


Curriculum Vitae

	Name	Dr. Prithusayak Mondal
	Present Designation	Assistant Professor in Biochemistry, Regional Research Station (Terai Zone), Uttar Banga Krishi Viswavidyalaya, Pundibari, Cooch Behar
	Area of Specialization	Agricultural chemicals; Pesticide synthesis, formulation and residue analysis; Synthesis and formulation of hydrogel polymers; Synthesis of nanoparticles and nanomaterials; Botanical pesticide formulations

1. PERSONAL PARTICULARS

Date of Birth	22 nd September, 1988
Sex	Male
Nationality	Indian
Category	Unreserved
Marital Status	Single
Religion	Humanity
Name of Father	Dr. Buddhadeb Mondal
Name of Mother	Mowsumi Mondal
Email	prithusayak@gmail.com
Mobile	7047928535
Corresponding Address	Department of Biochemistry, Faculty of Agriculture, Uttar Banga Krishi Viswavidyalaya, P.O. Pundibari, Cooch Behar 736165, W.B.
Permanent Address	“MATOSREE”, Naihati 7/D Bijoy Nagar, Opposite to Diagnostic Centre, P.O. + P.S. Naihati, Dist. North 24 Parganas, Pin 743165, W.B.
Languages Known	Bengali, English & Hindi (read, write & speak)
Hobbies	Quiz, Playing badminton, Bengali recitation, Listening music, Reading books and essays

2. ACADEMIC EXPERIENCES

EDUCATIONAL QUALIFICATIONS					
Examinations passed	Name of Board/ University/ Institute	Division/ Class	Year of passing	Marks/ OGPA	Subject(s)
Ph.D.	I.A.R.I	1 st	2017	8.13/10	Agricultural Chemicals
M.Sc.	I.A.R.I	1 st	2012	8.51/10	Agricultural Chemicals
B.Sc. (Ag.) Hons.	B.C.K.V	1 st	2010	8.47/10	Agriculture
Higher Secondary	W.B.C.H.S.E	1 st	2006	88.30%	Bengali, English, Physics, Chemistry, Mathematics, Biology

Secondary	W.B.B.S.E	1 st	2004	87.25%	Bengali, English, Physical Science, Life Science, Mathematics, History, Geography
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COURSES STUDIED

- Basic and advanced organic chemistry, spectroscopic and chromatographic techniques
- General introduction and synthesis of agrochemicals
- Formulations of agrochemicals, nanotechnology in crop protection
- Botanicals and bio-pesticides
- Regulation and registration of pesticides
- Pesticide residue chemistry
- Instrumentation and analytical techniques monitoring pesticide in environmental matrix, decontamination and disposal of agrochemicals
- Soil, plant and water testing and fertilizer recommendation
- Soil biology and biochemistry, soil microbiology
- Radiotracer techniques in soil-plant system
- Application of modelling in soil-plant system

AWARDS & RECOGNITIONS

Name of the Awards/ fellowships	Year in which received	Name of the organization	Score/ Rank	Subject	Awarded for
ICAR-NET	2014	ASRB	61%	Agricultural Chemicals	————
ICAR SRF Scholarship	2013	ICAR	AIR-3	Agricultural Chemistry/Agril. Chemicals	Pursuing Ph.D. in Agricultural Chemicals
IARI Merit Scholarship	2012	IARI	AIR-3	Agricultural Chemicals	Pursuing Ph.D. in Agricultural Chemicals
IARI Merit Scholarship	2010	ICAR	AIR-16	Physical Science	Pursuing M.Sc. in Agricultural Chemicals
University Merit Scholarship	2006	BCKV	————	Agriculture	Pursuing B.Sc. in Agriculture

3. RESEARCH EXPERIENCES

MASTER OF SCIENCE IN AGRICULTURAL CHEMICALS

Thesis Title: Integrated formulation of neem oil, *Trichoderma harzianum* and zinc for management of sheath blight and zinc in rice

Objectives:

- To in vitro assess the compatibility between neem oil and *Trichoderma harzianum*; *Trichoderma harzianum* and zinc sulphate; neem oil and zinc sulphate at various concentrations of neem oil and zinc sulphate
- To develop combination formulation(s) containing neem oil, *Trichoderma harzianum* and zinc sulphate ensuring compliance to the physico-chemical requirements
- To evaluate efficacy of formulation(s) for zinc release and against *Rhizoctonia solani* under laboratory conditions

DOCTOR OF PHILOSOPHY IN AGRICULTURAL CHEMICALS				
Thesis Title: Preparation of azomethines based nano-biocides and their evaluation against phyto-pathogenic fungi and nitrifying bacteria				
Objectives:				
<ul style="list-style-type: none"> ➤ To prepare azomethine based nano-biocides ➤ To evaluate fungicidal efficacy in vitro and in vivo against <i>Rhizoctonia solani</i>, <i>Sclerotium rolfsii</i> and <i>Rhizoctonia bataticola</i> ➤ To evaluate nitrification inhibitory activity 				
RESEARCH SKILLS				
<ul style="list-style-type: none"> ➤ Knowledge of basic laboratory techniques ➤ Sound knowledge of operating UV-VIS spectrophotometer, GC, HPLC, NMR, FTIR, GC-MS, LC-MS, Zetasizer (DLS), SEM, TEM and XRD ➤ Techniques of residue analysis ➤ Techniques of basic formulations ➤ Extraction and chemical profiling of botanicals and essential oils ➤ Techniques for analysing and testing soil, plant and water (including physico-chemical and biological parameters including heavy metals etc.) ➤ Basic microbial techniques ➤ Basic biochemical analysis 				
PROJECTS ASSOCIATED				
Title	Funding Agency	Period	Amount	Role & Status
Development of a novel pesticide formulation from a new turmeric variety in Terai region of West Bengal	Govt. of West Bengal (Science & Technology and Biotechnology Department)	3 Years (2019-2022)	11.5 Lakhs	P.I. (Ongoing)
Residual retention of plant protection chemicals in marketed vegetables – A study in Cooch Behar district under Terai Agro-Climatic zone of West Bengal	RRS (TZ), UBKV	1 Year (2019-2020)	Indefinite	P.I. (Ongoing)
Preparation of nano-emulsion from essential oil of blue turmeric and their antimicrobial screening	RRS (TZ), UBKV	1 Year (2018-2019)	Indefinite	P.I. (Completed)
Student Guidance				
Own student		Advisory committee member		
M.Sc.	Ph.D.	M.Sc.	Ph.D.	
1 (ongoing)	-	3 (completed) 1 (ongoing)	3 (ongoing)	

4. TEACHING EXPERIENCES

Courses Taught	Credit (T + P)	Level	College/Institute/University
Fundamentals of Plant Biochemistry (BCH-151)	2+1	UG	UBKV

Agricultural Chemicals (BCH-302)	1+0	UG	UBKV
Agrochemicals (ELC-351)	2+1	UG	UBKV
Principles of Biochemistry (BCH-401)	2+0	UG	UBKV
Plant Metabolic Pathways (BCH-402)	2+0	UG	UBKV
Basic Biochemistry (BCH-501)	2+1	PG	UBKV
Chemistry of Biomolecules (BCH-502)	2+1	PG	UBKV
Analytical Techniques in Biochemistry (BCH-504)	2+1	PG	UBKV
Plant Biochemistry-I (BCH-505)	2+1	PG	UBKV
Metabolic Pathways-I (BCH-506)	2+0	PG	UBKV
Chemistry of Botanicals & Biopesticides (BCH-527)	2+0	PG	UBKV
Metabolic Pathways-II (BCH-602)	2+0	Ph.D.	UBKV
Advances in Insecticide Chemistry (BCH-622)	2+0	Ph.D.	UBKV

5. ADMINISTRATIVE/PROFESSIONAL EXPERIENCE

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6. PUBLICATIONS

Research Papers
<ul style="list-style-type: none"> • Biswas S, Natta S, Ray D P, Mondal P and Saha U (2018) Til (<i>Sesamum indicum</i> L.) - An Underexploited but Promising Oilseed with Multifarious Applications: A Review. <i>International Journal of Bioresource Science</i>, 5(2): 127-139. (2020 NAAS rating: 3.54)
<ul style="list-style-type: none"> • Mondal P, Biswas S, Pal K and Ray D P (2018) <i>Annona squamosa</i> as a Potential Botanical Insecticide for Agricultural Domains: A Review. <i>International Journal of Bioresource Science</i>, 5(1): 81-89. (2020 NAAS rating: 3.54)
<ul style="list-style-type: none"> • Mondal P, Kumar R and Gogoi R (2017) Azomethine based nano-chemicals: Development, <i>in vitro</i> and <i>in vivo</i> fungicidal evaluation against <i>Sclerotium rolfsii</i>, <i>Rhizoctonia bataticola</i> and <i>Rhizoctonia solani</i>. <i>Bioorganic Chemistry</i>, 70: 153-162. (2020 NAAS rating: 9.93)
<ul style="list-style-type: none"> • Mondal P and Kumar R (2016) Preparation of azomethine based nano-chemicals and antibacterial activity against nitrifying bacteria. <i>Pesticide Research Journal</i>, 28(2): 194-200. (2020 NAAS rating: 5.90)
<ul style="list-style-type: none"> • Sarkar D J, Singh A, Mondal P, Kumar A and Parmar B S (2015) Synthesis and Characterization of Poly (CMC-g-cl-PAam/Zeolite) Superabsorbent Composites for Controlled Delivery of Zinc Micronutrient: Swelling and Release Behavior. <i>Polymer-Plastics Technology and Engineering</i>, 54: 357-367. (2020 NAAS rating: 7.71)
Books
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Book Chapters
<p><i>Modern Sample Preparation Techniques for Pesticide Residues Analysis in Soil</i> in Book named as "Soil Analysis: Recent Trends and Applications" published by Springer Nature</p>

7. TRAINING PROGRAMMES

Title	Venue	Date & Duration	Role
Laboratory Quality System Management and Internal Audit as per ISO/IEC 17025: 2017	National Institute of Plant Health Management, Hyderabad	5 days (July 23-27, 2018)	Attended

Synthesis and Characterization of Nanomaterials for Plant Protection and Growth	Directorate of Research, Maharana Pratap University of Agriculture and Technology, Udaipur, Rajasthan	10 days (March 5-14, 2018)	Attended
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8. SEMINAR/WORKSHOP/CONFERENCE/SYMPOSIUM

Title	Venue	Date	Role
National Seminar on “ <i>Use of agrochemicals for a sustainable agriculture and environment</i> ” organized by Society for Fertilizers and Environment & Department of Agricultural Chemistry and Soil Science	Farmers’ Academy and Convention Centre (Lake Hall), BCKV, Kalyani, West Bengal	March 27, 2019	Attended
National Conference on “ <i>Enhancing Nutritional Security through Climate Smart Farming Practices</i> ” organized by Cooch Behar Association of Cultivation for Agricultural Sciences (COBACAS)	Regional Research Station (Hill Zone), UBKV, Kalimpong	March 17-18, 2017	Attended

9. AWARDS/HONOURS

Best Oral Presentation Award in National Conference on “Enhancing Nutritional Security through Climate Smart Farming Practices” organized by Cooch Behar Association of Cultivation for Agricultural Sciences (COBACAS) from March 17-18, 2017 at Regional Research Station (Hill Zone), UBKV, Kalimpong
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10. PROFESSIONAL SOCIETY MEMBERSHIP

Name of Society	Membership Type
Cooch Behar Association of Cultivation for Agricultural Sciences (COBACAS)	Life
Society for Fertilizers and Environment (SFE)	Life

11. RESOURCE PERSON

Organizer of exhibition-cum-competition of project/ model on World Environment Day in 2018 and 2017
Quiz master of quiz competition in district level under Rashtriya Madhyamik Shiksha Abhiyan in 2017

12. EXTRA CURRICULAR ACTIVITIES

Extension Experience
<ul style="list-style-type: none"> Organizer of Student Development Programme to felicitate successful candidates at different all India level competitive examinations in 2017-18 Village attachment activities under Student READY Programme in 2017 Successfully completed ‘Job oriented course on Soil Testing’ during 6th and 7th semester of B.Sc. (Ag.) Hons. at Bidhan Chandra Krishi Viswavidyalaya (BCKV) Successfully completed ‘Block Training’ programme at Barrackpore block of District North 24 Parganas, West Bengal, arranged by BCKV during 6th semester of B.Sc.

<p>(Ag.) Hons.</p> <ul style="list-style-type: none"> • Successfully completed ‘Rural Agricultural Work Experience’ programme arranged by BCKV during 7th semester of B.Sc. (Ag.) Hons.
<p>Computer Skills</p>
<ul style="list-style-type: none"> • Fluent knowledge of DOS, MS Windows, MS Office and Adobe applications (Photoshop) • Successfully completed ‘Basic Computer Application Course’ during 6th semester of B.Sc. (Ag.) Hons.
<p>Games & Sports</p>
<ul style="list-style-type: none"> • Winner in Badminton Men’s Singles, Men’s Doubles and Mixed doubles in ICAR-IARI Annual Sports Meet 2014-15 ‘UDAAN’ • Runner-up in Lawn Tennis Men’s Singles, Men’s Doubles in ICAR-IARI Annual Sports Meet 2014-15 ‘UDAAN’ • Winner in Badminton Men’s Singles, Men’s Doubles and Runner-up in Mixed doubles in ICAR-IARI Annual Sports Meet 2015-16 ‘ABHYUDAY’ • Runner-up in football in ICAR-IARI Annual Sports Meet 2015-16 ‘ABHYUDAY’

Prithusayak Mondal

Signature of the Applicant

(Prithusayak Mondal)