ANNUAL REPORT-2019-20



DEPARTMENT OF LIFE SCIENCES

ରମାଦେବୀ ମହିଳା ବିଶ୍ୱବିଦ୍ୟାଳୟ, ଭୁବନେଶ୍ୱର Rama Devi Women's University, Vidya Vihar, Bhubaneswar

1.Name of the department: Department of Life Science

2. Mission and vision

Mission:

We not only want to give good education to students, but also our mission is to educate them in the following ways,

- Providing adequate knowledge and advancement in plant science (theory and practical)
- Use of modern technology and agriculture
- To identify rare and wild plants and their conservation
- To maintain herbarium
- To pursue a career in science
- Above to them industry ready to compete at national and international level

Vision:

The committed faculty members with the available infrastructure intent to disseminate knowledge, generate interest among the students on the subjects and its applied aspects and to make them par excellence so that they will be able to pursue a career in higher studies and research.

3. Academic Programmes:

- a. M.Sc. Life Science
- b. Ph.D. Life Science
- c. M.Sc. Industrial Microbiology
- d. Skill based certificate course

4. Publications/patents

JOURNAL PAPERS

S1	Paper Title	Author(s)	Name of the	Year of	Link to the
no.			Journal;	Publication	article
			Volume; Page		(doi/website)
			no.		
1.	Marine microfiber	S. Mishra, C. C.	Marine Pollution	2019	https://doi.org/10.
	pollution: A review	Rath, AP Das	Bulletin		1016/j.marpolbul.
	on present status				2019.01.039
	and future		140: 188-197		
	challenges.		110.100 177		
2.	In Vitro	I Das, MK Panda,	Asian Journal of	2019	https://doi.org/ <u>1</u>
	antimicrobial	C. C. Rath	Pharmaceutical		0.22159/ajpcr.20
	activity and		and Clinical		<u>19.v12i3.29319</u>
	molecular		Research		
	characterization of		itesearen		

3.	Bacillus amyloliquicifaciens isolated from Smilipal Biosphere Reserve, Odisha, India Condition Optimization for Phosphate Solubilization by Kosakoniacowanii MK834804, an Endophytic Bacterium Islated from Aegle marmelos.	S. Panigrahi, C. C. Rath	12(3): 1-6. Int. J. Curr. Microbiol. App. Sci 8(8):2823-2835	2019	https://doi.org/ <u>1</u> 0.20546/ijcmas. 2019.808.325
4.	Characterization of Antibacterial Activity of Selected Essential Oils	S. Hota, C. C. Rath.	Int. J. Curr. Microbiol. App. Sci 8(9):1051-1059.	2019	https://www.resea rchgate.net/public ation/344707675_ Characterization_ of_Antibacterial_ Activity_of_Selec ted_Essential_Oil s
5.	Potential of breastmilk in stem cell research.	Tripathy, S., Singh, S . and Das, S.K.,	<i>Cell and Tissue</i> <i>Banking</i> , <i>20</i> (4), pp.467-488.	2019	https://link.spring er.com/article/10. 1007/s10561- 019-09791-6
6.	Development of a colloidal gold strip-based immunochromato graphic assay for rapid detection of <i>Fusarium</i> <i>oxysporum</i> in ginger.	Ray, M., Achary, K.G., Nayak, S. and Singh, S .,	Journal of the Science of Food and Agriculture, 99(14), pp.6155- 6166.	2019	DOI: <u>10.1002/jsf</u> <u>a.9859</u>
7.	PreparationofstablebranchedDNANanistructures:Processof	A.K.Nayak, S.K.Rath ,U.Sub udhi	The Journal of Physical Chemistry B 123:3591-3597.	2019	doi.org/10.1021/a cs.jpcb.9b00353

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	Cooperative Self				
	Assembly.				
8.	<i>Coelogyne</i> <i>fimbriata</i> Lindl.va rburmanensis Kumar: a new orchid species from Manipur, India.	R. Supriya Devi, Sujata R Swain, S.K.Rath , S. Kumar and N.K.Dhal	I ₃ Biodiversity 6: 601-605	2019	https://www.rese archgate.net/publ ication/33984878 <u>1_Coelogyne_fim</u> briata_Lindl_var burmanensis_Ku mar_a_new_orchi d_species_from_ Manipur_India
9.	Solar Photovoltaic Panels as next generation waste: A Review.	Mishra, S., Rout, P.K., Das, A.P.	Biointerface Research in Applied Chemistry	2019 9(6), 4539- 4546.	https://doi.org/10. 33263/BRIAC96. 539546
10	Isolation and Identification of Lead (Pb) Solubilizing Bacteria from Automobile Waste and Its Potential for Recovery of Lead from End of Life Waste Batteries.	A. Prabhakar, S. Mishra & A. P. Das.	Geomicrobiology Journal.	2019	https://doi.org/10. 1080/01490451.2 019.1654044
	Molecular identification of native lactic acid bacteria isolated from curd samples with probiotic potential.	P. Biswal, A. Pal and A.P. Das.	Biointerface Research in Applied Chemistry.	2019	https://doi.org/10. 33263/BRIAC96. 591597
12	Marine microfiber pollution: A review on present status and future challenges.	S.Mishra, C.C. Rath and A. P. Das.	Marine Pollution Bulletin	2019 140, 188-197	https://doi.org/10. 1016/j.marpolbul. 2019.01.039

BOOKS/BOOK CHAPTERS

Sl	Book/book chapter	Author(s)	ISBN/ISSN	Year of	Name of the
no.	Title		number	Publication	publisher

1.	Evaluation of medicinal values of selected threatened medicinal plants available in Bhubaneswar,Odisha.	J P Jema, L Sahu, S Kumar, S K Rath, C. C Rath.		(2019) pp: 85-95.	Medico Biowealth of Odisha. S Kumar et al. (Ed) Ambika Prasad Research Foundation
2.	Characteristics Features of Mesenchymal Stem Cells, Biotechnology for Sustainable Utilization of Bioresources,	Seema Tripathy and Shikha Singh	ISBN: 978-93- 88982-00-9	2019	Daya Publishing House®Astral International Pvt. Ltd.
3.	Indian Giant Squirrel.	Sanghamitra Acharya, Sanjeet kumar, Sakti Kanta Rath	ISBN:978-81- 938861-7-5	2019.	Ambika Prasad Research Foundation.

PATENTS

Sl no.	Title of patent	Patent holders	Patent type & Country	Year of Filing	Status (Published/granted)

1. Research Projects

Sl. No	Title of the project	Name of the PI/Co-PI	Funding Agency	Amount mobilized
1.				
2.				
3.	Establishment of a culture collection centre in North East Region of India phase II	Co- investigator Dr. Alok Prasad Das	DBT Govt. of India	202880 Lakhs

4. Teachers' achievement Prof. Chandi Charan Rath

 Organizer of National Conference on advances in Life Sciences and biotechnology, RDWU, 27th – 28th Feb 2020.

Dr. Sakti Kanta Rath

- Organizer of National Conference on advances in Life Sciences and biotechnology, RDWU, 27th – 28th Feb 2020.
- ii. International Webinar on Understanding the COVID-19 Pandemic, Challenges and opportunities. RDWU, June 2020.

Dr. Alok Prasad Das

- A.P. Das. Bacterial extraction and recycling of Manganese from mining residues 2nd International Conference on Bioprocess for Sustainable Environment and Energy (ICBSEE-India-2020) 5 -7th March, NIT Rourkela, Odisha.
- ii. A.P. Das. Synthetic Microfibers: Detection, Characterization and removal for Environmental Sustainability. Third International Conference on Advanced Materials for Power Engineering (ICAMPE 2019), conference, 9-11 August 2019 at Mahatma Gandhi University, Kottayam, Kerala, India.

Dr. Navneet Kaur

- Science and Technology Interventions for Welfare of Tribal Population, National Academy of Sciences (NASI), Allahabad & amp; the Institute of Life Sciences (ILS), Bhubaneswar, 24th -25th Feb, 2020.
- Webinar on Opportunities and Challenges for Higher Technical Education post COVID-19, C.V. Raman Global University, 21th May 2020.
- Webinar on "Alternative Assessment & amp; Evaluation models during COVID-19 Crisis", Acharya Narendra Dev Nagar Nigam Mahila Mahavidyalaya Harsh Nagar, Kanpur, 14th May 2020.
- Webinar on Biodiversity and Public Health, Shivaji College, Delhi University & Society for Ecological Research and Natural Resources Management, 19th May 2020.
- v. Organiser of National seminar "Life-Tech", 27th 28th Feb 2020.

Dr. Mukta Mayee Kumbhar

- Presented paper at National Conference on Research Development in Fisheries (NCRDF-2019), Department of Zoology, BB Ambedkar University, Lucknow, 7th-8th Nov 2019.
- Attended National Conference on Advances in Life Sciences & Conference & Conference

- iii. Attended One Day National Webinar titled "Open Educational Resources, Gargi College, University of Delhi, 21th May 2020.
- Attended National Webinar on "Information Literacy to Fight Epidemics", B.B.
 Ambedkar University, Lucknow, 22nd May 2020
- v. Attended International Webinar on Quarantine and Prevention of Diseases: international and Comparative Law Perspectives, B.B. Ambedkar University, Lucknow, 25th May 2020
- vi. Attended Online FDP on "Artificial Intelligence", Vignana Bharathi Engineering College, Telangana, 22nd 26th May 2020.
- vii. Organizer of National Conference on advances in Life Sciences and biotechnology, RDWU, 27th – 28th Feb 2020.

Ms. Jamuna Tudu

- National Conference on Advances in Life Sciences & Biotechnology by Dept. of Biotechnology & Dept. of Life Sciences, 27th – 28th Feb 2020.
- National Online Workshop in "Research Methodology" by Indira Gandhi National Tribal University, Amarkantak, M.P., 26th – 30th May 2020.

5. Students' achievement

i. Swagatika Rath, P.G. student of Dept. of Life Sciences qualified Odisha Administrative Service Examination.

6. Seminars/FDPs/Workshops organized



Organizing of National Conference on "Advances in Life Sciences & Biotechnology" organised by Dept. of Biotechnology & Dept. of Life Sciences, Rama Devi Women's University, 27th – 28th February, 2020.



Dr. Prasanta Kumar Rout, Asst. Prof., Tripura University as guest speaker in departmental seminar



Dr. Nilotpala Pradhan, principal scientist and Associate Professor, IMMT delivering talk in Departmental seminar series, 15.02.2020.

- 7. Social outreach programmes conducted: Nil
- 8. Any other
 - i. Alumni activities: NIL
 - ii. Certificate/skill courses: NIL