016	National Conference on Environmental Impact on health and its Management: Ecofriendly strategies and XXVII All India Congress of Zoology	Department of Zoology, Centre for advanced studies, University of Rajasthan, Jaipur in collaboration with Zoological Siciety of India.
2	RoleofMolecularmarkersinnematodetaxonomy	2016	National Conference on Trends in healthcare and Biotechnology: opportunities and challenges	P.G. and Research department of zoology and Biotechnology at AVVM Sri Pushpam College, Poondi, Thanjavur, Tamil Nadu
3	StudiesondiversityandecologyofMononchidnematodesofJ&K	2016	National Conference on Impact of climate change on Biodiversity:Application of recent technologies for conservation of threatened species	Department of Zoology, Mizoram University, Aizawl, Mizoram
4	Role of DNA based markers in nematode taxonomy	2015	National Conference on Science and technology for indigenous development in India	Indian Science congress association-Bangalore Chapter in association with Indian Society of Life Sciences and M. S. Ramaiah College of Arts, Science and Commerce, Bengaluru
5	Studies on Free- living nematodes of India	2015	National conference on Innovations in Life sciences for sustainable development.	Department of Biochemistry, T.S Narayanaswami College of Arts and Science, Navalur, Chennai.
6	Molecular diversity of few species of some rhabditid	2014	International Conference on Faunal diversity and their conservational strategies.	Department of Zoology, University of Lucknow.

	nematodes using RAPD Markers.					
7	Development of	2011	National	Seminar	on	School of Enzymology and
	DNA barcode for		Recent	trends	in	environmental toxicology,
	rapid		Environm	ental		PG and Research department
	identification of		Toxicolog	y		of Zoology, Sir Theagaraya
	nematodes					College, Chennai

<u>Seminar/conference Attended:</u>

International

S.	Title of Paper	Year	Title of Conference/	Organized by
No	presented		Seminar	
1	THE SOIL	2010	International conference	Department of Life
	NEMATODES		on The key role of Life	Sciences, Hindustan
	Their economical		Sciences for sustainable	College of Arts and
	and ecological		development in the	Science, Chennai
	importance		World	

National

S.	Title of Paper	Year	Title of Conference/	Organized by
No	presented		seminar	
1	Diversity and	2016	National Conference on	PG and Research
	ecology of		Environmental	department of
	Rhabditid		Protection and	Zoology, Sir
	Nematodes of		Sustainability	Theagaraya College,
	Jammu and			Chennai
	Kashmir			
2	Nematodes as	2016	National Conference on	Hindustan College of
	Limiting Factors		Tangible benefits of	Arts and Science,
	in Agricultural		Marine Biotechnology	Chennai
	Productivity		Research in Food,	
			Heralth, energy and	
			Industrial sectors	
3	Development of	2015	102 nd Science Congress	University of Mumbai,
	DNA Barcode for			Mumbai
	Rapid			
	Identification of			
	Rhabditid			
	Nematodes.			
4	Some studies on	2015	National conference on	Department of
	nematodes of Pir		Innovations in Life	Biochemistry, T.S

	Panjal Biodiversity Park, J&K		sciences for sustainable development.	Narayanaswami College of Arts and Science, Navalur, Chennai.
5	StudiesonRhabditidnematodesofDKGforestsofJammuandKashmir.	2014	National Seminar on Science and Technology for Human development.	Department of Zoology, DG and DAV Colleges, Kanpur.
6	Some ecological studies on Nematodes of Rajouri district, Jammu and Kashmir.	2014	National Seminar on "Threats to Biodiversity and Ecosystems".	DepartmentofZoologyandEnvironmentalScience,GKV,Haridwar.
7	Molecular diversity of few species of Mesorhabditinae using RAPD Markers	2014	National seminar on Biodiversity: Sustainable development and conservation	Department of Zoology, University of Jammu.
8	Characterization of some free- living Nematodes of Pir Panjal Range in Jammu and Kashmir Using RAPD Markers	2014	101 st Indian Science Congress	University of Jammu
9	TaxonomicstudiesonRhabditidnematodesofPoonchdistrict,JammuandKashmir.	2013	24 th All India congress of Zoology	University of Kalyani, Kalyani, West Bengal.
10	Molecular comparison of bacteriovorus nematodes using Randomly Amplified Polymorphic DNA (RAPD) markers	2013	Global warming: Health Hazards and Mitigation Strategies	Indian Academy of Science and Nature, Agra

-	1		1	
11	Molecular	2012	23 rd All India Congress	Department of
	characterization		of Zoology and national	Zoology and
	of Cuticularia		confrence on	Biotechnology, GNC,
	oxycerca using		Conservation and	Chennai
	RAPD Markers		management of Faunal	
			resources	
12	Biodiversity of	2011	National Conference on	Department of life
	Nematode		Marine Biodiversity for	Sciences, Hindustan
	Meiofauna of		New biotechnological	College of Arts and
	India		Applications	Science. Chennai
13	Nematodes as	2011	National Congress on	Ethirai College for
	Biological	2011	Bioscience Research	Woman Chennai
	Models		Dioserence Researen	vi olitali, cholital
14	Biodiversity of		22 nd All India Congress	Department of
	Freeliving	2011	of Zoology and National	Zoology University of
	nematodes of	2011	Seminar on Recent	Lucknow Lucknow
	Iammu and		advances in Biological	Edeknow, Edeknow.
	Kashmir		Sciences: Biodiversity	
	Rusinin		and human welfare	
15	Studies on	2009	20 th All India Congress	Central institute of
	nematodes of	2007	of Zoology and National	fisheries education
	Alpine and sub-		Seminar on Bioresources	Versova Mumbai
	alpine zones of		and its Management for	versova, ividilibai
	Limeloven rengo		Each livelihood and	
	in Jommy and		Food, inventiood and	
	III Jaininu anu Kashmin		and National	
	Kasiiiiii		Halminthological	
			congress	
16	Studios	2000	21 st National congress of	Donartmont of
10	Dhahditid	2009	21 National congress of Deresitelease "Education	Zoology Dunich
	Rilabullio		Parasitology Education	Zoology, Pulljab
	nematodes of		and research in	Chandia and
	Jammu and		Parasitology in the	Chandigarn
17	Kashmir	2007	Service of Mankind	T'.1 '11
1/	importance of	2007	of Zoology and National	Jointly organized by
	nematodes in the		of Zoology and National	University OI
	Die dimension		Seminar on current	LUCKNOW, LUCKNOW
	biodiversity of		issues on Applied	and Dr. B. R.
	Jammu and		Loology and	Ambeaker University,
	Kashmir range		Environmental Science	Lucknow.
			with special reference to	
			Ecol I restoration and	
			Management of	
10			Bioresources.	
18	Observations on	2001	15 th National Congress	Desert Regional
	the diversity and		of Parasitology	Station, Zoological
	ecology of the			Survey of India,

	Rhabditid nematodes in India			Jodhpur Rajasthan
19	A comparative study on two genera of Mesorhabditinae (Rhabditida)	2000	14 th National Congress of Parasitology	ICGEB, New Delhi

Regional

S.	Title of Paper	Year	Title of Conference/	Organized by
No	presented		seminar	
1	Molecular	2013	Ninth JK Science Congress	University of
	Characterization of			Kashmir
	some Rhabditid			
	Nematodes of Pir			
	Panjal Range in			
	Jammu and			
	Kashmir Using			
	Randomly			
	Amplified			
	Polymorphic DNA			
	Markers.			
2	Observations on	2011	7 th J&K Science Congress	University of
	the diversity and			Jammu, Jammu
	ecology of			
	Rhabditid			
	nematodes of			
	district Rajouri			
3	Studies on the	2008	3 rd J&K Science Congress	University of
	biodiversity of			Jammu, Jammu
	free-living			
	nematodes of			
	Jammu and			
	Kashmir			

Sessions Chaired in Seminars/Conferences: 20

Publications:

Books:05

Selected Book Chapters

1. A. A. SHAH (2025) Cells of the immune system and their multifunctional roles." *Role of Medicinal Plants in Autoimmune Diseases*. Academic Press, 2025.

15-37 (with Kaisar).

- 2. A. A. SHAH (2025) Medicinal plants and other autoimmune diseases. *Role of Medicinal Plants in Autoimmune Diseases*, 291-323 (with Kaisar).
- 3. A. A. SHAH (2025) Different types of phytocompounds with immunomodulatory activities. *Role of Medicinal Plants in Autoimmune Diseases*, 261-289 (with Kaisar).
- A. A. SHAH (2025) Role of medicinal plants in autoimmune diseases like Sjogrens syndrome, SLE and Psoriasis: Concept, utilization and perspectives. In *Role of Medicinal Plants in Autoimmune Diseases* (pp. 215-232). Academic Press (with Kaisar).
- A. A. SHAH (2025) Plant-based approaches for treating celiac and Crohn's diseases: Current insights. *Role of Medicinal Plants in Autoimmune Diseases*, 155-173 (with Kaisar).
- A. A. SHAH (2025) Exploring medicinal plants as promising approaches for myasthenia Gravis and Multiple Sclerosis treatment: An emerging approach to new medicines. In *Role of Medicinal Plants in Autoimmune Diseases* (pp. 117-154). Academic Press (with Kaisar).
- A. A. SHAH (2025) Multifunctional role of jasmonates in stress tolerance. In Biotechnological Applications of Jasmonates (pp. 63-84). Apple Academic Press (with Kaisar).
- 8. A. A. SHAH (2025) Role of jasmonates in plant growth and development. In *Biotechnological Applications of Jasmonates* (pp. 105-126). Apple Academic Press (with Kaisar).
- 9. A. A. SHAH (2024) A Global Perspective on Negative Impacts of Climate Change on Soil Erosion. In *Handbook of Climate Change Impact on River Basin Management*. (pp. 292-303). Taylor & Francis. (With Rakeeb).
- 10. A. A. SHAH (2023) Avifaunal diversity at Baba Ghulam Shah Badshah University Campus. (pp. 208-219). (With Dr. Kaleem).
- 11. A. A. SHAH (2022) Molecular Farming: Sustainable Manufacturing of Vaccines, Antibodies, and Other Therapeutic Substances. In *Metabolic Engineering in Plants.* (pp 239–261). Springer (With Kaiser Bhat)
- 12. A. A. SHAH (2022) Towards Systemic Analysis of Abiotic Stress Responses. In *Advancements in Developing Abiotic Stress-Resilient Plants*. Taylor & Francis Group. (With SM Zargar).
- 13. A. A. SHAH (2022) Salmonella infection and pathogenesis. In *Enterobacteria*. IntechOpen (with Kaisar).
- A. A. SHAH (2022) sustainable manufacturing of vaccines, antibodies, and other therapeutic substances. In *Metabolic Engineering in Plants* (pp. 239-261). Singapore: Springer Nature Singapore (with Kaisar).
- 15. A. A. SHAH (2020) Role of silicon in abiotic stress tolerance of plants.

Selected Research Articles

- 1. A. A. SHAH (2025) *Boiga multifasciata* (Blyth, 1861), *Pseudoindotyphlops porrectus* (Stoliczka, 1871), and *Sibynophis collaris* (Gray, 1853): three new snake records for Poonch District, Union Territory of Jammu and Kashmir, India. *Herpetology Notes*. 18: 187–195 (With Sarshad) (**IF:1.3**).
- 2. A. A. SHAH (2025) Carcinogenic parasites: Insights into the epidemiology and possible mechanisms of cancer. *Mutagenesis*, geaf007, https:// doi.org/10.1093/ mutage/geaf007 (With Hannan) (**IF:2.9**).
- 3. A. A. SHAH (2025) Study of Structural, Crystallite Size, and Optical Properties of Sol–Gel Synthesized Zinc Oxide Nanoparticles Using XRD and UV-Visible Techniques. *Physics of the Solid State*. (Springer) 67(2): 128–139 (With Muzaffar Iqbal Khan) (IF:1.3).
- 4. A. A. SHAH (2024) Nucleic Acid Aptamers Protect Against Lead (Pb(II)) Toxicity. *New Biotechnology*. bioRxiv preprint doi: <u>https://doi.org/10.1101/2024.03.28.587288</u>. (With Afreen Anwar) (IF:11.7)
- 5. A. A. SHAH (2024) Lignocellulosic biomass in circular economy: A technotransition in carbon neutrality towards sustainable energy production. *Biomass and Bioenergy*. (Elsevier) 189:107349 (With Arif & Muddasir) (IF:5.8).
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