

SANHITA PADHI

ASSOCIATE PROFESSOR

DEPARTMENT OF BOTANY AND BIOTECHNOLOGY

SCHOOL OF LIFE SCIENCE

RAVENSHAW UNIVERSITY, CUTTACK, ODISHA, INDIA



Phone: (+91) 993-849-6445
san_puri9828@rediffmail.com
sanhitabot@gmail.com
spadhi@ravenshawuniversity.ac.in

Qr. No. 4RF/3, Bayababa Matha Road
Nicco Park Square, Unit 9
Unit 9 Flats, Bhubaneswar
Odisha, India 751022

EDUCATION

<i>Degree Awarded</i>	<i>Degree / Specialization</i>	<i>Class / Distinction</i>	<i>Institute / University</i>	<i>Year of Completion</i>
Bachelor of Science (B.Sc.) Hons & Distinction	Botany	First class distinction Rank: First	Utkal University	1982
Master of Science (M.Sc.)	Botany (Biochemistry & Enzymology)	First class Rank: First	Utkal University	1984
Master in Philosophy (Sc.)	Botany (Histochemistry, Embryology & Microscopy)	First class Rank: Third	University of Delhi	1986
Doctor of Philosophy (Ph.D.)	Botany (Microbial Biochemistry & Biotechnology)		National Rice Research Institute, Cuttack (Utkal University)	2006

Ph.D. Details: Submitted thesis titled “Microbial Metabolism of Pesticides in Rice Soil” in the field of Microbial Biochemistry & Biotechnology under the supervision of Dr. T. K. Adhya, Principal Scientist and Ex-Director, NRRI.

PROFESSIONAL EXPERIENCE

<i>Organization</i>	<i>Designation</i>	<i>Service Period</i>		
		<i>From</i>	<i>To</i>	<i>Total Experience</i>
Ravenshaw University, Cuttack	Associate Professor	2010	Present	8 years
Odisha Public Service Commission, Youth & Higher Education Service, Govt. of Odisha	Lecturer, Sr. Lecturer, Reader & Assoc. Prof.	1988	2010	22 years
Odisha Education Service, Govt. of Odisha	Lecturer	1987	1988	1 year

RESEARCH AREA

Core Research Area: Biochemistry

Current Research Fields:

- Abiotic Stress & Microbial Biochemistry
- Acoustic research (Therapeutic Effect of Sound energy, Indian Classical Music: Vocal and Instrumental Music) in relation to Plant Physiology & Biochemistry
- Magnetism & Plant Processes
- Planetary Sounds / Radio waves & plant Biochemistry
- Natural Green Music and Plant Life Processes
- Sound energy as bio-pesticides
- Bio-fuel Production from food-crop plants

RESEARCH PROFILE

List of Ph.D. / M.Phil. / M.Sc. Dissertations / Thesis Guided

Name of the Research Scholar	Degree / Specialization	Title of M.Phil. / Ph.D. / M.Sc. Thesis	Year of Registration	Year of Completion
Lisi Swagatika	M. Phil., Botany (Biochemistry)	Plant Pigments-A Rainbow of Healthy Nutrition in Human-A Review	2010	2011
Jyotirmayee Saw	M. Phil., Botany (Microbiology)	Functional viability and Osmo tolerance of <i>Bacillus thuriengenesis</i> of Coastal Saline Ecologies	2011	2012
Mandakini Raj	M. Phil., Botany (Biochemistry)	Biochemical Analysis and Antioxidant Studies in <i>Madhuca Indica</i> J.F. Gmel from Western and Northern Belt of Odisha	2012	2013
Swati Dash	M. Phil., Botany (Biochemistry)	Quantitative and Qualitative Analysis of the Biochemical and Phytochemical Compounds in the seeds and leaves of <i>Citrullus colosynthis</i> (L.) schard and Characterization of seed oil	2013	2014
Rageshree Swain	M. Phil., Botany (Biochemistry)	Effect of Harmonic Octave Consonants (Classical Musical Notes) on various Physiological processes in Plants	2014	2016

<i>Name of the Research Scholar</i>	<i>Degree / Specialization</i>	<i>Title of M.Phil. / Ph.D. / M.Sc. Thesis</i>	<i>Year of Registration</i>	<i>Year of Completion</i>
Pragyan P. Rout	M. Phil., Botany (Biochemistry)	Effect of synchronized sound waves in the form of Instrumental classical music (strings and closed pipes) on various Physiological processes of Plants	2014	2016
Sampat Pratap	M. Phil., Botany (Biochemistry)	Phytochemical & Biochemical Analysis in <i>Boerhavia diffusa</i> L. – its leaf and stem	2015	2016
Nitu Das	M. Phil., Botany (Biochemistry)	Impact of additional pesticide and fertilizers on growth of plant and soil microbes in Guar cultivation.	2015	2016
Lipika Dash	M. Phil., Botany (Biochemistry)	Effect of Ethylene on storage life & on Biochemical contents in Indian and Thai guava variety	2016	2017
Bibhuti Bhushan Champati	M. Phil., Botany (Biochemistry)	Amplification of DNA and Screening for antimicrobial activity of PSB from coastline of Puri	2017	To be submitted in July, 2018
Swastika Mallick	M. Phil., Botany (Biochemistry)	Phytochemical and Biochemical analysis of <i>Moringa oleifera</i> leaf and <i>Syzygium cumini</i> seed extracts using different solvent extraction	2017	To be submitted in July, 2018
Saswat Nayak	Ph.D., Botany (Biochemistry)	Quantitative and Qualitative Analysis of the Biochemical and Phytochemical Compounds in the Bark and Ovary of <i>Madhuca indica</i>	2008	2013
Madhusmita Barik	Ph.D., Botany (Biochemistry)	Physiological and Biochemical responses of chromosome segment substitution lines of rice to moisture stress and association of root traits with molecular markers	2013	2018

<i>Name of the Research Scholar</i>	<i>Degree / Specialization</i>	<i>Title of M.Phil. / Ph.D. / M.Sc. Thesis</i>	<i>Year of Registration</i>	<i>Year of Completion</i>
Sonali Acharya	Ph.D., Botany (Biochemistry)	Characterization of toxins of <i>Bacillus thuringiensis</i> isolated from rice genotypes and their virulence assessment against leaf folder (<i>Cnaphalocrosis medinalis</i>) Guenee	2013	Continuing
Mandakini Raj	Ph.D., Botany (Biochemistry)	Phytochemical, Antimicrobial and antioxidant activities in <i>Madhuca indica</i> J.F.Gmel.	2015	Continuing
Bandita Pati	Ph.D., Botany (Biochemistry)	Study of microbial diversity in saline soil of Odisha coastline and their role in adaptation strategy to saline stress in Padmini rice plant	2015	Continuing
Pragyan P. Rout	Ph.D., Botany (Biochemistry)	Phytochemical, phytohormonal and proteomic analysis of <i>Vanda tessellata</i> (Roxb.) Hook.Ex.G.Don. and <i>Dendrobium denisoniana</i> (Benson.) Ex. RCHB. F. on exposure to synchronized soundwaves	2016	Continuing
Rageshree Swain	Ph.D., Botany (Biochemistry)	Effect of Harmonic octave consonants of Indian Classical <i>Ragas</i> on the physiological, biochemical and molecular processes in <i>Camiphora wightii</i> (Arn.) Bhandari and <i>Rauvolfia serpentina</i> (L.) Benth. Ex. Kurz.	2016	Continuing
Durga Madhab Rath	Ph.D., Botany (Biochemistry)	Effect of Electro Magnetic Field (EMF) and Geomagnetic field (GMF) on growth and development of wheat (<i>Triticum aestivum</i> L.) and Maize (<i>Zea mays</i>)	2017	Continuing
Aditya Dash	Ph.D., Botany (Biochemistry)	Effect of Planetary sounds (Earth and Jupiter) on Physiology, Growth and Development of <i>Clitoria Ternatea</i> (Aparajita) and <i>Ocimum sanctum</i> (Tulsi)	2017	Continuing

<i>Name of the Research Scholar</i>	<i>Degree / Specialization</i>	<i>Title of M.Phil. / Ph.D. / M.Sc. Thesis</i>	<i>Year of Registration</i>	<i>Year of Completion</i>
Avijeet Ku. Mohanty	M.Sc., Biotechnology	Simple and Inexpensive method for Extraction of Human Genomic DNA from dried blood spots	2016	2017
Bibhuti Bhushan Champati	M.Sc., Botany	Effect of Planetary Sounds (Viz. Planet Earth & Jupiter's sound) on germination, growth & development of <i>Pisum sativum</i> L. and <i>Abelmoschus esculentus</i> (L.) Moench.	2016	2017
Bibhuti Bhusan Biswal	M.Sc., Botany	Finding Effective Inhibitor for HIV-1 Protease: A QSAR approach towards drug discovery	2016	2017
Chandra Sekhar Bhoi	M.Sc., Botany	Comparative study of extraction methods for determination of antioxidant activity in extracts of <i>Madhuca indica</i> J.F Gmel flowers	2016	2017
Anindita Mishra	M.Sc., Botany	Effect of storage temperature on phytochemical and antioxidant activity in <i>Madhuca indica</i> J.F Gmel flowers	2017	2018
Rajib Kundu	M.Sc., Botany	Effect of static magnetic field on germination, growth and development of <i>Zea mays</i> L. in two different soils	2017	2018
Dinesh Kumar Panda	M.Sc., Botany	Effect of Electro Magnetic Frequency-RF on seed germination and Biochemical Studies in seedling using cell phones	2017	2018

List of Ongoing Projects

<i>Title of the Project</i>	<i>Funding Agency</i>	<i>Period</i>	<i>Grant / Amount to be Mobilized in INR</i>
Study of Phytochemistry and Bioactivity of essential oils collected from wild variety of Ethno botanical plant species of Tribal zones of Bastar Dist, (M.P.) and Mayurbhanj Dist. (Odisha)	TRD-Project*, Ministry of Tribal Affairs, Central Govt. (Alliance with University of Pune)	02 + 01years (2016-2019)	3,700,000
Effect of GMF and EMF on soil characters and growth and Development of Crop plants	DRDO*(PCRA-Research & Development Project) (Alliance with Central University of Hyderabad)	03 years (2016-2019)	5,500,000
To Identify and elucidate structural changes in a single species of plant (<i>Clitoria ternatea</i>) during its germination and vegetative growth, due to the effect of planetary sound (planet Earth and planet Jupiter) through histological studies using Foldscope Microscope	Department of Biotechnology, Ministry of Science and Technology, Govt. of India.	03 years (2018-Continuing)	2,000,000

PUBLICATION PROFILE

Journal Publications

1. Sonali Acharya, **Sanhita Padhi***, T. K. Dangar, “Endophytic microbial diversity and population dynamics in wild and cultivated rice genotypes”, Plant Science Research, vol. 39, no. 1 & 2, 2018, pp. 35-41. ISSN 0972-8546, IF: 3.63.
2. Sonali Acharya, **Sanhita Padhi***, LK Bose, T. K. Dangar, “Structure and Function of phytonic *Bacillus thuringiensis* of wild rice genotype *Oryza brachyantha* A. Chev. And Roehr”, Oryza, vol. 54, no. 4, 2017, pp. 431-444. Peer reviewed, DOI 10.5958/2249-5266.2017.00059.5, **SCI Indexed**.
3. Madhusmita Barik, SK Dash, **Sanhita Padhi**, P. Swain, “Effect of drought on Morpho-physiological, yield and yield traits of chromosome segment of substitution lines (CSSLs) derived from wild species of rice.”, Oryza, vol. 54, no. 1, 2017, pp. 65-72. ISSN 2249-5266, **SCI Indexed**.

4. **Sanhita Padhi***, Rageshree Swain, Pragyan P. Rout, "Bioactive compounds from Macro Algae - The Medicinal Prospectives", Scholarly Research Journal for Interdisciplinary Studies, vol. 4, no. 29, 2017, pp. 4590-4602. IF: 6.177.
5. **Sanhita Padhi***, Rageshree Swain, Pragyan P. Rout, "Gasification - The Most Promising Approach to Waste-To-Energy Technology", Remarking An Analisation, vol. 2, no. 1, 2017, pp. 13-20. P: ISSN 2394-0344, E: ISSN 2455-0817, Peer reviewed, IF: 5.879, **Indexed with Google Scholar**.
6. P. P. Rout, **Sanhita Padhi***, "Ozone Technology and Photo Catalysis - The Newer Effective Methods for Keeping the Fruits and Vegetables Fresh for A Longer Period", American Journal of PharmTech Research, vol. 7, no. 3, 2017, pp. 57-68. E: ISSN 2249-3387, Peer reviewed, IF: 3.59, IC Value: 65.12.
7. Saktishree Jena, **Sanhita Padhi***, Rageshree Swain, Pragyan P. Rout, "Herbal Antidotes: A possible replacement of serum antivenome with effective lead compound using Bioinformatics tools", Plant Science Research, vol. 38, no. 1 & 2, 2016, pp. 101-105. ISSN 0972-8546, Peer reviewed, IF: 3.63.
8. **Sanhita Padhi***, Bandita Pati, "Persistence and Degradation of 'Endosulfan' - An Organochlorine Pesticides", Remarking, vol. 2, no. 9, 2016, pp. 105-110. P: ISSN 2394-0344, E: ISSN 2455-0817, IF: 5.879, **Indexed with Google Scholar**.
9. **Sanhita Padhi**, "Phytochemical Studies and Multipurpose uses of Seed Oil of *Moringa Oleifera*", Scholarly Research Journal for Humanity Science and English Language, vol. 3, no. 15, 2016, pp. 3662-3672. ISSN 2348-3083, IF: 4.44.
10. **Sanhita Padhi***, Bandita Pati, "Severity of persistence and toxicity of hexachlorocyclohexane (HCH) to the environment - A current approach", Scholarly Research Journal for Interdisciplinary Studies, vol. 4, no. 27, 2016, pp. 3159-3168. ISSN 2278-8808, IF: 6.177.
11. S. Dash, M.Raj, **Sanhita Padhi***, "Characterisation of seed-oil of *Citrullus colocynthis* (L.) Schard", Scholarly Research Journal for Interdisciplinary Studies, vol. 3, no. 18, 2015, Pages 188-192. ISSN 2278-8808, IF: 6.177.
12. **Sanhita Padhi***, Swati Dash, Mandakini Raj, "Phytochemical Analysis of Seeds and Leaves of *Citrullus Colocynthis* (L.) Schard", Asian Resonance, vol. 4, no. 3, 2015, pp. 105-107. P: ISSN 0976-8602, E: ISSN 2349-9443, IF: 5.706.
13. M. Raj, **Sanhita Padhi***, "Biochemical and Anti-oxidant Analysis of *Madhuca indica* J.F GMEL.", Scholarly Research Journal for Interdisciplinary Studies, vol. 3, no. 16, 2015, Pages 2657-2666. ISSN 2278-8808, IF: 6.177.
14. **S. Padhi***, "Degradation of Chemically related Organochlorine pesticides (γ -HCH & Vinclozolin) in rice soil, pre-exposed to each other", Plant Science Research, vol. 35, no. 1 & 2, 2013, pp. 1-7. ISSN 1612-4758, IF: 3.63.

15. **S. Padhi***, "Influence of selected heavy metals on the aerobic degradation of γ -HCH by HCH-degrading bacterial isolates", *Plant Science Research*, vol. 33, no. 1 & 2, 2011, pp. 103-111. ISSN 0972-8546, IF: 3.63.
16. **S. Padhi***, "Degradation of γ -HCH or vinclozolin pre-exposed to the other chemicals", *Environmental Pollution*, vol. 78, 2006, pp. 1124-1129. ISSN: 0269-7491, IF: 4.839.
17. **S. Padhi***, "Effect of Salinity on Aerobic Degradation of γ -HCH by *Ochrobactrum anthropi*", *Biology of Reproduction*, vol. 115, 2004, pp. 2133-2137. ISSN 1529-7268, IF: 4.027.
18. **S. Padhi***, "Influence of heavy metals (Zn, Cr) on degradation of HCH isomers by *Bacillus pumilus*", *Journal of General and Applied Microbiology*, vol. 112, 2003, pp. 857-859. ISSN 1349-8037, RG Journal Impact: 1.58.
19. **S. Padhi***, "Aerobic Degradation of γ -HCH by different soil bacteria as affected by their prior exposure to the same or other isomers of HCH", *Pesticides Research Journal*, vol. 9, 2002, pp. 63-67. ISSN 2249-524X, IF: 4.3.
20. Anjana Banerjee, **Sanhita Padhi**, Tapan K. Adhya, "Persistence and biodegradation of vinclozolin in tropical rice soils", *Pesticide Science*, vol. 55, no. 12, 1999, pp. 1177-1181. ISSN 1612-4758, RG Journal Impact: 0.84.
21. K. Bharati, **S. Padhy**, T. K. Adhya, "Accelerated biodegradation of gamma-hexachlorocyclohexane (gamma-HCH) in a flooded alluvial soil retreated with gamma-HCH or its metabolite 1, 2, 4-trichlorobenzene (TCB)", *Bulletin of Environmental Contamination and Toxicology*, vol. 60, no. 6, 1998, pp. 858-863. ISSN 0007-4861, GI: 1.414.

Conference Proceedings

1. Saktishree Jena, **Sanhita Padhi***, "Natural Air Purifiers: House Plants as Excellent Filters of Indoor Toxic Agents", *Proceedings of National Conference on Biotechnological Interventions for Environmental Stress Management in Plants and Microbes & 42nd Annual Conference of Orissa Botanical Society*, January 2018, pp. 43-44.
2. Sonali Acharya, **Sanhita Padhi***, T. K. Dangar, "Endophytic microbial diversity and population dynamics in wild and cultivated rice genotypes", *Proceedings of National Conference on Biotechnological Interventions for Environmental Stress Management in Plants and Microbes & 42nd Annual Conference of Orissa Botanical Society*, January 2018, pp. 76.
3. Karubaki Dhal, **Sanhita Padhi***, "Biosensor: An Innovative Technique to determine Fruit Ripening", *Proceedings of National Seminar of Indian Science Congress*, vol. 19, 2017, pp. 180-183.

4. Mandakini Raj, Chandrasekhar Bhoi, Bandita Pati, **Sanhita Padhi***, “Comparative Study of Extraction Methods for Determination of Antioxidant Activities in Extracts of *Madhuca Indica* J.F.Gmel. Flowers”, Proceedings of Indian Science Congress, vol. 19, 2017, pp. 142-145.
5. B. S. Sipra, **Sanhita Padhi***, “Biological Assessment of Filamentous Green Algae *Spirogyra* Sp. Collected from Similipal Biosphere Reserve, Odisha”, Proceedings of National Seminar of Indian Science Congress, vol. 19, 2017, pp. 9-13.
6. P. P. Rout, **Sanhita Padhi***, “Anti-oxidants from Seaweeds for pharmaceuticals”, Conference Proceedings of National Conference on Marine Bio-resources of East Cost of India and their Bioprospecting, 2016, pp. 71-72.
7. Rageshree Swain, **Sanhita Padhi***, “Bioactive Compounds from Seaweeds for the treatment of cancer”, Conference Proceedings of National Conference on Marine Bio-resources of East Cost of India and their Bioprospecting, 2016, pp. 72-73.
8. **Sanhita Padhi***, “Bioactive Compound from Macro algae – The medicinal Prospective”, Conference Proceedings of National Conference on Marine Bio-resources of East Cost of India and their Bioprospecting, 2016.
9. Sonali Acharya, **S. Padhi**, T.K. Dangar*, “Phenotypic and CRY diversity of the Endophytic BT of rice (*Oryza sativa* L.)”, Conference Proceedings of UGC Sponsored National Conference on Biodiversity Assessment, Monitoring and Conservation by Odisha Botanical Society, vol. 37, 2015, pp. 26-28.
10. P. Behera, M.Raj, **Sanhita Padhi***, “Role of Plant Compounds in wound healing - A review”, Conference Proceedings of UGC Sponsored National Conference on Biodiversity Assessment, Monitoring and Conservation by Odisha Botanical Society, 2015.
11. Bandita Pati, Mandakini Raj, **Sanhita Padhi***, “Microalgae - The emerging sources of sustainable energy”, Conference Proceedings of National Seminar on Science and Technology by Indian Science Congress Association (BBSR chapter), 2015, pp. 105-106.
12. Rageshree Swain, **Sanhita Padhi***, “Gasification - The Most Promising Approach to Waste-to-Energy Technology”, Conference Proceedings of National Seminar on Science and Technology by Indian Science Congress Association (BBSR chapter), 2015, pp. 107-108.
13. Pragyan Paramita Rout, **Sanhita Padhi***, “Ozone Technology and Photo Catalysis - The Newer Effective Methods for Keeping the Fruits and Vegetables Fresh For a Longer Period”, Conference Proceedings of National Seminar on Science and Technology by Indian Science Congress Association (BBSR chapter), 2015, pp. 111-112.
14. Mandakini Raj, Bandita Pati, **Sanhita Padhi***, “Endophytes as source of Bio active compounds”, Conference Proceedings of National Seminar on Science and Technology by Indian Science Congress Association (BBSR chapter), 2015, pp. 112-113.

15. Bandita Pati, Mandakini Raj, **Sanhita Padhi***, “Role of microorganisms in adaptation of agricultural crop plants to climate change - Review Article”, Conference Proceedings of Odisha Environmental Congress, 2015, pp. 1-9.
16. Pragyan Paramita Rout, **Sanhita Padhi***, “Global Climate change and its Impact on Energy Pyramid of Terrestrial Ecosystem in Eastern Himalayan Range”, Conference Proceedings of National Conference on Frontier in Life Science, 2015, pp. 12-15.
17. Dash, S., Raj, M., **Padhi,S.***, “Characterisation of seed oil and phytochemical analysis of seeds and leaves of *Citrullus colocynthis* (L.) Schard”, Conference Proceedings of 102nd Indian Science Congress, 2015.
18. M. Raj, **S. Padhi***, “Priliminary Phytochemical Screening of pollen and Gynoecium of *Madhuca indica* J.F. GMEL”, Conference Proceedings of UGC Sponsored National Conference on Biodiversity Assessment, Monitoring and Conservation by Odisha Botanical Society, vol. 37, 2015, pp. 14-17.
19. **Sanhita Padhi***, M. Raj, “Climatic Change and its Impact on mangrove Biodiversity of Odisha”, Conference Proceedings of UGC Sponsored National Conference on Biodiversity Assessment, Monitoring and Conservation: Application of Biotechnological Tools by Odisha Botanical Society, 2015, pp. 11-15.
20. M. Raj, **S. Padhi***, “Antioxidant studies in enzymes, extracted from corolla of *Madhuca indica* J.F.Gmel. from Western and Northern belts of Odisha”, Conference Proceedings of Indian Science Congress, vol. 26, 2014, pp. 51-54.
21. M. Raj, **S. Padhi***, “Phytochemical studies in different plant parts of *Madhuca indica* from Similipal Bioreserve Forest”, Conference Proceedings of UGC Sponsored National Seminar by Odisha Botanical Society, vol. 36, 2014, pp. 18-21.
22. **S. Padhi***, J. Saw, TK Dangar, “Characterization of osmotolerance of *Bacillus thuringiensis* of Bhitarkanika mangroove ecology, Odisha, India”, PPMNC on Recent Advances in Plant Biotechnology, 2013, pp. 39-47.
23. **S. Padhi***, “Biomedical Waste Management: A case study in a city hospital”, Conference Proceedings of 99th Indian Science Congress National Conference, 2012.
24. **S. Padhi***, “Biotechnology for the development for rural women in India”, Conference Proceedings of 99th Indian Science Congress National Conference, 2012.

Book Chapters

1. Rageshree Swain, Pragyan P. Rout, **Sanhita Padhi***, “Global Cooling: The Other Side of Global Catastrophic Change in Climate”, Bioprospecting In Life Sciences Excel India Publishers, 2018, pp. 287-289.
2. Pragyan P. Rout, **Sanhita Padhi***, “Global Climate Change and its Impact on Energy Pyramid of Terrestrial Ecosystem in Eastern Himalayan Range”, Frontiers in Life Sciences, Excel India Publishers, 2016, pp. 103-115.

3. Rageshree Swain, **Sanhita Padhi***, “Impact of Asteroid and Comet Explosion on Earth’s Atmosphere and Global Climatic Change”, *Frontiers in Life Sciences*, Excel India Publishers, 2016, pp. 89-102.

Books

1. **Sanhita Padhi**, “Persistence and Biodegradation Of γ -Hexachlorocyclohexane”, New Red Mars, 2018 (In Press).
2. **Sanhita Padhi**, “Microbial Degradation Of γ -HCH in Soil under Abiotic Stress”, New Red Mars, 2018 (In Press).

Popular Science Articles

1. **Sanhita Padhi**, “Global climate change and its impact on world peace and security”, *Proceedings of Indian Environmental Congress*, 2018.
2. **Sanhita Padhi**, “Talking Plants?”, *Aroma* (BARC, Ravenshaw University), 2018, pp. 23-27.
3. **Sanhita Padhi**, “Traditional verses Innovative Water Conservation practices in India - A Review article”, *Aroma* (BARC, Ravenshaw University), 2017, pp. 16-21.
4. **Sanhita Padhi**, “Traditional verses modern techniques of food Preservation - A Review article”, *Aroma* (BARC, Ravenshaw University), 2016, pp. 15-20.
5. **Sanhita Padhi**, “Can plants think?”, *Everyday Science*, 2015.
6. **Sanhita Padhi**, “The violent beauty of carnivorous plants”, *Sambad* (Daily News Paper), 2015.
7. **Sanhita Padhi**, “Genetically modified plants: Ability to eliminate food poisoning”, *Oracle* (Annual Regional Magazine), 2015.
8. **Sanhita Padhi**, “Some amazing Facts about 70,000 plant species utilized for medicine”, *Everyday Science*, 2014.
9. **Sanhita Padhi**, “Antioxidants in fruit pigments - A boon to health”, *Satadala* (Annual Regional Alumni Magazine), 2013.
10. **Sanhita Padhi**, “Choosing healthy fats”, *Aroma* (BARC, Ravenshaw University), 2012.

CONTRIBUTION PROFILE

List of Citations: Please refer the page at

<https://scholar.google.co.in/citations?user=ehec5ycAAAAJ>

List of Expert / Invited / Guest Lectures Delivered

<i>Title of Lecture / Academic Session</i>	<i>Title of Conference / Seminar etc.</i>	<i>Organized by</i>
Phenotypic and cry diversity of the endophytic Bt of rice (<i>Oryza sativa</i> L.)	National Conference on Biotechnological Intervention for Environmental Stress Management in Plants and Microbes, 2018	Odisha Botanical Society and PG Dept. of Botany, Utkal University
Effect of Planetary sounds (Earth and Jupiter) on Physiology, Growth and Development of plants	National Seminar on Emerging Trends in Biotechnology and crop Improvements, 2017	Dept. of Biotechnology, Ramadevi Womens University, Bhubaneswar
Biosensor: An Innovative Technique to determine fruit ripening	National Seminar on Reaching the unreachable through Science and Technology, 2017	Indian Science Congress and KIIT Deemed University, Bhubaneswar
Bioactive Compounds from Sea weeds for the treatment of Cancer	40 th OBS and National Conference on Marine Bio - resources of East Cost of India and their Bioprospecting, 2016	P.G. Dept. of Biosciences & Biotechnology and P.G. Dept. of Environmental Science, F.M. University, Balasore, Odisha
Role of microorganisms in adaptation of agricultural crop plants to climate change	Odisha Environmental Congress, 2015	Museum of Natural History, Bhubaneswar
Impact of Asteroid or Comet explosion on Earth's Atmosphere and Global Climatic Change	National Conference on Frontier in Life Science, 2015	Sambalpur University, Sambalpur
Ozone Technology and Photo Catalysis - The Newer Effective Methods for keeping the Fruits and Vegetables Fresh for a longer period	National Seminar on Science and Technology, Indian Science Congress Association- BBSR chapter, 2015	KIIT University, Bhubaneswar, Odisha
Priliminary Phytochemical Screening of pollen and Gynoecium of <i>Madhuca indica</i> J.F. GMEL	UGC Sponsored National Conference on Biodiversity Assessment, Monitoring and Conservation & Annual Conference of Odisha Botanical Society, 2015	Regional plant Research Centre, Bhubaneswar
Characterization of seed oil and Phytochemical analysis of seeds and leaves of <i>Citrullus colocynthis</i> (L.) Schard.'	Indian Science Congress, 2015	Mumbai University, Mumbai

<i>Title of Lecture / Academic Session</i>	<i>Title of Conference / Seminar etc.</i>	<i>Organized by</i>
ILI-National Faculty - Development Strategies	ILI-Odisha Chapter, Gopalpur, Berhampur, Odisha, 2012	International Leadership Institute (ILI), South Asia, Odisha Chapter
Socio-economic Developmental Challenges before Women Scientists, Technologists & Engineers	National Women Conference, 2009	NIT, Rourkela, Odisha
Anti-Darwinism	SPF-MEET, Balasore, Odisha, 2011	Student Professional Fellowship (SPF)
Integrity & Leadership	SPF-MEET, Kolkata, 2010	Student Professional Fellowship (SPF)
Cultural Relevance in grooming Women-leaders	SPF-MEET, Bhubaneswar, Odisha, 2009	Student Professional Fellowship (SPF)
Overcoming Adversities - A Challenge for Women	National Conference for Women, 2012, G. Udayagiri, Kandhamal Dist., Odisha	International Leadership Institute (ILI), South Asia, Odisha Chapter
Training Women Leaders & Changing Lives	National Faculty-Training programme for Women, 2011, Puri, Odisha	International Leadership Institute (ILI), South Asia, Odisha Chapter

List of Participations as a Resource Person

<i>Name of the Programme</i>	<i>Programme Venue</i>	<i>Duration</i>	<i>Organized by</i>
Summer Training for Teachers	Bhawanipatna, 1999	02 weeks	DIET, Govt. of Odisha
Summer Training for Teachers	Govt. College, Phulbani, 2000	08 days	Govt. College, Phulbani

List of Contributions as a Reviewer

- Reviewer of the Plant Science Research Journal
- Reviewer of the Oryza, National Rice Research Institute
- Reviewer of scholarly research journal for interdisciplinary studies
- Reviewer of Asian Resonance, Scholarly Research Foundation

List of Memberships of Professional Bodies

- Life member of Odisha Botanical Society
- Life member of Indian Botanical Society
- Life member of Indian Science Congress
- Life member of Society of Biochemistry and Biotechnology, IARI, Pusa, New Delhi
- Founder Life Member of Indian Climate Congress
- Founder Life Member of Indian Environmental Congress
- Life Member of Emerging Science
- Life member & member of Advisory Committee of All India SPF
- Faculty Member of International Leadership Institute, South Asia

List of Expert Participations in Educational / Research Institutions and Corporates

- **Member, Senior Research Committee**
Dept. of Botany, Ravenshaw University (2010 - till date)
Dept. of Botany, Utkal University, Vanivihar (2015 - 2018)
Dept. of Environmental Science, Sambalpur University, Jyotivihar (2014 - 2018)
- **Member, Board of Studies**
Dept. of Botany, Ravenshaw University (2010 - till date)
Dept. of Botany, Utkal University, Vanivihar (2016 - 2018)
Dept. of Environmental Science, Sambalpur University, Jyotivihar (2014 - 2018)
- **Sr. Committee Member for Introducing New Syllabus & New Courses both in UG / PG Departments**
Ravenshaw University (2010 – till date)
- **Member & In-charge of Admission Committee (Sc.Stream)**
Ravenshaw University (2010 - 2013)
- **Coordinator, UGC-sponsored-NET-Coaching for Minority**
PG Dept. of Botany, Ravenshaw University (2012 - 2015)
- **Secretary, Botanical Association of Ravenshaw College (BARC) Alumni Association**
Ravenshaw University (2012 - 2014)
- **Secretary, Staff Council (Teachers)**
PG Dept. of Botany, Ravenshaw University (2010 - 2016)
- **Director, IAS Study Circle**
Ravenshaw University (2016)
- **Coordinator, Skill and Entrepreneurship Development Programme**
Ravenshaw University (Dept. of Sc. and Technology, Govt. of Odisha) (2014 - 2016)

List of Conferences Organized

- Organized 5 days **DST – INSPIRE Programme** in Ravenshaw University, Cuttack, Odisha during 2011, 2012, 2013, 2014.
- Organized 3 days **PPM National Conference** in P.G. Dept. of Botany, Ravenshaw University, Cuttack, Odisha in 2012.
- Organized **Parija Seminar of 15 eminent Personalities for 150 years Celebration of Ravenshaw University**, in the Dept of Botany and Biotechnology, in 2017.

- Organised 2 days **workshops for aspiring women on social entrepreneurship** in the Dept of Botany and Biotechnology, Ravenshaw University, Cuttack, Odisha along with KIIT TBI, **mandated by US Consulate (Hyderabad)** in 2018.

List of Research / Academic Positions held in any Organizations

- Awarded Senior Research Fellow in an ICAR Project, working at University of Delhi, 1985 - 1987
- Awarded UGC-Teacher Fellowship, 1996 - 1999
- Awarded Best Teacher in 2006
- Lecturer, Sr. Lecturer, Reader and Associate Professor in Botany in various Govt. colleges under the Higher Education Dept. , Govt. of Odisha
- Head of the Dept. of Botany in a Govt. College (2006 - 2010)
- N.C.C. Officer in Charge in Govt. College [1(O) Girls' BN, Bhubaneswar] (2003 - 2007)
- Member, Purchase Committee, S.C.S. Govt. College, Puri (2006 - 2010)
- Sr. Member, Library Committee, S.C.S. Govt. College, Puri (2005 - 2010)
- Head of the Dept. of Botany, Ravenshaw University (2016 - 2018)
- Coordinator, Dept. of Biotechnology, Ravenshaw University (2016 - 2018)
- Member, Senior Research Committee, Dept. of Botany, Ravenshaw University (2010 - till date), Dept. of Botany, Utkal University, Vanivihar (2015 - 2018), Dept. of Environmental Science, Sambalpur University, Jyotivihar (2014 - 2018)
- Member, Board of Studies, Dept. of Botany, Ravenshaw University (2010 - till date), Dept. of Botany, Utkal University, Vanivihar (2016 - 2018), Dept. of Environmental Science, Sambalpur University, Jyotivihar (2014 - 2018)
- Asst. Supt. & Supt. Women's Hostel in Govt. College (5 years) & in Ravenshaw University (1 year)
- Member, Property Census Committee, Ravenshaw University (2010 - 2011)
- Sr. Committee Member for introducing new syllabus & new courses both in UG/PG Departments, Ravenshaw University (2010 – till date)
- Supt., Deputy Supt and Squad Member of Central Invigilation Duty, (both PG and UG) Ravenshaw University (2010 - till date)
- Member & In-charge of Admission Committee (Sc.Stream) , Ravenshaw University

- Coordinator, UGC-sponsored-NET-Coaching for Minority, PG Dept. of Botany, Ravenshaw University
- Organizer of different educational re-innovative programmes, UGC-sponsored DST-INSPIRE programmes, National and International Conferences of the Ravenshaw University
- Secretary, Botanical Association of Ravenshaw College (BARC) Alumni Association
- In-Charge of Students' disciplinary Committee, Ravenshaw University
- Secretary, staff council (Teachers), PG Dept. of Botany, Ravenshaw University
- Director, IAS Study Circle, Ravenshaw University
- Coordinator, Skill and Entrepreneurship Development Programme, Ravenshaw University (Dept. of Sc. and Technology, Govt. of Odisha)

EVALUATION PROFILE

List of Outstanding Contributions as a Researcher / Academician

- **New Technology of Acoustic Research in relation to plant processes has been developed:** Effect of Sound Energy, viz: Indian Classical Instrumental Music, vocal music, Chanting and Various forms of Positive and orchestrated sound energy, Planetary sound radio waves, Green Music etc in Biochemical and Molecular activities of living systems of plants.
- Contributed towards **Research & Development** in the Dept. of Botany, Ravenshaw University in **Skill and Entrepreneurship Development Programme, Dept. of Sc. and Technology, Govt. of Odisha.**
- **Examiner and Evaluator of Odisha Public Service Commission and Staff Selection Commission, Govt. Of Odisha.**
- **Subject Expert** for the selection of Lecturers / PGT and other posts under Govt. Of Odisha through Odisha Public Service Commission and Staff Selection commission
- **External Examiner and Evaluator** for UG and PG practical Examinations and M.Phil. dissertations in various Govt. Colleges, Odisha University of Agriculture and Technology, Utkal University, Vanivihar, Dept. of Environmental Science, Sambalpur University, Jyotivihar, Ramadevi University, etc.
- One of the **Research Collaborators** for Research collaboration “An innovative use of bio-electromagnetic sensors and metamaterial resonator for cancer detection” for **IMPRINT-II with Monash University, Melbourne, Australia and National Institute of Technology, Rourkela, India.**

- One of the **Research Collaborators** for Research collaboration “Investigation of natural Mdm2 inhibitors and Insilco drug discovery for cancer treatment” with **National Institute of Technology, Rourkela, India.**

List of Awards / Honors / Distinctions

- Presidential Award Winner for All-Rounded performance in academic career by All India Red Cross Society
- Best Debater in Sc. Debates, Best Sc. Project Award at Graduation level
- Chancellor’s Debate Runners-up Award in University level
- Topped in Inter-College Essay Competition
- Inter-University Drama Championship Award from Utkal University

LANGUAGES

- Odia: Native Language
- Hindi: Advanced Listener, Intermediate Speaker and Reader, Novice Writer
- English: Advanced Listener, Speaker, Reader, Writer

OTHER

Hobbies: Research and Theology.

Extra-Curricular Achievements

- Sangeet Visharad in Hindustan Vocal Music from Pune Gandharb Mahavidyalaya, Pune, Maharastra
- Sangeet Visharad in Odishi Music.