

ANNUAL REPORT-2018-19



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

Sl no.	Paper Title	Author(s)	Name of the Journal; Volume; Page no.	Year of Publication	Link to the article (doi/website)
1.	Anticancerous and Immunomodulatory Activities of <i>Alpinia nigra</i> (Gaertn.) Burt.	Sahoo, S., Kar, B., Dash, S., Ray, M., Acharya, K.G., Singh, S. and Nayak, S.,	<i>Journal of Essential Oil Bearing Plants</i> , 21(4), pp.869-875.	2018	https://doi.org/10.1080/0972060X.2018.1524795
2.	Impact of novel N-aryl piperamide NO donors on NF-κB	Shahbazi, S., Kaur, J., Singh, S. , Achary, K.G., Wani, S., Jema,	<i>Innate Immunity</i> , 24(1), pp.24-39.	2018	DOI: 10.1177/1753425917740727

	translocation in neuroinflammation: rational drug-designing synthesis and biological evaluation	S., Akhtar, J. and Sobti, R.C.,			
3.	Edible plant-derived essential oils synergistically enhance the Th1, Th2 and anti-inflammatory cytokines in neonatal cord blood monocytic cell line.	Dash, S., Ray, M., Parida, R., Achary, K.G., Nayak, S. and Singh, S. ,	<i>Food and Agricultural Immunology</i> , 29 (1), pp.346-357	2018	https://doi.org/10.1080/09540105.2017.1376039
4.	Development and evaluation of polyclonal antibodies for detection of <i>Pythium aphanidermatum</i> and <i>Fusarium oxysporum</i> in ginger	Ray, M., Dash, S., Achary, K. G., Nayak, S., & Singh, S	<i>Food and Agricultural Immunology</i> , 29(1), 204-215.	2018	https://doi.org/10.1080/09540105.2017.1365820
5.	Plant based natural pesticides.	B.Baliyarsingh and S.K.Rath	Sabujima 26:12-16.	2018	
6.	Invitro propagation by axillary shoot proliferation, assessment of antioxidant activity and genetic fidelity of micropropagated <i>Paederiafoetida</i> L	B. Behera, P.Sinha, S. Gouda, S.K.Rath , D.P.Barik, P.K.Jena, P.C.Panda, S.K.Naik (2018)	J. of Applied Biology and Biotechnology. 6(2): 41-049	2018	DOI: 10.7324/JABB.2018.60207

BOOKS/BOOK CHAPTERS

Sl no.	Book/book chapter Title	Author(s)	ISBN/ISSN number	Year of Publication	Name of the publisher
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1	In Vitro Secondary Metabolite Production Through Fungal Elicitation: An Approach for Sustainability.	Shasmita, N.R.Singh, S.K.Rath , S. K.Behera and S.K.Naik	ISBN: 978-981-10-8666-3	2018	Springer
2	Biotechnological intervention through tissue culture in <i>Hedychium coronarium</i> : A potential anticancer plant.	S. Behera, S.K.Rath , Mohd. S Akhtar, S.K.Naik	ISBN:978-981-10-8064-7	2018	Springer
3	Microbial pesticides- Potential Alternative.	B. Baliyarsingh, A. Mishra and S.K.Rath	ISBN:9781351248914	2018	Apple Academic Press, Taylor and Francis
4	Prospects and application of Azospirillum spp as a natural agricultural biofertilizer.	D. Mohapatra, N.R.Singh and S.K.Rath	ISBN:9781351248914	2018	Apple Academic Press, USA
5	Bioremediation of insecticides by white rot fungi and its environmental relevance.	D Mohapatra, S.K.Rath and P.K.Mohapatra	ISBN:978-3-319-68957-9	2018	Springer

PATENTS

Sl no.	Title of patent	Patent holders	Patent type & Country	Year of Filing	Status (Published/granted)
1	METHOD OF DETECTING RHIZOME ROT IN TURMERIC CROP AND ICT KIT FOR EARLY DIAGNOSIS OF THE SAME.	S. Singh	Indian patent	2018	Published

1. Research Projects

S.No	Title of the project	Name of the PI/Co-PI	Funding Agency	Amount mobilized
1	Bioreactor based enhanced biorecovery of manganese from mining waste residues [SP/YO/031/2016].	Dr. Alok Prasad Das	DST, Govt. of India	32.5 Lakhs
2	Enhanced recovery of Manganese as Electrolytic Manganese Dioxide (EMD) from Ferro manganese mine tailings through bioleaching	Dr. Alok Prasad Das	Ministry of Mines, Govt. of India	30 Lakhs

2. Teachers' achievement

Prof. Chandi Charan Rath

- i. Isolation and characterization of endophytic bacteria from selected medicinal plants and exploitation of their potential role in sustainable agriculture with reference to plant growth promoting activities and biocontrol properties.

Dr. Shikha Singh

- i. Presented paper at International Conference on Innovative Research in Chemical, Bioprocess, Textile, Mining, Aeronautics, Nanotechnology, Material Science and Metallurgical Engineering. (CBMT-2018), 22nd Dec 2018.
- ii. National conference on BIEMPM & 42 and Annual conference of Odisha botanical society, 2018.
- iii. Presented paper at International conference on science and Arts of Holistic Health, 29th April 2018.
- iv. Presented paper at National Conference on molecular Biology, 4th – 5th Jan 2019.
- v. Presented paper National workshop on Emerging trends in Life Sciences for sustainable Development, 8th – 9th Feb 2019.

Dr. Sakti Kanta Rath

- i. Presented paper at National seminar on Importance of sacred groves for conservation of medicinal plants and Biodiversity, 7th Jan 2018.

Dr. Navneet Kaur

- i. Induction program for newly recruited RDWU faculty, RDWU from 20th – 27th Aug 2018.
- ii. Effective classroom management, ICFAI Business School, 9th Sep 2018.

- iii. National Seminar on Biotechnological Interventions towards Stress Management, Department of Biotechnology, RDWU, 12th Jan 2019.
- iv. Presented paper at National Workshop on Emerging Trends in Life Sciences for Sustainable Development, Department of Life Sciences, RDWU, 8th -9th Feb 2019.
- v. Symposium on Emerging Trends in Biological Sciences Research, Institute of Life Science, 18th - 19th March 2019.
- vi. Identification and characterization of floral & faunal species & methods for the evaluation of their pharmacological values, Ambika Prasad Research Foundation, 22nd – 23rd April 2019.

Dr. Alok Prasad Das

- i. A.P. Das. National level brainstorming workshop on conservation of horseshoe crab and horseshoe crab habitats on 26th April 2019 in Kolkata.
- ii. A.P.Das. Biomineral Recycling for Bioenergy Applications. Workshop on Energy Production and Management, 19th-23rd March 2018, NIT Agartala.

Dr. Mukta Mayee kumbhar

- i. Faculty Knowledge Sharing Programme on “Teacher-taught Relationship: A Paradigm Shift & Effective Classroom Management” at RD Women’s University, Bhubaneswar, 9th Sep 2018.
- ii. National Seminar on Biotechnological Interventions towards Stress Management, at Dept. of Biotechnology, RD Women’s University, Bhubaneswar, 12th Jan 2019
- iii. National workshop on Emerging Trends in Life Sciences for Sustainable Development, at RD Women’s University, Bhubaneswar, 8th -9th Feb 2019.
- iv. Presented paper at National Conference on Research Development in Fisheries, 7th – 8th Nov 2019.

Miss Jamuna Tudu

- i. Presented paper at National Seminar on Indigenous Knowledge and conservation of Threatened Medicinal plants by APRF, SOA, CUTM, 30th and 31st Aug 2019.

3. Students' achievement

- i. Anwasha Behera, Punam Sourav, Shivani Behera, Sushree Manisha Behera was selected for Campus Placement by OMICS International.
- ii. Sweta Mishra won 3rd Prize in Oral Presentation organised by Annual Conference of Odisha Botanical Society.
- iii. Syed Afroze won 3rd Prize in Group Discussion in Wildlife week competition by KMNH, BBSR.
- iv. Anwasha Behera, Debasrita Mohanty, Sweta Mishra were awarded IMA Scholarship.

- v. Jayashree Behera won 2nd Prize in Quiz Competition organised by Mamata Charitable trust, BBSR.
- vi. Rajanandini Nayak won 3rd Prize in State Level Essay Competition organised by Department of Information & Public Relation, Govt. Of Odisha on the Occasion of Dr. Harekrushna Mahatab Jayanti.
- vii. Rajanandini Nayak won 2nd Prize in State Level Essay Competition organised by Department of Information & Public Relation, Govt. Of Odisha on the Occasion of Bravery Day.
- viii. Rajanandini Nayak won 3rd Prize in State Level Essay Competition organised by Department of Information & Public Relation, Govt. Of Odisha on the Occasion of Saheed Laxman Nayak Jayanti.
- ix. Rajanandini Nayak won 3rd Prize in State Level Essay Competition organised by Department of Information & Public Relation, Govt. Of Odisha on the Occasion of Utkala Gouraba Madhusudan Das Shraddha Divasa.
- x. Rajanandini Nayak won 2nd Prize in State Level Essay Competition organised by Department of Information & Public Relation, Govt. Of Odisha on the Occasion of Late Nabakrushna Choudhury Jayanti.
- xi. Rajanandini Nayak won 1st Prize in State Level Essay Competition organised by Department of Information & Public Relation, Govt. Of Odisha on the Occasion of
- xii. Deepika Devi, Monalisa Rout, Suchismita Das availed Medhabruti Scholarship.
- xiii. Anwasha Behera of PG 2nd year won Best Poster Prize in M.Sc. Category in ‘National Workshop on Emerging Trends in Life-Sciences on Sustainable Development, RDWU.
- xiv. B. Jyotirmayee M.Phil. student of Life Science Department won Best Poster Prize in M.Sc. Category in ‘National Workshop on Emerging Trends in Life-Sciences on Sustainable Development, RDWU.
- xv. Rajanandini Nayak , Deepika Devi, Monalisa Rout, Suchismita Das of PG 2nd year students awarded with Medhabruti Scholarship, in 2018.
- xvi. Syed Afroze of PG 2nd year won 3rd Prize in Group Discussion in Wildlife week competition by KMNH, BBSR.

xvii. Anwasha Behera, Punam Sourav, Shivani Behera, Sushree Manisha Behera of PG 2nd year were selected for Campus Placement by OMICS International.

4. Seminars/FDPs/Workshops organized



National workshop on Emerging trends in Life Sciences for Sustainable Development. Rama Devi Women's University Februray8-9, 2019.



Student delivering seminar



National Seminar on Plants for Sustainable Development and Clean Environment & 43rd Annual Conference of Odisha Botanical Society on 23rd -24th December, 2018.



Swachh Bharat Abhiyan

5. Social outreach programmes conducted:



Two-day Workshop on “Identification and Characterisation of floral & faunal species & Methods for the Evaluation of their Pharmacological values” by APRF on 22nd -23rd April, 2019.



Sensitization meeting under Women’s Scientist scheme by KIRAN, KIIT on 30th September, 2018.



Visit to Central Instrumentation Lab, OUAT 2019.



Visit to Odisha conclave



Visit to CIFA for a detailed idea about aquaculture and hydroponics.



6. Any other

- i. Alumni activities: NIL
- ii. Certificate/skill courses: NIL