

FACULTY PROFILE



❖ **Basic Information**

- Name: Dr. Archana Masram
- Designation: Professor & Head of the Department
- Department: Department of Zoology
- Area of Specialization: Fisheries
- VIDWAN ID- 558932
- ORCID ID- 0009-0004-6886-9412
- Google Scholar ID- jAHu7gUAAAAJ

❖ **Educational Qualifications:** M.Sc. , Ph.D., M.Phil., B.Ed.

❖ **Teaching Experience:** Total Teaching Experience: 22 Years

❖ **Research Experience**

- Total Research Experience: 20 Years
- Research Guidance (M.Phil /Ph.D. Guided): Ph. D. awarded-01 student
Students Registered- 04
- Areas of Research Interest: Mammalian Reproductive Physiology, Environmental Science. Aquatic Biology

❖ **Research Publications**

(A) Research Papers in National/ International Journals (Year wise)

- Consequences of Seasonal Changes on Serum Alkaline Phosphatase and Lactate Dehydrogenase Concentration in the Indian Male Fruit Bat *Rousettus leschenaulti* (Desmerest), Published in *Bionano Frontier* (Special Issue on Second World Congress for Man and Nature-2012: Global Change: Impact on Biodiversity, Culture & Technology), 2012, ISSN: 0974-0678 (pp. 91-93).

- The Influence of Season, Nutrition and Other Factors upon the Serum Protein Concentration in Indian Male Fruit Bat *Rousettus leschenaulti* (Desmerest), Published in Indian Stream Research Journal, 2013, ISSN: 2230-7850 (pp. 99–104).
- Annual Variation in Serum Lipid Profile of the Indian Male Flying Fox *Rousettus leschenaulti* (Desmerest), Published in International Journal of Researches in Biosciences, Agriculture & Technology, Vol. II, Issue 2, May 2014, ISSN: 2347-517X (Online).
- Seasonal Analysis of Physicochemical Characteristics of Well Water in Rural Area of Hingana (M.S.), India, Published in International Journal of Researches in Biosciences, Agriculture & Technology, Special Issue, December 2014, ISSN: 2347-517X (Online).
- Annual Changes in Follicle Stimulating Hormone and Testosterone in Male Indian Fruit Bat *Rousettus leschenaulti* (Desmerest), Published in International Journal of Researches in Biosciences, Agriculture & Technology, Vol. II, Issue 2, May 2014, ISSN: 2347-517X (Online).
- Water Quality Assessment of Well Water in Nildoh Village, Hingna Region (M.S.), India, Published in International Journal of Researches in Biosciences, Agriculture & Technology (IJRBAT), Vol. V, Special Issue 1, May 2017, ISSN: 2347-517X (pp. 63–69).
- Evaluation of Physicochemical Properties of Water from Wells of Different Zones in Nagpur City, India, Published in International Journal of Researches in Biosciences, Agriculture & Technology (IJRBAT), Vol. V, Special Issue 1, July 2017, ISSN: 2347-517X (pp. 1188–1193).
- Monitoring Water Quality Using Zooplankton Organisms as Bioindicators in the Well Water of Nagpur City (M.H.), India, Published in International Journal of Researches in Biosciences, Agriculture & Technology (IJRBAT), Vol. V, Special Issue 2, July 2017, ISSN: 2347-517X (pp. 877–885).
- Comparative Analysis of Some Physicochemical Parameters of Well Water with Reference to Different Locations of Nagpur City (M.S.), India, Published in The Botanique, Vol. 21(I), 2017, ISSN: 0257-800 (pp. 74–78).

- Water Quality Index of Well Water of Nagpur City with Reference to Some Heavy Metals and Other Parameters, Published in Journal of Emerging Technologies and Innovative Research, 2018, ISSN: 2349-5162 (pp. 385–390).
- A Comparative Study on the Physicochemical and Bacterial Analysis of Drinking Water in Three Different Places of Nagpur City (M.S.), India, Published in Research Journey International E-Research Journal, Special Issue 183(A), April 2019, ISSN: 2348-7143 (pp. 120–124).
- Bacteriological Analysis of Well Water Sources in Some Parts of Nagpur (M.S.), India, Published in Parishodh Journal, Vol. IX, Issue III, March 2020, ISSN: 2347-6648 (pp. 5922–5928).
- Elements of Research-Based Pedagogical Tools for Teaching Science, Published in Educational Quest: An International Journal of Education and Applied Social Science, Vol. 11, No. 3, December 2020, ISSN: 0976-7258 (Print), 2230-7311 (Online) (pp. 189–192).
- Use of Research-Based Pedagogical Tools in Science Education, Published in The Research Journal (TRJ), Vol. 7, Issue 1, January–February 2021, ISSN: 2454-7301 (Print), 2454-4930 (Online) (pp. 69–71).
- Zooplankton Analysis of Well Water of Certain Zones of Nagpur (M.S.), India, Published in AGPE The Royal Gondwana Research Journal, Vol. 2, Issue 1, July 2021, ISSN: 2582-8800 (pp. 54–60).
- Study of Correlative Changes in Serum Creatinine Phosphokinase and Testosterone Concentration during Breeding Season of Male Fruit Bat *Rousettus leschenaulti* (Desmerest), Published in International Journal of Researches in Biosciences, Agriculture & Technology (IJRBAT), Vol. III, Issue IX, September 2021, e-ISSN: 2347-517X (pp. 75–79).
- Electrophoretic Study of Hemoglobin Components in Indian Fruit Bat *Rousettus leschenaulti* (Desmerest), Published in Journal of Emerging Technologies and Innovative Research, 2023, ISSN: 2349-5162 (pp. a780–a785).
- Insect Fauna Associated with *Calotropis procera* (Milkweed) from Hingna, District Nagpur (M.S.), India, Published in BIOINFOLET – A Quarterly Journal of Life Sciences, Vol. 20, Issue 3(A), 2023, ISSN: 0973-1431 (Print), 0976-4755 (Online) (pp. 468–473).

- Study of Reproductive Physiology of Male Fruit Bat *Rousettus leschenaultia* (Desmerest): A Conservation Effort of a Crucial Pollinator, Published in Uttar Pradesh Journal of Zoology, Vol. 46, Issue 10, 2025, ISSN: 0256-971X (pp. 60–66).
- Chronobiological Shifts in Prolactin Levels and Testicular Function in Male *Rousettus leschenaultia* (Desmerest), Published in International Journal of Innovative Research in Technology (IJIRT), Vol. 12, Issue 3, August 2025, ISSN: 2349-6002 (pp. 1331–1336).

(B) Books / Book Chapters

Edited-

- Proceedings of National conference on Bioresearch, Bioethics and Environment on 2nd and 3rd December 2011 organized by LAD college for Women, Nagpur. Pg.1-167, Proceedings of National conference & as a Co-editor of editorial board. ISBN-978-93-80985-04-06
- International Journal of Researches in Biosciences, Agriculture and Technology Issue- 2, Volume 2, May 2014 International Journal ISSN no. Online 2347-517X
- Proceedings published on the Occasion of National Conference on Water Conservation Role of Educators organized by L.A.D. & Smt. R.P. College for Women, (December-2028) Proceedings 978-93-80985-20-6

Authored-

- Zoology semester-III-Based on syllabus of R.T.M. Nagpur University, Nagpur ISBN-978-93-81660-85-0
- Practical Handbook of Zoology (Sem I & II) For B.Sc. Semester-I &II ISBN no.-978-9382962-69-4
- “Zoology Semester-V”(Handbook based on syllabus of RTMNU ISBN No.
 - .978-93-84336-02-0)
- “Zoology Semester-VI” Handbook based on syllabus of RTMNU ISBN No.
 - (ISBN No.978-93-84336-14-1

- “Zoology Semester-I” ((July-2017) Handbook based on syllabus of RTMNU ISBN No.978-93-84336-37-0)
- As per National Education Policy-2020- Semester-I Zoology (October-2024) Handbook based on syllabus of RTMNU ISBN No-978-98-6468-751-5
- Book chapter in Indian Knowledge System ‘Analyzing Vedic Mathematics, Indian Tradition, Philosophy, and Science in the Indian Knowledge System’ Pg: 388-398.
- Indian Knowledge System- Values & Philosophies ISBN-978-81-977606-2-4
- Handbook based on syllabus of RTMNU As per National Education Policy-2020- Semester-II Zoology (October-2024) ISBN No- 978-93-6468-835-2
- Insects Associated with Calotropis Procera in Tirora tehsil of Gondia district, Maharashtra. Eureka Nexus Connecting The Dots of Science by SAI JYOTI PUBLICATION ISBN No.: 978-93-48367-53-2

(C) Conference / Seminar Proceedings

- Seasonal variation in some serum enzyme concentration & its effect on physiology of Indian male fruit bat Rousettus leschenaulti (Desmerest) Pg. 144-148 Proceedings of National conference on Bioresearch, bioethics and environment on 2nd and 3rd December 2011 organized by y L.A.D. College for Women,, Nagpur ISBN- 978-93-80985-04-06.
- Studies on Ground Water Quality of Some Urban Areas of Nagpur City” Proceedings published on the Occasion of National Conference on Water Conservation Role of Educators- organized by L.A.D. & Smt. R.P. College for Women, On 18 December-2017, ISBN No.- 978-93-80985-20-6,

❖ Research Projects

- Major Research Project:

S.N.	Title	Funding Agency:	Amount Sanctioned
1	Comparative	UGC, New Delhi	Rs. 3,75,000/-

Analytical study of Well water of Nagpur city (MS), India (File NO. 47-955/14 (ST/25/WRO)XII plan		
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❖ Refresher / Orientation

- U.G.C. Sponsored Orientation Course 27th June-24th July 2011 (3 Weeks)
Academic Staff College, R.T.M. Nagpur University, Nagpur,
U.G.C.Sponsored Refresher Course 5th March-25th March-2014 (3 Weeks)
Academic Staff College, R.T.M. Nagpur University, Nagpur
- UGC Sponsored Refresher Course 9 -29 Nov,2016 (21 days) Academic staff
college, R.T.M. Nagpur University, Nagpur
- .Online Refresher Course through MOOC on ‘ Advances in Animal Diversity,
Systematics & Evolution Refresher Course 19 November to 27
March,2019(40Hrs.) Conducted by Ministry of Human Resource Development
Govt. of India (Online) (SWAYAM)
- FDP on ‘Managing Online Classes & Co creating Moocs’. April 20-May 6, 2020
(Two weeks) Conducted by Ministry of HRD,
- Interdisciplinary Refresher Course in Biotechnology at HRDC, Pandit Deen
Dayal Upadhyaya University, Raipur 13-28 December 2021.(Two Weeks) at
Raipur(Online)
- Short Term Course for Teaching Staff on 8-13 December 2014. (1
Week)Academic Staff College, R.T.M. Nagpur University, Nagpur
- Use of ICT in Education for Online & Blended Learning on 2 May- 10 July, 2016
IIT , Bombay (Online) sponsored by MHRD, Govt. of India
- FDP on Mentoring Educators in Educational Technology on 17 May to 5 July,
2018(Two Week)IIT , Bombay (Online) under PMMMNMTT) sponsored by
MHRD, Govt. of India

- Short term Programme entitled 'National Education Policy 2020-Orientation and Sensitization Programme' 15-03-2025 To 30-03-2025 (15 Days) Conducted by the UGC-Malaviya Mission Teacher Training Centre, Rashtrasant Tukadoji Maharaj Nagpur (Online Mode)

❖ **Papers Presented in Conferences / Seminars**

- Annual variations in some serum enzyme concentrations & its effects on behavioral physiology of the Indian male Fruit bat *R. leschenaultia* (desmerest)', Authros- A. S. Masram & M.S. Sastry UGC Sponsored National symposium on Invertebrates for Biomonitoring ecosystem health, on 17th & 18th January, 2011. 2010-11 organised by Dept. of Zoology, Hislop College, Nagpur.
- Annual Variation In Serum Triglyceride Concentrations. In The Indian Male Fruit Bat *Rousettus leschenaulti* (Desmerest)' Emerging Trends in Chemical and life Sciences with relevance to Environmental Conservation, on 30th January, 2013 2012-13 Guru Nanak college of Science, Ballarpur
- "Analysis of water quality of Ambazari lake before and after Ganesh visarjan" by A.S. Masram & B.A. Wadjikar UGC sponsored National symposium on Odonotology on 17 & 18 August 2014. Department of Zoology, Hislop College, Nagpur.
- Microbial analysis of borewell and dugwell water in rural area of Digdoh, Hingna, MS, India. UGC sponsored International conference on futuristic materials and emerging trends in forensic and life sciences on 5/2/2015 2014-15 PGTD of chemistry, RTM Nagpur university, Nagpur in collaboration with Seth Kesarimal Porwal college, Kamptee
- Microbiological analysis of ground water quality of Nildoh village, Hingana Authored by Bharti Wadjikar & A.S. Masram at the National Conference on Recent trends in Life Sciences ,Material Sciences and Home Sciences" on 4-10-2015 Sevadal Mahila Mahavidyalaya Nagpur.
- A comparative study on some physicochemical parameters of well water of MIDC area of Hingna Nagpur (Ms), India' at the National Conference on Biodiversity Conservation and sustainable Development on 6th February 2016. Department of Zoology, Janata College, Chandrapur

- Science & Technology helpful for specially abled persons Science & Technology for Specially abled persons on 11-04-2017, P.G. Department of Mathematics R.T.M. Nagpur University, Nagpur
- Physicochemical and Microbial Parameters as an indicator in defining quality of well water” presented at a National Seminar on Natural Heritage and Biodiversity on January 17 - 18, 2018 Hislop College, Nagpur
- ‘An investigative analysis of Bacterial and Physicochemical parameters of selective wells of Nagpur city (M.S.) India” National Seminar on Trends in Bio resource Management and Nanotechnology on 26-10-2018 Centre for Sericulture and Biological pest Management of Research, R.T.M. Nagpur University, Nagpur
- 10 “Composting of Organic waste by using Fungal Decomposers” Symposium on Current & Emerging trends in Plant Health Management on 23 & 24-08-2018. Plant Pathology Section, College of Agriculture, Nagpur In Association with Association of Plant Pathologist, Dr. PDKV, Akol
- “Investigation in to the status, cause & management of root knot Nematode of Brinjal” Symposium on Current & Emerging trends in Plant Health Management on 23 & 24-08-2018. Plant Pathology Section, College of Agriculture, Nagpur In Association with Association of Plant Pathologist, Dr. PDKV, Akola
- Water Quality analysis of Fresh Water from wells of Nagpur city by investigating certain physicochemical and Microbiological Parameters at 11th National Conference on Solid State Chemistry and Allied areas on 20 & 21-12-2019 , Seth Kesarimal Porwal College, Kamptee
- “Conservative Classroom Teaching Method to student Centric Teaching Method- a Leap to face new Challenges” at National Conference on Innervate-2020; Reforming Higher Education: Role of Accreditation and Autonomy” on 03-03-2020 at Bajaj College of Science, Wardha, on 3rd March 2020.
- Assessment Of Certain Parameters Of Fresh Water Of Nagpur City (Ms), India" in the National Conference on Basics & Advances in Biological Sciences on 8th & 9th April, 2022. Organized by Dada Ramchand Bakharu Sindhu Mahavidyalaya, Nagpur
- Comparative analysis of Well Water quality in terms of Zooplankton plankton ecology of certain parts of Nagpur city (MS), India”, 108th Indian Science Congress, Nagpur on 3-7—01-2023 RTM Nagpur University, Nagpur at 5 Jan-2023

- Leaf extract mediated green synthesis of silver nanoparticles from widely available Indian plants: Against Insect pests at National Conference on Green Earth - Clean Earth on 10-02-2024 L.A. D. & Smt. R.P. College for Women, Nagpur
- Efficacy of Silver Nanoparticles from Lemon (Citros limon) against Sitophilus oryzae and Aedes aegypti International conference on Advances Agricultural Technology and Allied Sciences. On Society of Agriculture Research and Social Development , New Delhi
- A Study On Earthworm Diversity In and around Bhandara District (Ms) India.
Advances in Science, Technology and Humanities: Intersecting for a Bright and Prosperous Society” on 30 th Nov. 2024, Indian Indigenous Society for Sciences & Social Sciences Sciences-ISSS and Shri. Shivaji Education Society, Amravati’s Dhanwate National College (DNC), Nagpur
- Earthworms & Soil Relation on Chilli Production in Sakoli Tahsil, Maharashtra Recent Trends in Biological and Chemical Sciences for sustainable Future & Society on 4 & 5 – 02-2025 G.K. College, Kawarabandh, Salekasa

❖ **Workshops / Seminars / Conferences Organized-**

1. Organized a National Conference on Bioresearch, Bioethics & Environment in 17 & 18 December 2011.

❖ **Administrative Responsibilities**

- Board of Studies of Zoology, R.T.M. Nagpur University, Nagpur
- Internal Quality Assurance Cell- Coordinator
- College Development Committee- Member
- Head- Department of Zoology

❖ **Membership of Professional Bodies**

- Member of Board of Studies of Zoology, R.T.M. Nagpur University, Nagpur
- Member of Reviewer Committee of The AGPE The Royal Gondwana Research Journal Of History, Science, Economic, Political And Social Science Licensed Under Rni: Mahmul/2019/78986 Issn: 2582:8800 (Print) | A Peer-reviewed | Annually | Multidisciplinary Published by: Adivasi Gondwana Bhasha Prachar Bahuudheshiya

Shikshan Sanstha Tipagad Warora (Maharashtra Government awarded Trust for Tribal welfare)

- Life member of Vishwshanti Multipurpose Society, Nagpur

❖ Awards / Recognitions

Sr. N	Name of the award	Whether National/	Name of awarding agency	Date of award
1	Meghnath Saha National award -2010 by outstanding services in the field of education.	National	Mahatma Fule Talent Research Academy, Nagpur	14-04-2022
2	Received 1 st Prize for the Best Research Poster Presentation at	Internatio nal	Vishwashanti	19, 20, 21 may, 2015
3	SAP Award of excellence by IIT, Bombay. In 2016	National	IIT, Bombay	10-07-2016
4	Top Performer Award	National	IIT, Bombay	05-07-2018
5	Second prize for Best Research Poster presentation on “Conservative Classroom Teaching Method to Student Centric Teaching Method – A Leap to Face New Challenges” at the INNERVATE-2020- A National Conference on	National	” organized by Bajaj College of Science, Wardha.	3-03-2020

❖ Extension Activities / Community Engagement

- Vermicomposting
- Bee Keeping

❖ E-Content / MOOCs / ICT Use

S.N.	Title
1	•Website: https://archanasmasram.wordpress.com/
2	Tutorials on You Tube
3	https://youtu.be/ryNRAix6kUw
4	https://www.youtube.com/watch?v=dwmJ8yt_3pY
5	https://youtu.be/CTfKewCVBUw
6	https://youtu.be/GizfsDxmMDg
7	https://www.youtube.com/watch?v=NjTcw58RkKQ
8	https://www.youtube.com/watch?v=RH7yzd-7A88
9	https://www.youtube.com/watch?v=nPo6mBA3YvA
10	https://www.youtube.com/watch?v=7g3Qy20TfxQ

❖ Other Relevant Information

- **Patent Awarded-** “Composition to improve the growth and Quality of Turmeric rhizomes’. On 2-10-2023. (IPC) C05F 11/00. Federal Republic of Germany
International Utility Patent No. 20 2023 105 484
- **Invited lectures/ Resource Person**
 - Mentored FDP on Foundation Program in ICT for Education on 3 August to 7 September,2017
 - Mentored FDP on Pedagogy for Online & Blended Teaching –Learning Process on 14 September to 12 October,2017
 - Web presence of the Faculty on 11-15 September,2017
 - Discussion Forum Moderator
 - Two week equivalent FDP 101x:Foundation Program in ICT for Education during 13-21 Oct 2018
 - Discussion Forum Moderator for Two week equivalent FDP 201x:Pedagogy for online & Blended Teaching- Learning Process during 30 Oct 6 Jan 2019

- “Content management system and basic Customization I & II “ Summer School in Social Sciences 2018-19
- Creation of Contents Short Term Course on MOOC in online application for Six-days TEQIP-III Sponsored Interdisciplinary Online Faculty Development Program (O-FDP) on "Teaching-Learning process for BEGINNERS during COVID-19 Pandemic" during 14-19 July,2020
- Contributed Video tutorials on Website designing with word press Online Workshop on “MOOCs ,Online Courses, & Open Educational Resources” on 1 July,2020
- Online FDP on Introduction of Moodle for Teaching Learning Process
- Online FDP on Introduction of Moodle for Teaching Learning Process on 8 April,2021.