



## KAZI NAZRUL UNIVERSITY ASANSOL

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### Faculty Profile

1. Name (Block Letter): DR. SUPRABHAT MUKHERJEE
2. Department: Animal Science
3. Current Designation: Assistant Professor & Coordinator
4. Address for Communication (Present): Department of Animal Science, Kazi Nazrul University, Asansol- 713 304
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8. Research Degree:

Degree	Name of the University	Date of Award
Ph.D.	Visva-Bharati (A Central University)	2017
M.Sc	University of Burdwan	2009
B.Sc	University of Burdwan	2007

### 9. Published Papers in Journals:

Sl. No	Name of Article	Journal with page no	ISSN/IS BN No	Referred/N on-Referred	No of Co-author or	Whether you are the main author	Date of Publication
1.	In silico analyses on the comparative sensing of SARS-CoV-2 mRNA by	<i>Journal of Medical Virology.</i>	1096-9071	Referred	4	Corresponding author	2021

	the intracellular TLRs of human.						
2.	Designing of a novel multi-epitope peptide-based vaccine against <i>Brugia malayi</i> : an <i>in silico</i> approach.	<i>Infection, Genetics and Evolution</i>	1567-1348	Referred	7	Corresponding author	2021
3.	Targeting human TLRs to combat COVID-19: A solution?	<i>Journal of Medical Virology</i>	1096-9071	Referred	3	Corresponding author	2020
4.	<i>In silico</i> studies on the comparative characterization of the interactions of SARS-CoV-2 spike glycoprotein with ACE-2 receptor homologs and human TLRs.	<i>Journal of Medical Virology</i>	1096-9071	Referred	8	Corresponding author	2020
5.	Polymer anchored gold nanoparticles : Synthesis, characterization and antimicrobial activities.	Nanoscience & Nanotechnology Asia.	2210 - 6820	Referred	8	Co-author	2020

6.	Exploring the homolog of a novel proinflammatory microfilarial sheath protein (MfP) of <i>Wuchereria bancrofti</i> in adult stage bovine filarial parasite <i>Setaria cervi</i> .	<i>Journal of Helminthology</i> .	1475-2697	Referred	3	First author	2020
7.	Synthesis of smart graphene quantum dots: A benign biomaterial for prominent intracellular imaging and improvement of drug efficacy.	Applied Surface Science	0169-4332	Referred	6	Co-author	30/10/2019
8.	TLR polymorphism in host immune response to infectious diseases: A review.	Scandinavian Journal of Immunology	1365-3083	Referred	3	First author	03/05/2019
9.	Effect of Bovine Serum Albumin on LMCT and d-d Transition of Tartrate Modified MnFe <sub>2</sub> O <sub>4</sub> Nano Hollow Spheres.	Physical Chemistry Chemical Physics	1463-9084	Referred	8	Co-author	30/04/2019
10.	<i>Wuchereria bancrofti</i> filaria activates human dendritic cells	Nature Communications Biology	2399-3642	Referred	5	First author	07/05/2019

	and polarizes regulatory T cells via Toll-like receptor 4						
1 1.	Aryl quinolinyl hydrazone derivatives as anti-inflammatory agents that inhibit TLR4 activation in the macrophages.	European Journal of Pharmaceutical Science	1879-0720	Referred	6	Joint First author	15/06/2019
1 2.	Graphene oxide dispersed supramolecular hydrogel capped benign green silver nanoparticles for anticancer, antimicrobial, cell attachment and intracellular imaging applications	Journal of Molecular Liquids	0167-7322	Referred	7	Co-author	15/05/2019
1 3.	Polyphenol enriched ethanolic extract of <i>Cajanus scarabaeoides</i> (L.) Thouars exerts potential antifilarial activity by inducing oxidative stress and programmed cell death	Plos One	1932-6203	Referred	5	Joint First author	15/11/2018
1 4.	Gut microbes as future therapeutics in treating	<i>The Journal of Nutritional Biochemistry</i>	0955-2863	Referred	4	First author	16/08/2018

	inflammatory and infectious diseases: lessons from recent findings.						
1 5.	Quinolone-fused cyclic sulfonamide as a novel benign antifilarial agent.	<i>Scientific Reports</i>	2045-2322	Referred	7	First author	13/8/2018
1 6.	Chitosan biopolymer functionalized gold nanoparticles with controlled cytotoxicity and improved antifilarial efficacy.	<i>Advanced Composites and Hybrid Materials.</i>	2522-0128	Referred	8	Co-author	31/5/2018
1 7.	Thioredoxin reductase from the bovine filarial parasite <i>Setaria cervi</i> : Studies on its localization and optimization of the extraction.	<i>International Journal of Biological Macromolecules</i>	0141-8130	Referred	3	Joint first author	2/1/2018
1 8.	Polyphenol Oxidase based luminescent enzyme hydrogel: An efficient redox active immobilized scaffold.	<i>Bulletin of Materials Science</i>	0973-7669	Referred	6	Co-author	1/2/2018

19.	A novel ligand of toll-like receptor 4 from the sheath of <i>Wuchereria bancrofti</i> microfilaria induces proinflammatory response in macrophages.	<i>Journal of Infectious Diseases.</i>	0022-1899	Referred	5	First author	15/3/2017
20.	Design and synthesis of reduced graphene oxide based supramolecular scaffold: A benign microbial resistant network for enzyme immobilization and cell growth.	<i>Materials Science &amp; Engineering C: Materials for Biological Applications.</i>	0928-4931	Referred	5	Co-author	1/6/2017
21.	Surface proteins of <i>Setaria cervi</i> induce inflammation in macrophage through Toll-like Receptor 4 (TLR4)-mediated signaling pathway.	<i>Parasite Immunology.</i>	1365-3024	Referred	4	First author	1/1/2017
22.	Studying the biological activities and molecular docking of some novel Benzosultam	<i>Current Bioactive Compounds.</i>	1573-4072	Referred	6	Co-author	12/1/2017

	s and Benzosultones.						
2 3.	Metabolic inhibitors as antiparasitic drugs: pharmacological, biochemical and molecular perspectives.	<i>Current Drug Metabolism</i>	1389-2002	Referred	5	First author	1/12/2016
2 4.	An approach towards optimization of the influential growth determinants of opportunistic yeast isolate <i>Pichia guilliermondii</i> .	<i>Preparative Biochemistry and Biotechnology</i>	1082-6068	Referred	5	First author	3/7/2016
2 5.	TLR2 and TLR4 mediated host immune responses in major infectious diseases: A review.	<i>Brazilian Journal of Infectious Diseases</i>	1413-8670	Referred	3	First author	3/7/2016
2 6.	Green-silver nanoparticles for drug transportation, bioactivities and a bacterium, <i>Bacillus subtilis</i> , mediated comparative nanopatterning feature.	<i>RSC Advances</i>	2046-2069	Referred	8	Co-author	26/4/2016

2 7.	Optimization of growth determinants of a potent cellulolytic bacterium isolated from lignocellulosic biomass for enhancing biogas production.	<i>Clean Technologies and Environmental Policy.</i>	1618-954X	Referred	6	Joint first author	6/1/2016
2 8.	Phenolics and Terpenoids; the Promising New Search for Anthelmintics: A Critical Review.	<i>Mini Reviews in Medicinal Chemistry.</i>	1875-5607	Referred	5	Co-author	11/1/2016
2 9.	A supramolecular hydrogel for generation of a benign DNA-hydrogel.	<i>RSC Advances</i>	2046-2069	Referred	8	Co-author	25/11/2015
3 0.	Ginger extract ameliorates phosphamidon induced hepatotoxicity.	<i>Indian Journal of Experimental Biology</i>	0975-1009	Referred	5	First author	1/9/2015
3 1.	<i>Diospyros perigrana</i> bark extract induced apoptosis in filarial parasite <i>Setaria cervi</i> through generation of reactive oxygen species.	<i>Pharmaceutical Biology</i>	1388-0209	Referred	8	Co-author	3/6/2015



3 2.	Isolation and characterization of arsenic resistant bacteria from contaminated water-bodies in West Bengal, India.	<i>Geomicrobiology Journal</i>	1521-0529	Referred	7	Co-author	1/2/2015
3 3.	Design and green synthesis of polymer inspired nanoparticles for the evaluation of their antimicrobial and antifilarial efficiency.	<i>RSC Advances.</i>	2046-2069	Referred	5	Co-author	24/4/2014
3 4.	Ethanol extract of <i>Azadirachta indica</i> (A. Juss.) causing apoptosis by ROS upregulation in <i>Dirofilaria immitis</i> microfilaria.	<i>Research in Veterinary Science.</i>	0034-5288	Referred	6	Co-author	10/1/2014
3 5.	Antifilarial effect of ursolic acid from <i>Nyctanthes arbortristis</i> : molecular and biochemical evidences.	<i>Parasitology International</i>	1383-5769	Referred	8	Co-author	10/1/2014
3 6.	Molecular evidence on the occurrence of co-	<i>Infectious diseases of Poverty</i>	2049-9957	Referred	6	First author	13/4/2014

	infection with <i>Pichia guilliermondii</i> and <i>Wuchereria bancrofti</i> in two filarial endemic districts of India.						
3 7.	Antifilarial effects of polyphenol rich ethanolic extract from the leaves of <i>Azadirachta indica</i> through molecular and biochemical approaches describing reactive oxygen species (ROS) mediated apoptosis of <i>Setaria cervi</i> .	<i>Experimental Parasitology</i> .	0014-4894	Referred	5	Joint first author	1/1/2014
3 8.	An approach towards optimization of the extraction of polyphenolic antioxidants from ginger ( <i>Zingiber officinale</i> ).	<i>Journal of Food Science and Technology</i> .	0022-1155	Referred	4	First-author	11/1/2014
3 9.	<i>In vitro</i> antifilarial activity of <i>Azadirachta indica</i> aqueous extract through ROS	<i>Asian Pacific Journal of Tropical Medicine</i>	1995-7645	Referred	5	Co-author	1/1/2014

	enhancement .						
40.	Optimization of physicochemical parameters for phenol biodegradation by <i>C. tropicalis</i> PHB5 using Taguchi methodology .	<i>Desalination and Water Treatment.</i>	1944-3986	Referred	4	Co-author	1/10/2013
41.	Potential use of polyphenol oxidases (PPO) in the bioremediation of phenolic contaminants containing industrial wastewater.	<i>Reviews in Environmental Science and Bio/Technology</i>	1569-1705	Referred	5	First author	1/3/2013
42.	An improved method of optimizing the extraction of polyphenol oxidase from potato ( <i>Solanum tuberosum</i> L.) Peel.	<i>Notulae Scientia Biologicae.</i>	2067-3205	Referred	6	First author	22/2/2012
43.	Stem cells in tissue engineering- an interface between biology and engineering.	<i>International Journal of Biological Sciences and Engineering,</i>		Referred	4	First author	03/03/2011
44.	Synthesis of hydroxyapatite biomaterial from	<i>International Journal of Biological Sciences and Engineering</i>		Referred	4	Co-author	03/03/2011

different biosources for tissue engineering.						
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10. Articles/Chapters Published in Edited Volume:

Sl. No	Name of Article/chapter	Name of Edited Volume, Editor and Publisher	ISBN No	No of Co-author	Whether you are the main author	Date of Publication
1.	Neurofilariasis.	Neurology in Tropics. Second Edition.	978-81-312-4232-2	2	Yes	2015
2.	Current trends in targeted chemo- and immunotherapy against bancroftian filariasis: biochemical, molecular and pharmacological perspectives.	Advances in Medico-Veterinary Parasitology: An Indian Perspective.	978-81-86535-80-6	3	Yes	2018
3.	Redox regulatory circuits as targets for therapeutic intervention of bancroftian filariasis: biochemical, molecular and pharmacological perspectives.	Oxidative Stress in Microbial Diseases. P-185-208. Springer, Singapore	978-981-13-8762-3	3	Yes	2019

11. Full Papers in Conference Proceedings: **NIL**

12. Published Books or Edited Volume: **01**

**Mukherjee, S.\*** and Chowdhury, A. (2020). Molecular evolution of the inflammatory mediators of animal kingdom. *Lambert Academic Publishing (LAP)*, Beau Bassin, Mauritius. ISBN: 978-620-2-52489-6; ISBN-10: 6202524898 EAN: 9786202524. \*Corresponding author.

13. Papers Presented in Conferences/Seminars/Workshops/ Symposia:

Sl. No	Title of the Paper Presented	Title of the Conference/Seminar/Symposia	Organising Authority	Whether International/National/State/Regional/University/College Level	Date of presenting the Paper
1.	Quinolone-fused cyclic sulfonamide as a novel benign antifilarial agent.	International Congress of Parasitology.	Korean Society of Parasitology	International (South Korea)	24/08/2018
2.	A novel putative ligand of Toll like receptor 4 from <i>Wuchereria bancrofti</i> induces classical macrophage activation.	International Seminar on Exploring the modern approach in Biological Science: From Genome to organism.	Department of Zoology, Sidho-Kanho-Birsa University, Purulia	International (India)	25/11/2015
3.	A novel ligand for TLR4 mediated signaling in filarial nematode.	International Conference on Molecular Signaling	Department of Zoology, North-Eastern Hill University, Shillong, Meghalaya, India	International (India)	22/11/2015
4.	A novel ligand for TLR4 mediated signaling on a worm.	National Symposium on Comparative Endocrinology and Reproductive Biology	Department of Zoology, Visva-Bharati University, Santiniketan, India	National	01/09/2015
	<i>Setaria cervi</i> , a bovine filarial parasite activates macrophage through Toll like Receptor4 (TLR4) mediated signaling pathway: <i>In vitro</i> and <i>in vivo</i> approaches.	6 <sup>th</sup> ASEAN Congress of Tropical Medicine Parasitology (ACTMP)	Malaysian Society of Parasitology and Tropical Medicine, Kuala Lumpur, Malaysia	International (Malaysia)	06/03/2014
5.	3D structure modelling and <i>in silico</i> characterisation of human	Acharya P C Ray National Young Scientists' Conference,	Presidency University and Calcutta University	National	17/02/2018

	double- stranded RNA adenosine deaminase”.				
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14. Organising Seminar/Conference/Symposia: **NIL**

15. Invited Lectures/Chairing the Session or Presentation for Conferences/Seminar/Symposia etc:

Sl. No	Title of the Lecture/Academic Session	Title of the Conference/Seminar	Organizing Authority	Whether International/National/State/Regional/University/College Level	Date of Conference/Seminar/Symposia
1.	Central Dogma: mystery behind the molecular design of life	Special Lecture	Principal, Gour College, Malda	College Level	08/05/2018
2.	DNA: The Molecular Design of Life	Invited Lecture	Department of Zoology, Michael Madhusudan Memorial College, Durgapur, West Bengal	College Level	20/06/2019
3.	Quinolone derivatives as novel antifilarial agents with potential macrofilaricidal and anti-inflammatory actions	Invited Lecture	Department of Zoology, Visva-Bharati University, Santiniketan, West Bengal	National Conference	24/03/2019

16. Ongoing Projects/Consultancies: **NIL**

17. Completed Projects/Consultancies: **NIL**

18. Received Research Fellowship/ Awards:

Sl. No	Title	Funding Authority	Period	Grant/Amount Mobilized (Rs..)
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1.	INSA Visiting Scientist	Indian National Science Academy	Will be availed in 2021	60,000/- has been sanctioned
2.	Dr. D.S. Kothari Postdoctoral Fellowship	UGC, Govt. of India	2017-2018	Rs. 52,500/- per month
3.	International Travel Grant	ICMR, Govt. of India	2018	Rs. 1,46,000/-
4.	EMBO Visiting fellowship	European Molecular Biology Organization	2017	Rs. 5, 50,000/-
5.	Travel Grant	ICMR, Govt. of India	2014	Rs. 73,000/-
6.	UGC-BSR Research Fellowship	UGC, Govt. of India	2012-2016	Rs. 24,800 per months

19. Academic Staff College Organised Orientation/ Refresher Courses Attended: **01**

Refresher Course in Natural and Biosciences, UGC – Human Resource Development Centre (HRDC), University of Burdwan, Bardhaman, West Bengal, India (24.11.2020 to 07.12.2020). Total duration: 84 hours (14 days) Grade: A+

20. Training Courses, Teaching-Learning-Evaluation Technology Programmes, Faculty Development Programme: **01**

Online Learning Workshop for Faculty, Webinar, QASPIR, UK, April 1-3, 2020 (8hrs).

21. Research Guidance: **03** (*01 will be registered for Ph.D. very soon*)

22. Any other Information:

- Life Member, Indian Society for Parasitology (2013 onward)
- Member, Editorial board, *Aperito Journal of Infectious Diseases and Vaccines*
- Expert Member (Immunology and Parasitology) in Reviewers' board, *Bio-Protocol Journal*
- Worked as Reviewer of manuscript in Journals of International reputation.
  - Innate Immunity (SAGE Publications)*, *Issues in Biological Sciences and Pharmaceutical Research, Environment, Development and Sustainability (Springer)*, *Journal of Research in Environmental Science and Toxicology, Geomicrobiology Journal (Taylor & Francis)*, *Preparative Biochemistry and Biotechnology (Taylor & Francis)*, *3Biotech Journal (Springer)*, *Agricultural Research Journal, Environmental Pollution (Elsevier)*, *Separation and Purification Technology (Elsevier)*, *International Journal of Pharmacology, Phytochemistry and Ethnomedicine (SciPress)*.
- Expert Reviewer (Natural Products and Immunopharmacology), *Natural Resources*.

IRINS: <http://knu.irins.org/profile/122359>

Google scholar ID: <https://scholar.google.co.in/citations?user=e28tNpoAAAAJ&hl=en>

**ResearchGate link:** [https://www.researchgate.net/profile/Suprabhat\\_Mukherjee](https://www.researchgate.net/profile/Suprabhat_Mukherjee)

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**Personal webpage:** <https://babaimbc.wixsite.com/suprabhat-mukherjee>

**Scopus ID:** 55357135900