## **CURRICULUM VITAE**



Name: JAGNESHWAR DANDAPAT

**Present Position and Designation:** 

**Professor and Head, Dept of Biotechnology**, Utkal University.

Coordinator, Dept. of Biotechnology, Govt. of India sponsored

Teaching programme under Human Resource Development (HRD)

support.

Director, Research & Development, Utkal University

Coordinator, Centre of Excellence in Integrated OMICS and

Computational Biology supported by World Bank and Dept. of

Higher Education, Govt. of Odisha under WB-OHEPEE programme.

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#### 1. Areas of Research Interest:

Redox homeostasis, Epigenetics and Immune response

# 2. Courses Taught:

Immunology, Cell & Molecular Biology, Biomolecules, Biotechniques and animal cell culture

### 3. Education/ Academic Qualifications:

- **Ph.D.** (**Zoology**) (Cell physiology and Biochemistry), 2002, Utkal University.
- M.Phil.(Zoology), 1994, Utkal University, Rank- I in University.
- M.Sc.(Zoology), 1992, Utkal University, 1st Class, Rank- VI in University.
- **B.Sc.** (Zoology Hons.), 1989, Utkal University, 1st class Distinction, Rank- II in University.

#### 4. Research

a. Research Supervisor and Mentorship:

**Mentoring of Ph.D Students:** 

12 (awarded)

#### I. Mr. JavedAkthar:

Title:-Peptides and Mimetics as inhibitors of NF-kB pathway.

### II. Miss AlpanaSahoo:

**Title:-**Antioxidant defence status in Tasar Silkworm, *Antheraea mylitta*.

#### III. Miss MadhumitaBehera:

**Title:-**Studies on Soil bacteria and their Bioactive substances from Similipal Biosphere reserve.

#### IV. Miss SmaranikaSahu:

**Title:-**Cellular redox status during development of *Antheraea mylitta* under different physiological conditions.

#### V. Mr. Sunil KumarSahoo:

**Title:-**Age related changes in the expression of antioxidant enzymes and apoptotic proteins in testis of neonatal hypothyroid rats.

# VI. Mr. Suresh Kumar Bunker:

**Title:-**Effect of 6-n-Propyl-2-thiouracil, a thyroid disrupting drug, on Male rat liver: A study on catalase and DNA binding proteins.

# VII. Mr. Abinash Dutta:

**Title:-**Redox regulatory mechanism in tasar Silkworm, *Antheraea mylitta*: Modulatory effect of eSxogenous antioxidants.

### VIII. Mr. Asit Ray:

**Title:-**Chemotyping, genotyping and neural network based modeling for drug yield optimization in *Hedychium coronarium* 

# IX. Dr. Sandeep Saini:

**Title:-**Validation of antihypertensive homeopathic drug *Rauwolfia serpentina* by biochemical and molecular approaches in rat model.

# X. Dr. Manas Kumar Jagdev:

**Title:-** Structural Characterization of Mycobacterial and Plant Clp Chaperone Machinery Proteins

#### XI. Dr. Atala Bihari Jena

**Title:-** Conformational dynamics of biomolecules exposed to polycyclic aromatic hydrocarbon.

#### XII. Dr. Umesh Chandra Dash

**Title:-** Pharmacological Profiling of *Geophila repens* and *Piper trioicum* and Evaluation of Their Therapeutic Potential Against Alzheimer's diseases.

No of ongoing Ph.D Scholars -06

**Mentoring of Post Doctoral Students: 03** 

Mentoring of M.Phil Students: 06

M. Sc. Students: 22 + 04 (ongoing)

## b.Research Collaboration and Projects undertaken:

Collaboration with Institute of Life Sciences, Bhubaneswar; NISER-Bhubaneswar; CSIR-Institute of Minerals & Materials Technology, Bhubaneswar; Regional Pant Resource Centre, Bhubaneswar; Bloomberg School of Public Health, Johns Hopkins University, USA; Department of Biochemistry, Molecular Biology, Entomology and Plant Pathology, Mississippi State University, USA.

### **Research Projects Undertaken:**

■ Handling of extramural research grants- DAE, Govt. of India, DST, Govt. of India, DST, Govt. of Odisha and DST-PURSE scheme, AYUSH, Govt. of India

### c. Research Publications in peer reviewed Journals

- 1. Crystal structure of the N-terminal domain of MtClpC1 in complex with the anti-mycobacterial natural peptide Lassomycin.
  - Manas K Jagdev, Dharma R Tompa, Losee L Ling, Aaron J Peoples, Jagneshwar Dandapat, Chinmayee Mohapatra, Kim Lewis, Dileep Vasudevan. International Journal of Biological Macromolecules(2023) https://doi.org/10.1016/j.ijbiomac.2023.126771
- 2. Covid 19 Cases and Co-Morbidities: Complementary and Alternative Medicinal Systems (CAM) For Integrated Management of the Pandemic.
  - Jema JP, Pradhan J, Chainy GBN, Hati AK, Nayak D, Kausik, S, Dandapat J. Journal of Herbal Medicine. 23 August 2023, 100745. https://doi.org/10.1016/j.hermed.2023.100745. (IF: 2.542)
- 3. The ameliorative effect of *Piper trioicum* in attenuating cognitive deficit in scopolamine induced neurotoxicity in experimental rats.
  - Umesh Chandra Dash, Sandeep Kumar Swain, Atala Bihari Jena, Jagneshwar Dandapat, Atish Kumar Sahoo. Journal of Ethnopharmacology(2023) https://doi.org/10.1016/j.jep.2023.116911
- 4. Thermodynamics of benzoquinone-induced conformational changes in nucleic acids and human serum albumin.
  - Atala B. Jena, Rashmi R. Samal, Jagneshwar Dandapat, Umakanta Subudhi. **Chemico-Biological Interactions(2023)** https://doi.org/10.1016/j.cbi.2022.110281
- 5. Epigenetic signature in neural plasticity: the journey so far and journey ahead.

- Madhusmita Nayak, Diptimayee Das, Jyotsnarani Pradhan, RG Ahmed, Roberto Laureano-Melo, Jagneshwar Dandapat, **Heliyon, Elsevier, 2022.** https://doi.org/10.1016/j.heliyon.2022.e12292
- 6. Thermodynamics of benzoquinone-induced conformational changes in nucleic acids and human serum albumin.
  - Atala B Jena, Rashmi R Samal, **Jagneshwar Dandapat**, Umakanta Subudhi, Chemico-**Biological Interactions**, 2022. <a href="https://doi.org/10.1016/j.cbi.2022.110281">https://doi.org/10.1016/j.cbi.2022.110281</a>
- 7. A Computational Insight on the Inhibitory Potential of 8-Hydroxydihydrosanguinarine (8-HDS), a Pyridone Containing Analog of Sanguinarine, against SARS CoV2.

  Atala Bihari Jena, Namrata Kanungo, Gagan Bihari Nityananda Chainy, Vinod Devaraji, Sudipta Kumar Das, **Jagneshwar Dandapat, Chemistry & Biodiversity**, 2022. https://doi.org/10.1002/cbdv.202200266
- 8. Epigenomic interplay in tumor heterogeneity: Potential of epidrugs as adjunct therapy. Suvasmita Rath, Diptesh Chakraborty, Jyotsnarani Pradhan, Mohammad Imran Khan, **Jagneshwar Dandapat. Cytokine**, 2022. <a href="https://doi.org/10.1016/j.cyto.2022.155967">https://doi.org/10.1016/j.cyto.2022.155967</a>
- 9. Molecular interaction of benzo-a-pyrene inhibits the catalytic activity of catalase: Insights from biophysical and computational studies.

  AB Jena S Rath JJ Subudhi J Dandanat Journal of Molecular Structure, Volume
  - AB Jena, S Rath, U Subudhi, **J Dandapat**. **Journal of Molecular Structure**, Volume 1265, 5 October 2022, 133494. <a href="https://doi.org/10.1016/j.molstruc.2022.133494">https://doi.org/10.1016/j.molstruc.2022.133494</a>
- CTK7A, a curcumin derivative, can be a potential candidate for targeting HIF-1α/p300 complex: Evidences from in vitro and computational studies.
   S Rath, AB Jena, A Bhattacharyya, J Dandapat Biophysical Chemistry, Volume 287, August 2022, 106828. <a href="https://doi.org/10.1016/j.bpc.2022.106828">https://doi.org/10.1016/j.bpc.2022.106828</a>
- 11. Comprehending the role of homeopathic preparations of *Rauwolfia serpentina* on oxidative stress parameters of cardiac tissue of DOCA-salt induced hypertensive male rats: An experimental approach.
  - Sandeep Kumar, Gagan Bihari Nityananda Chainy, **Jagneshwar Dandapat**, Akshaya Kumar Hati, Laxmikanta Nanda. **Phytomedicine Plus**, 1(4), 100115. doi: 10.1016/j.phyplu.2021.100115
- 12. Interface-based design of the favipiravir-binding site in SARS-CoV-2 RNA-dependent RNA polymerase reveals mutations conferring resistance to chain termination.

  Aditya K Padhi, **Jagneshwar Dandapat**, Prakash Saudagar, Vladimir N Uversky, Timir
  - Tripathi. **FEBS Letters.** doi:10.1002/1873-3468.14182
- 13. The modulatory role of prime identified compounds in Geophila repens in mitigating scopolamine-induced neurotoxicity in experimental rats of Alzheimer's disease via attenuation of cholinesterase,  $\beta$ -secretase, MAPt levels and inhibition of oxidative stress imparts inflammation.
  - Umesh Chandra Dash, Sandeep Kumar Swain, Satish Kanhar, Purusottam Banjare, Partha Pratim Roy, **Jagneshwar Dandapat**, Atish Kumar Sahoo. **Journal of Ethnopharmacology**. doi: 10.1016/j.jep.2021.114637
- 14. Factors regulating dynamics of angiotensin-converting enzyme-2 (ACE2), the gateway of SARS-CoV-2: Epigenetic modifications and therapeutic interventions by epidrugs. Suvasmita Rath, Venkateswarlu Perikala, Atala Bihari Jena, **Jagneshwar Dandapat. Biomedicine & Pharmacotherapy**, 143, 112095. doi:10.1016/j.biopha.2021.112095
- 15. TLR2 dimer-specific ligands selectively activate Protein Kinase C isoforms in Leishmania infection.
  - Arkajyoti Mukherjee, Sayoni Roy, Ashok Patidar, Neelam Bodhale, **Jagneshwar Dandapat**, Bhaskar Saha, Arup Sarkar. **Immunology**, **2021**.
- 16. A primer on cytokines.

- Prashant Chauhan, A Nair, A Patidar, **Jagneshwar Dandapat**, A Sarkar, B Saha. **Cytokine**, **(2021)**, 155458, doi: 10.1016/j.cyto.2021.155458
- March of Mycobacterium: miRNAs intercept host cell CD40 signalling.
   Prashant Chauhan, Jagneshwar Dandapat, Arup Sarkar & Bhaskar Saha. Clinical & Translational Immunology. (2020); doi: 10.1002/cti2.1179
- 18. Catechin and curcumin interact with S protein of SARS-CoV2 and ACE2 of human cell membrane: insights from computational studies
  - Atala B. Jena, Namrata Kanungo, Vinayak Nayak, G.B.N. Chainy and **Jagneshwar Dandapat**. **Scientific Reports**, Nature.(2021),11(1),2043 https://doi.org/10.1038/s41598-021-81462-7
- 19. The benzene metabolite p-benzoquinone inhibits the catalytic activity of bovine liver catalase: A biophysical study.
  - Atala B. Jena, Rashmi R. Samal, Kanchan Kumari, Jyotsnarani Pradhan, Gagan B. N. Chainy, Umakanta Subudhi, Satyanarayan Pal, **Jagnehswar Dandapat**. **International journal of biological macromolecules**. (2021) vol. 167: 871-880. doi:10.1016/j.ijbiomac.2020.11.044.
- 20. Recombinant expression, purification and SAXS analysis of Arabidopsis thaliana ClpC1.

  Manas K. Jagdev, Jagneshwar Dandapat, Dileep Vasudevan. International Journal of Biological Macromolecules. (2021) 167, 1273–1280.

  <a href="https://doi.org/10.1016/j.ijbiomac.2020.11.081">https://doi.org/10.1016/j.ijbiomac.2020.11.081</a>
- Oxidative stress correlates well with markers of metabolic syndrome in clinically hypothyroid cases: a hospital based study in a remote tribal district.S Panda, MK Dash, PK Thatoi, Jagneshwar Dandapat. B Rath. RUDN Journal of

Medicine,(2021) 25 (1), 55-65

- 22. Leaf Extract of *Nerium oleander* L. Inhibits Cell Proliferation, Migration and Arrestof Cell Cycle at G2/M Phase in HeLa Cervical Cancer Cell.
  - Shubhasmita Mohapatra, Anil K. Biswal, **Jagnehswar Dandapat** & Priya R. Debata. **Anti-Cancer Agents in Medicinal Chemistry**(2020); doi: 10.2174/1871520620666200811121400
- 23. Isolation, identification, and quantification of Pentylcurcumene from Geophila repens: A new class of cholinesterase inhibitor for Alzheimer's disease.
  - Umesh Chandra Dash, Satish Kanhar, Anshuman Dixit, **Jagnehswar Dandapat**, Atish Kumar Sahoo. Bioorganic chemistry,(2019) 88, 102947. https://doi.org/10.1016/j.bioorg..102947
- 24. First report on transferrin in the silkworm, *Antheraeamylitta*, with a putative role in antioxidant defense: Insights from proteomic analysis and immunodetection.
  - AbinashDutta ,JagneshwarDandapat, NakulanandaMohanty. Comparative Biochemistry and Physiology. (2019); Part B 233: pp. 23-34. doi.org/10.1016/j.cbpb. 2019.03.010

- Curcumin restores hepatic epigenetic changes in propylthiouracil(PTU)Induced hypothyroid male rats: A study on DNMTs, MBDs, GADD45a, C/EBP-β and PCNA.
   Suresh Kumar Bunker, AbinashDutta, JyotsnaraniPradhan, JagneshwarDandapat&G.B.N.
   Chainy. Food and Chemical Toxicology(2019); 123. 2019, doi.org/10.1016/j.fct.10.050
- 26. Pro-inflammatory cytokine Interleukin-1β (IL-1β) controls Leishmaniainfection.

  TejaswiniPatil, Vasundhara More, DeeptiRane, Arkajyoti Mukherjee, Rahul
  Suresh,AshokPatidar, NeelamBodhale, David Mosser, **JagneshwarDandapat**, Arup Sarkar. **Cytokine**.(2018);doi.org/10.1016/j.cyto.2018.06.033.
- 27. Neutrophils: Interplay between host defense, cellular metabolism and intracellular infection. Deepti Rane, Tejaswini Patil, Vasundhara More, Sushree Sangita Patra, Neeelam Bodhale, **Jagneswar Dandapat** & Arup Sarkar. **Cytokine**(2018);doi.org/10.1016/j.cyto.2018.07.009.
- 28. Foliar supplementation of ascorbic acid and glycine boost the growth performance and antioxidant protection in the larvae of tropical tasar silkworm, *Antheraeamylitta*.
  AbinashDutta, Jagneshwar Dandapat & Nakulananda Mohanty. Journal of Entomology and Zoology Studies (2018); E-ISSN: 2320-7078 P-ISSN: 2349-6800, 136-142.
- 29. Type-1 interferons prolong the lifespan of neutrophils by interfering with members of the apoptotic cascade.
  EressoAgaa, ArkajyotiMukherjee, DeeptiRane, VasundharaMore, TejaswiniPatil, Ger van Zandbergend, Werner Solbach, JagneswarDandapat, Heidi Tackenberg, Mareike Ohms, Arup Sarkarb, TamasLaskay. Cytokine.(2018);doi.org/10.1016/j.cyto.2018.06.027.
- 30. Low H<sub>2</sub>O<sub>2</sub> and enhanced oxidative resistance in the diapause-destined pupa of silkworm, *Antheraeamylitta* (Lepidoptera: Saturniidae) suggest their possible involvement in dormancy and lifespan extension.
  - Sahoo, A., Dutta, A., **Dandapat, J.**,& Samanta, L. **BMC Zoology**(2018);DOI 10.1186/s40850-018-0027-4.
- 31. Host plant-derived allelochemicals and metal components are associated with oxidative predominance and antioxidant plasticity in the larval tissues of silkworm, *Antheraeamylitta*: Further evidence of joint effects hypothesis.
  - Smaranika Sahu, Abinash Duttaa, Dinesh Kumar Ray, Jyotsnarani Pradhan, **Jagneshwar Dandapat**. **Comparative Biochemistry and Physiology**(2018); DOI 10.1016/j.cbpb.2018.06.004.
- 32. Features and outcomes of drugs for combination therapy as multi-targets strategy to combat Alzheimer's disease.
  - Sahoo, A.K., **Dandapat, J.**, Dash, U.C. & Kanhar, S. **Journal of Ethnopharmacology**(2017); 215: pp.42-73.
- 33. Neonatal Exposure to 6-n-Propyl-Thiouracil, an Anti-Thyroid Drug, Alters Expression of Hepatic DNA Methyltransferases, Methyl CpG-Binding Proteins, Gadd45a, p53, and PCNA in Adult Male Rats.
  - Bunker, S.K., **Dandapat, J.**, Chainy, G.B., Sahoo, S.K. & Nayak, P.K.**European Thyroid Journal**. (2017); 6: pp.281-291.

- 34. Differential expression of apoptotic proteins in seminiferous tubule cells of adult rats by neonatal exposure to 6-n-propyl-2-thiouracil (PTU), a thyroid disrupting chemical.
  - Sahoo, S.K., **Dandapat, J.**, and Chainy, G.B.N. **Indian Journal of Experimental Biology**(2017); 55: pp.634-641.
- 35. Curcumin and Ellagic acid synergistically induce ROS generation, DNA damage, p53 accumulation and apoptosis in HeLa cervical carcinoma cells.
  - Kumar, D., Basu, S., Parija, L., Rout, D., Manna, S., **Dandapat**, J., and Debata, P.R. **Biomedicine & Pharmacotherapy**. (2016); 81: pp.31-37.
- 36. An Overview of Seasonal Changes in Oxidative Stress and Antioxidant Defence Parameters in Some Invertebrate and Vertebrate Species.
  - Chainy, G.B.N., Paital, B. and Dandapat, J.(2016). Scientifica
- 37. Homeopathic Medicine Rauwolfia serpentina Ameliorate Blood Pressure and Oxidative Stress Parameters of Kidney by Modulating Expression of Antioxidant Enzymes in Deoxycorticosterone Acetate (DOCA)-Salt-Induced Hypertensive Rat Model.
  - Kumar, S., **Dandapat, J.**, Chainy, G.B.N., Hati, A.K. and Nanda, L. J **Drug Res Dev**. (2016); 2(1): pp.2470-1009.
- 38. Neonatal persistant exposure to 6 propyl- 2 Thiouracil, A Thyroid disrupting chemical, differentially modulates expression of hepatic catalase and C/EBP-β in adult rats.
  - SK Bunker, J Dandapat, SK Sahoo, A Ray, GBN Chainy. Journal of Biochemical & Molecular Toxicology. (2015); DOI: 10.1002/jbt.21766.
- 39. Hypothyroidism impairs antioxidant defence system and histoarchitecture of cerebral cortex of rat brain during postnatal development.
  - Srikanta Jena, Shravani Bhanja, **Jagneshwar Dandapat**, Gagan B.N. Chainy. **Int. J. Devl Neuroscience** 47. (2015);doi.org/10.1016/j.ijdevneu.2015.04.202.
- 40. Pro-oxidative challenges and antioxidant protection during larval development of non-mulberry silkworm, Antheraeamylitta (Lepidoptera: Saturniidae).
  - A Sahoo, S Sahu, **J Dandapat** and L Samanta, **Italian J of Zoology**. (2015);doi: 10.1080/11250003.2015.1103319
- 41. Age related decrease in rat liver catalase expression is associated with change in its promoter methylation pattern.
  - S.K. Bunker, J. Dandapat, G.B.N. Chainy. Current trends in Biotechnology and Pharmacy(2015); 9(1): 88-96.
- 42. Foliar supplementation of zinc modulates growth and antioxidant defense system of tasar silkworm Antheraeamylitta.
  - S. Sahu, J. Dandpat, N. Mohanty, Journal of Entomology and Zoology Studies. (2015); 3(2):25-35.
- 43. Oxidative Damaged products, Level of Hydrogen Peroxide and antioxidant protection in Diapausing Pupa of Tasar Silk Worm, Antheraeamylitta: A Comparative Study in Two Voltine Groups. A.Sahoo, **J. Dandapat**, L.Samanta. **International journal of Insect Science**. (2015); 7:11-17.
- 44. Neonatal hypothyroidism alters expression of antioxidant enzymes and redox status in adult rat seminiferous tubule cells.

- S.K. Sahoo, G.B.N. Chainy, J. Dandapat. Current trends in Biotechnology and Pharmacy. (2015); 9(2): 117-131.
- Effect of aminotriazole on antioxidant defense system of tasar silkworm Antheraeamylitta.
   B Patra, S Sahu, J Dandapat. Entomological Science. (2014); 17: 316-323, doi:10.1111/ens.12060.
- 46. Effect of heavy metals on growth response and antioxidant defense protection in Bacillus cerus.
  - M Behera, J Dandapat, CC Rath. J of Basic Microbiol. (2014); 54: 1201-1209.
- 47. PEGylation of an osteoclast inhibitory peptide: Suitable candidate for the treatment of osteoporosis.
  - J Akhtar, V Mallaredy, **J Dandapat**, P Maiti, SK Sahoo, and S Singh. **International Journal of Pharmaceutics**. (2012); 434: 429-436.
- 48. Hypothyroidism modulates renal antioxidant gene expression during postnatal development and maturation in rat.
  - S Jena, GBN Chainy and J Dandapat. General and Comparative Endocrinology. (2012); 178: 8-18.
- 49. Curcumin differentially regulates the expression of superoxide dismutase in cerebral cortex and cerebellum of L-thyroxine (T<sub>4</sub>)-induced hyperthyroid rat brain.
  - S Jena, **J Dandapat**, and GBN Chainy. **Neurological Sciences**(2012); (DOI 10.1007/s10072-012-1084-z).
- 50. Expression of antioxidant genes in renal cortex of PTU-induced hypothyroid rats: effect of vitamin E and curcumin.
  - S Jena, GBN Chainy, and **J Dandapat**. **Molecular Biology Reports**. (2012); 39 (2): 1193-1203.
- 51. Induction of oxidative stress and inhibition of superoxide dismutase expression in rat cerebral cortex and cerebellum by PTU-induced hypothyroidism and its reversal by curcumin.
  - S Jena, C Anand, GBN Chainy and **J Dandapat. Neurological Sciences.**(2012); 33 (4): 869-873.
- 52. Isolation and characterization and screening of bacteria isolate from similipal Biosphere Reserve forest soil for their metal tolerance capacity and extracellular enzymatic activity.
  - MadhumitaBehera, **JagneshwarDandapat**, Chandi C. Rath. **Bioremediation**, **Biodiversity and Bioavailability**. (2009); 3 (2): 72-78.
- 53. Probiotic induced immunomodulation: Investigation into the cellular and Molecular mechanism involved.
  - Panigrahi, A., Azad, I. S., Das, B. K., **Dandapat, J.,** Das, G., Behera, S. and Mishra, S.S. **Research Journal of Biotechnology**. (2009); 4(3):7-13.
- 54. Lipid Peroxidation and nonenzymetic antioxidants, Glutathione and ascorbic acid, in a carp, *Labio rohita*.
  - A. Sahoo, M.Patra and J. Dandapat. Asian Journal of Microbiology Biotechnology and Environmental Science. (2008); 10 (127-130).

- 55. Non-enzymatic antioxidant status and modulation of lipid peroxidation in the muscles of *Labeo rohita* by sub lethalexposure of CuSO4.
  - S. D. Jena & M. Behera & **J. Dandapat** & N. Mohanty. **Vet Res Commun**(2009); 33:421–429, DOI 10.1007/s11259-008-9188-x
- 56. Lipid peroxidation and antioxidant defence status during larval development and metamorphosis of giant prawn, *Macrobrachium rosenbergii*.
  - **Jagneshwar Dandapat**, Gagan B.N. Chainy, K. Janardhana Rao. **Comparative Biochemistry and Physiology Part C**. (2003); 135: 221–233.
- 57. Improved post larval production in Giant Prawn MacrobrachiumRosenbergii through modulation of antioxidant defense system by Dietary Vitamin-E.
  - **Jagneshwar Dandapat**, GBN Chainy and K Janardhana Rao. **Indian Journal Of Biotechnology**. (2003); 2:195-202.
- 58. Comparative evaluation of biochemical parameters in wild and cultured brood stock of Macrobrachiumrosenbergii.
  - Bindu R. Pillai, A.P. Tripathy and J. DANDAPAT. Indian J. Fish. (2001); 48(1): 35-39.
- 59. Dietary vitamin-E modulates antioxidant defence system ingiant freshwater prawn, Macrobrachium rosenbergii.
  - **Jagneshwar Dandapat**, Gagan B.N. Chainy, K. Janardhana Rao. **Comparative Biochemistry and Physiology Part C**. (2000); 127: 101–115.
- 60. Antioxidant defence system in giant prawn *Macrobrachium rosenbergii*. **Jagneswar Dandapat,** Gagan B.N. Chainy. (2001), http://hdl.handle.net/10603/227825
- 61. An in vitro study of metal ion-induced lipid peroxidation in giantfresh water prawn *Macrobrachium rosenbergii* (de MAN).
  - **Jagneswar Dandapat**, K. Janardhana Rao & Gagan B.N. Chainy. **BioMetals**. (1999); 12: 89–97.

# d. Conference Publications (presented/ published in proceedings):

- 1. Abinash Dutta, J Dandapat, (2018) Oxidative stress in tasarsilk worm *Antheraea mylitta*: Beneficial role of antioxidant for improvement of larval health and silk production. National Seminar on Recent trends in Microbiology and Biotechnology, organized by the Society of Biotechnology and Bioinformatics and MITS school of Biotechnology, Bhubaneswar, Odisha from 16<sup>th</sup>-17<sup>th</sup> March, 2018
- 2. Sandeep Kumar, A.K Hati, G.B.N Chainy, L.K Nanda, J Dandapat. Effect of Homeopathic medicine *Rauwolfia serpentina* on expression of superoxide dismutase in heart of Deoxycorticosterone acetate (DOCA)- salt induced hypertensive rat. National Seminar on Recent trends in Microbiology and Biotechnology, organized by the Society of Biotechnology and Bioinformatics and MITS school of Biotechnology, Bhubaneswar, Odisha from 16<sup>th</sup>-17<sup>th</sup> March, 2018

- Smaranika Sahu, J. Dandapat, N.M Mohanty. Effect of Manganese on growth and anti oxidant defence of *Antheraea mylitta*. National Seminar on Recent trends in Microbiology and Biotechnology, organized by the Society of Biotechnology and Bioinformatics and MITS school of Biotechnology, Bhubaneswar, Odisha from 16<sup>th</sup>-17<sup>th</sup> March, 2018
- 4. Anita Roy & J. Dandapat (2014) Long term curcumin treatment modulates p53 expression in testis of hypothyroid rats. in International symposium on genetic analysis: translational and developmental & Annual meeting of Society of Biotechnologist (India), November 21-23, 2014
- 5. Anita Roy & J. Dandapat (2014) Persistent curcumin treatment ameliorates 4-Hydroxynonenal (4HNE) induced protein carbonylation in neonatal hypothyroid rat testis. In: 83<sup>rd</sup> annual meeting of Society of Biological Chemists (INDIA) Evolution: Molecules to life December 18-21, 2014
- 6. Anita Roy & J. Dandapat (2014) Curcumin failed to modulate altered oxidative stress marker in PTU induced neonatal hypothyroid rat testis. In: National conference on current trends in life science research and challenges ahead. 28<sup>th</sup> Feb-2<sup>nd</sup> March, 2014, Sambalpur University, Sambalpur.
- 7. Anita Roy & J. Dandapat (2014) Neonatal hypothyroidism induces serum 4-hydroxy-2-nonenal (4-HNE), a bioactive oxidative stress marker, in male rats and its regulation by curcumin. In: National symposium on emerging trends in Biotechnology: present scenario and future dimensions. 29<sup>th</sup>-30<sup>th</sup> March, 2014, Utkal University, Bhubaneswar.
- 8. Suresh Kumar Bunker, G. B. N. Chainy, J. Dandapat.(2014). "Comparative study of methylation pattern of catalase promoter in liver, kidney and cerebral cortex tissues of male rats during aging." National symposium on Emerging trends in Biotechnology: Present scenario and future dimensions. March 29 th-30th, 2014. Organized by P.G. Department of Biotechnology, Utkal University, Bhubaneswar, Odisha.
- 9. Suresh Kumar Bunker, G. B. N. Chainy, J. Dandapat (2014). "PTU induced Neonatal Hypothyroidism Modulates Methylation Pattern of Catalase Promoter in Rat Liver". International Symposium on Genetic Analysis Translational and Developmental and Annual Meeting of Society for Biotechnologists (India). November 21st to 23rd, 2014.Organized by Department of Zoology, University Of Burdwan.
- 10. G. B. N. Chainy, Suresh Kumar Bunker, J. Dandapat (2014). "Down regulation of hepatic catalase in PTU- induced hypothyroid rats is due to promoter methylation. 84<sup>th</sup> Annual Session of the National Academy of Sciences, India. 04-06 December, 2014. Organized by Jai Narayan Vyas University, Jodhpur (B/85/2014).
- 11. Suresh Kumar Bunker, G. B. N. Chainy, J. Dandapat. "Neonatal Persistant Hypothyroidism Modulates Rat Hepatic DNA Methyltransferase 3b (DNMT 3b) Expression in Adulthood. 83<sup>rd</sup> Annual Meeting of the Society of Biological Chemist of India. 17-21 December 2014. Organized By KIIT University Bhubaneswar, Institute of Life Sciences, Bhubaneswar and NISER Bhubaneswar.

- **12.** S. Kumar, A. K. Hati, G. B. N. Chainy, L.K. Nanda, J. Dandapat (2014). "Effect of homoeopathic preparations of *Rauwolfia serpentine* ondeoxycorticosterone acetate (DOCA)-salt induced hypertensive rats" National Conference on Ethnopharmacology and Biotechnology in Drug Development: Prospects and Challenges. November 2014. Organized by Bundelkhand University, Jhansi and Society for Ethnopharmacology, India.
- 13. Sandeep Kumar, Akshaya Kumar Hati, JagneshwarDandapat, Gagan B. N. Chainy, Laxmikanta Nanda Effect of homoeopathic preparations of *Rauwolfia serpentine* ondeoxycorticosterone acetate (DOCA)-salt induced hypertensive rats. National Conference on Current trends in Life sciences research and challenges ahead. Organized by School of Life sciences, Sambalpur University, Sambalpur.
- **14.** S. Sahu, A. Dutta, J. Dandapat, N. Mohanty (2014). Effect of micronutrients on growth response and antioxidant defense system of silkworm *Antheraea mylitta*. National Conference on Current trends in Life sciences research and challenges ahead. Organized by School of Life sciences, Sambalpur University, Sambalpur.
- **15.** Sandeep Kumar, Akshaya Kumar Hati, Jagneshwar Dandapat, Gagan B. N. Chainy, Laxmikanta Nanda (2014) "Expression of antioxidant enzymes in cardiac tissue of deoxycorticosterone acetate (DOCA)-salt induced hypertensive rat: Effect of homoeopathic preparations of *Rauwolfia serpentina*." National symposium on Emerging trends in Biotechnology: Present scenario and future dimensions. March 29 <sup>th</sup>-30<sup>th</sup>, 2014. Organized by P.G. Department of Biotechnology, Utkal University, Bhubaneswar, Odisha.
- **16.** Sandeep Kumar, Akshaya Kumar Hati, G. B. N. Chainy, Laxmikanta Nanda, JagneshwarDandapat (2014). "Modulation of rat kidney SOD expression by homoeopathic preparations of *Rauwolfia serpentine* ondeoxycorticosterone acetate (DOCA)-salt-induced hypertensive rats."83<sup>rd</sup> Annual Meeting of the Society of Biological Chemist of India. 17-21 December 2014. Organized By KIIT University Bhubaneswar, Institute of Life Sciences, Bhubaneswar and NISER Bhubaneswar.
- 17. S. Sahoo, J. Dandapat, G.B.N. Chainy (2014) "Alteration of Bax expression in seminiferous tubule cella of neonatal hypothyroid wistar rats." 83<sup>rd</sup> Annual Meeting of the Society of Biological Chemist of India. 17-21 December 2014. Organized By KIIT University Bhubaneswar, Institute of Life Sciences, Bhubaneswar and NISER Bhubaneswar.
- 18. S. Sahu, A. Dutta, J. Dandapat, N. Mohanty (2014). "Selenium modulates antioxidant defense response in the mid gut tissues of Vth instar larvae of *Antheraea mylitta*." National seminar Organized by Department of Zoology, North Orissa University.
- 19. S. Jena, B Patra, S. Sah, J. Dandapat, GBN Chainy (2014) "Curcumin ameliorates oxidative stress without modulating the expressions of antioxidant enzymes in 6-n-propylthiouracil (PTU)-induced hypothyroid rat testes." National symposium on Emerging trends in Biotechnology: Present scenario and future dimensions. March 29 th-30th, 2014. Organized by P.G. Department of Biotechnology, Utkal University, Bhubaneswar, Odisha.

- 20. A. Sahoo, S. Sahu, A. Dutta, J. Dandapat, L. Samanta (2014) "Tissue and sex specific redox status and antioxidant defenses during pupal diapause of *Antheraea mylitta*." National symposium on Emerging trends in Biotechnology: Present scenario and future dimensions. March 29 th-30th, 2014. Organized by P.G. Department of Biotechnology, Utkal University, Bhubaneswar, Odisha.
- 21. A. Dutta, S. Sahu, I. Das, A. Datey, J. Dandapat (2014). Immune response and antioxidant defense status in the larvae of tasar silk worm, *AntheraeamylittaD*. challenged with *Escherichia coli*. International Symposium on Genetic Analysis: Translational and Developmental & Annual Meeting of Society for Biotechnologists (India). November 21-23, 2014. Organized by Department of Zoology, The University of Burdawn.
- 22. P.R. Debata, D. Kumar, D. Rout, P.K. Nayak, J. Dandapat.(2014). "Curcumin and Ellagic Acid synergistically induce p53 accumulation and apoptosis in HeLa cervical carcinoma cells." International Symposium on Genetic Analysis: Translational and Developmental & Annual Meeting of Society for Biotechnologists (India). November 21-23, 2014. Organized by Department of Zoology, The University of Burdawn.
- 23. Suresh K Bunker, U Subudhi, J Dandapat, G.B.N. Chainy. (2013). "DNA methylation pattern of rat liver catalase promoter is modified by aging and neonatal Hypothyroidism". Frist International and Third National Conference on Biotechnology, Bioinformatics and Bioengineering. June 28-29 2013. Organized by Society for Applied Biotechnology (India), Sri Venkateswara University, Tirupati, Andhra Pradesh India. Pp 46.
- 24. Suresh K Bunker, U Subudhi, J Dandapat, G.B.N. Chainy. (2013) "Aging Modulates methylation pattern of catalase promoter of rat liver". National Conference on Emerging Trends and Challenges in Basic and Translational Research in Biochemistry. February 4-5, 2013. Organized by Under the auspices of Centre of Advanced Study, Department of Zoology, Banaras Hindu University, Varanasi UP India.
- 25. A. Sahoo, S. Sahu, J. Dandapat and L. Samanta (2013) Oxidative damaged products, Level of Hydrogen Peroxide and Antioxidant protection in Diapausing pupa of tasar silkworm, *Antheraeamylitta*: A comparative study in two voltine groups. National Symposium on recent advances in beneficial insects. November 27-29, 2013. Organized by Indian Institute of Natural Resins and Gums (IINRG) and SANRAG, Ranchi.
- 26. A. Dutta, S. Sahu, J. Dandapat and N. Mohanty (2013) Foliar supplementation of ascorbic acid and Glycine modulate antioxidant defence components in the larvae of tasar silkworm, *Antheraeamylitta*. National Symposium on recent advances in beneficial insects. November 27-29, 2013. Organized by Indian Institute of Natural Resins and Gums (IINRG) and SANRAG, Ranchi.
- Popular science articles on "Horseshoe crab" in two Oriya dailies, The Dharitri and The Sambad.
- Life cycle of Macrobrachiumrosenbergii

### Pillai, B.R. and Dandapat, J.

- Training manual on Breeding and Hatchery Management of *Macrobrachium* rosenbergii, pp. 6-7, 6th-15th October 1998, organised by CIFA.
- Hatchery Technology of *Macrobrachium rosenbergii*Rao, K.J., Pillai, Bindu. R., Sinha, M.K. Tripathy, A.P. and **Dandapat, J.**
- Training manual on Breeding and hatchery Management of *M. rosenbergii*, pp. 8-12, 6th-15th October 1998, organised by CIFA.
- Role of Vitamins and Minerals in Prawn Aquaculture (Training manual on Breeding and Hatchery Management of *Macrobrachium rosenbergii*, pp. 24-29, 6th-15th October 1998, organised by CIFA) **Dandapat**, **J.** and Das, A.
- Baigyanik Prathayee Galda Chingdir Chas (Scientific prawn culture A technical book in Bengali language). Dandapat, J., Sinha, M.K., Dutta, T. and Rao, K.J. 2000, CIFA—ICAR.

# 5. Book Chapters:

Age-Related Changes in Antioxidant Enzymes of Rat Kidney and Oxidative Stress Parameters with Special Reference to Methylation of the Catalase Promoter.

Srikanta Jena, Suresh K. Bunker, **Jagneshwar Dandapat** and G.B.N. Chainy. **Springer Science+Business Media Singapore**.2017;Edited by P.C. Rath, R. Sharma and S. Prasad, DOI 10.1007/978-981-10-2155-8 9.

#### 6. Invited Talk in Conference / seminar

- 1. International Symposium on Genomics in Aquaculture, "Beyond genomics: Epigenomic in aquaculture and the way forward", organized by the ICAR-Central institute of fresh water Aquaculture in collaboration with association of Aquaculturists during 21<sup>st</sup>-23<sup>rd</sup> February, 2020.
- 2. National Conference on Biotechnology: Prospective and Challenges, "Remodeling Redox Regulatory Network In Silk Worm: Insights From Proteomics And Systems Biology" Organized by Department of Biotechnology, under quality improvement programme, Savitribai Phule University, Pune during 14<sup>th</sup>-15<sup>th</sup> February, 2020.
- 3. Annual Meeting of the Society for Free Radical Research. India & Conference on "Role and Management of Oxidative stress in Human Disease" (SFRR-INDIA-2020), "Hepatic epigenetic changes in the adult male rats under altered thyroid state: Impact of natural antioxidant curcumin" Organized by Bio-Science group, Bhaba Atomic Research Centre, Mumbai during 12<sup>th</sup>-13<sup>th</sup> February, 2020.
- 4. Oxidative stress induced in rat brain by altered thyroid hormone titer is rescued by curcumin. Resource person in NeuroScience International Conference on Translational Neuroscience& Its Application in protection of Mental Health. in XXXV Annual Meeting of Indian Academy of neuroscience organized by Ravenshaw University on 29-31, Oct., 2017.

- **5. Proteomics in the era of Omics.** Resource person in National Seminar on Emerging trends in Biotechnology and crop improvements organized by Department of Biotechnology, Rama Devi Women's University, Bhubaneswar, Odisha, India from 21st to 22nd November, 2017.
- 6. Redox homeostasis: a cross talk between oxidative defenses and immune response. UGC Sponsored National Seminar on current approaches in life Science. M.P.C Autonomous College, Baripada, 21-22 March, 2015.
- 7. PTU induced Neonatal Hypothyroidism Modulates Methylation Pattern of Catalase Promoter in Rat Liver. Symposium Lecture in the International Symposium on Genetic Analysis Translational and Developmental and Annual Meeting of Society for Biotechnologists (India). Organized by Department of Zoology, The University Of Burdwan on November 21st to 23rd, 2014.
- 8. **Exciting World of Biology.** Invited talk in the inspire programme cum Residential Science camp for School and College students. Organised by Vidyasagar University and sponsored by Dept of Science and Technology, Govt. Of India and Govt. Of West Bengal on June 26, 2014.
- 9. Oxidative challenges and antioxidant protection in aquatic organisms: from biomarkers to health management. Invited lecture in the International Symposium on Problem and prospects of coastal aquaculture and application of biotechnological tool for the rural development. Organised by Vidhasagar University, sponsored by DBT, Govt of India, UGC New Delhi on March 1-3, 2013.
- 10. **DNA methylation and histone modification: Impact on Epigenetics.** Delivered lecture in the National workshop on Hands on DNA technologies. Nagarjuna Post graduate College of Science, Raipur sponsored by UGC, New Delhi on January 8-11, 2013.
- 11. **Biofertilizers**. Invited Talk in the National Seminar on sustainable development through the use of Biofertilizers. AUL College, sponsored by UGC, New Delhi on January 5-6, 2013.
- 12. **Organic Farming.** Invited talk in the State level seminar on Biotechnology and Organic Farming. Dept of Botany, Balikuda College, Jagatsinghpur sponsored by UGC, New Delhi on March 4-5, 2012.
- 13. **Body's Battle.** Delivered lecture in the Science Seminar. Gopabandhu Science College, Athagarh on February 8, 2012.
- 14. Ameliorative Effect of Curcumin on the expression of Superoxide dismutase and level of Lipid Peroxidation in cerebral cortexof hypo and hyperthyroid rats. Delivered talk in the International conference on Biotechnology Advances: OMICS, Appraches and way forward. SOA University, Bhubaneswar on December 20-22, 2012.
- 15. **Defence system of the Body.** Delivered lecture in the Seminar organized by Science Society. SeemantaMahavidyalaya, Jharpokhria on February 19, 2011.
- 16. **Insect Diapause: Can hydrogen peroxide be a potent regulator.** Invited lecture in the Regional Biochemical Symposium. Organised by Society of Biological chemistry, India and NISER, Bhubaneswar on September 3, 2011.
- 17. Invited lecture in the International Level Seminar on Problems and Prospects of Coastal Aquaculture and Application of Biotechnological Tools For Rural

- **Development** organized by **Department of Aquaculture Management & Technology, Vidyasagar University, Midnapore, West Bengal**, India from 1<sup>st</sup> 3<sup>rd</sup> March,2013.
- 18. Participated in 99<sup>th</sup> Indian science Congress on **Science and Technology for Inclusive Innovation: Role of Women** organized by KIIT and NISER, Bhubaneswar from 3<sup>rd</sup> January 2012 to & 7<sup>th</sup> January 2012.
- 19. Participated in 1<sup>st</sup> meeting of Indian Immunological Society-Odisha Chapter organized by NISER and ILS, Bhubaneswar, Odisha on August 11, 2012.
- 20. Participated in XXXV All India Cell Biology Conference (AICB) & Symposium on **Membrane dynamics and Disease** organized by NISER, Bhubaneswar from 16<sup>th</sup>-18<sup>th</sup> December 2011.
- 21. Participated in International Brainstorming meet 2011 on Recent Advances in Fish Reproductive Physiology organized by CIFA, Kausalyaganga, Bhubaneswar on 16.08.2011.
- 22. Participated in ICAR, New Delhi sponsored Winter School on Recent Advances in Fish & Shell fish Immunology and its application organized by CIFA, Kausalyaganga, Bhubaneswar from 21.10.2008 to 10.11.2008.
- 23. Idea generation workshop in Aquaculture Biotechnology during 26-27 September, 2007 organised by Central Institute of Freshwater Aquaculture, Bhubaneswar and sponsored by Department of Biotechnology, Government of India.
- 24. Participated in a training programme on "Molecular techniques in Animal disease diagnosis" organized by National Biotechnology Centre, Indian Veterinary Research Institute, Izat Nagar, Bareli from 09th March to 29th March, 2004.
- 25. Participated in a short term training course cum workshop on "**Electrophoresis Techniques**" held in the Electrophoresis Institute, Yercaud, Tamilnadu from 27.05.2002 to 01.06.2002.
- 26. Undergone a training programme on "Breeding and Hatchery Management of Carps" in Central Institute of Freshwater Aquaculture (ICAR), Kausalyaganga, Bhubaneswar from 06.06.2000 to 14.6.2000.
- 27. Undergone a training programme on "Reproductive Physiology of Carp and Catfishes" in Central Institute of Freshwater Aquaculture (ICAR), Kausalyaganga, Bhubaneswar, from 27th July to 1st August, 1998.
- 28. Undergone a training programme on "Aquatic Microbiology" in Central Institute of Freshwater Aquaculture (ICAR), Kausalyaganga, Bhubaneswar, from 17th May to 23rd May, 1994.

#### 7. Orientation/Refresher Courses Attended

- Participated in an **Orientation Course on Values of Education** from 18th November, 2010 to 14th November, 2010 organised by **Academic Staff College of Utkal University**, **Bhubaneswar**, **Orissa**.
- Participated in an **Orientation Course** from 11th January, 2006 to 7th February, 2006 organised by **Academic Staff College of Utkal University, Bhubaneswar, Orissa**.

### 8. Professional Experience & Technical Expertise

#### Practical knowledge on:

- Routine Biochemical Analysis of various biological samples, Enzymatic Studies, Studies on oxidative stress and antioxidant biology, Electrophoresis and blotting Techniques, Isolation of DNA, RNA, Immuno techniques and PCR, RT–PCR, HPLC.
- Generation of Brood-stock of *Macrobrachium rosenbergii* in captivity and culture of freshwater prawn adopting mono and polyculture system.
- Nutritional manipulation and health management of freshwater prawn, fishes and silkworm.

## 9. Refresher Course/Seminar organized

- Refresher course in Biotechnology for College and University teachers 2011
- National Symposium on "Emerging trends in Biotechnology: Present scenario and future dimensions" on 29th and 30th March, 2014
- Proteomics workshop 2018Refresher course in biotechnology 2019 for college lecture.

# 10. Awards/ Honours/ Fellowships Received

- Post Doctoral Fellowship sponsored by Dept. of Biotechnology, Govt. of India by selection committee for DBT-Post Doctoral Fellowship held in Indian Institute of Science, Bangalore in 2002.
- Orissa Young Scientist Award for the year 1999 from Department of Science & Technology, Govt. of Orissa for significant contribution in the field of Life Sciences.
- Best paper (poster) presentation award from Indian Science Congress Association in 86th Indian Science Congress held at Chennai in January 1999.
- Best research scholar award for the year 1998 in Central Institute of Freshwater Aquaculture (ICAR), Kausalyaganga, Bhubaneswar.
- National Scholarship received from Govt. of India for studying M.Sc. in the year 1990.

### 11. Professional Experience and Previous Positions held

- a. Teaching:
- Professor in P.G. Department of Biotechnology, Utkal University since February-2015.
- Reader in P.G. Department of Biotechnology, Utkal University, VaniVihar, Bhubaneswar from March 2010 to February 2015.

- Lecturer in P.G. Department of Zoology, North Orissa University, Takatpur, Baripada from August 2004 to February 2010,
- Lecturer (Consolidated) in P.G. Department of Biotechnology, North Orissa University, Takatpur, Baripada from October 2002 to August 2004.
- Worked as Resource Person in the Department of Biotechnology, North Orissa University, Takatpur, Baripada.
- Associated with the P.G. teaching program in Biotechnology running in the **P.G. Dept.** of Botany, Ravenshaw College, Cuttack, as guest faculty, during the academic session 2001 2002.
- Associated with the teaching program in **P.G. Diploma in Clinical Biochemistry and Medical Biotechnology,** running in the Center for Biotechnology at P.G. Dept. of Zoology, Utkal University, Bhubaneswar, from June 2000 to June 2002.
- Visiting faculty in GuruGhasidas University, Bilaspur, Chhatisgarh in 2001.
- Technical Officer (from December 1997 to 31st March 2000) in Technology Project in Mission Mode on Semi-intensive Prawn Aquaculture (MMPA) funded by DBT, Govt. of India in Central Institute of Freshwater Aquaculture (CIFA-ICAR), Kausalyaganga, Bhubaneswar.
- Senior Research Fellow (from December 1994 to November 1997) in Technology Project in Mission Mode on Semi-intensive Prawn Aquaculture (MMPA) funded by DBT, Govt. of India in Central Institute of Freshwater Aquaculture (CIFA-ICAR), Kausalyaganga, Bhubaneswar.

# b. Workshops / Training Programme Attended

- Participated in ICAR, New Delhi sponsored Winter School on Recent Advances in Fish & Shell fish Immunology and its application organized by CIFA, Kausalyaganga, Bhubaneswar from 21.10.2008 to 10.11.2008.
- Idea generation workshop in **Aquaculture Biotechnology** during 26-27 September, 2007 organised by **Central Institute of Freshwater Aquaculture**, **Bhubaneswar and sponsored by Department of Biotechnology**, **Government of India**.
- Participated in a training programme on "Molecular techniques in Animal disease diagnosis" organized by National Biotechnology Centre, Indian Veterinary Research Institute, Izat Nagar, Bareli from 09th March to 29th March, 2004.
- Participated in a short term training course cum workshop on "**Electrophoresis Techniques**" held in the Electrophoresis Institute, Yercaud, Tamilnadu from 27.05.2002 to 01.06.2002.
- Undergone a training programme on "Breeding and Hatchery Management of Carps" in Central Institute of Freshwater Aquaculture (ICAR), Kausalyaganga, Bhubaneswar from 06.06.2000 to 14.6.2000.

- Undergone a training programme on "Reproductive Physiology of Carp and Catfishes" in Central Institute of Freshwater Aquaculture (ICAR), Kausalyaganga, Bhubaneswar, from 27th July to 1st August, 1998.
- Undergone a training programme on "Aquatic Microbiology" in Central Institute of Freshwater Aquaculture (ICAR), Kausalyaganga, Bhubaneswar, from 17th May to 23rd May, 1994.

# 12. Patents / Product Commercialisation

Contributed for "Formulation and Commercialization of indigenous feed for different life stages of freshwater prawn" developed at Central Institute of Freshwater Aquaculture, Kausalyaganga, Bhubaneswar.

Contributed for development of anti-transferrin antibody and commercialization of the product by Abgenexindia ltd.

### 13. Members in Academic Committees and Policy making bodies

- 1. Member- Advisory committee DBT-Star College Programme, Salepur College, Odisha
- 2. Executive council member, Odisha Bigyan Academy, Govt. of Odisha from 2018.
- 3. Chairman-Board of studies in Biotechnology, Utkal University, Bhubaneswar, 2010 2017
- 4. Member-Academic Council-Utkal University, Bhubaneswar 2010–2017
- 5. Member-Subject Research Committee, Biotechnology, Utkal University since 2010 and chairman, subject research committee, Biotechnology, Since 2017
- 6. Member-Academic Committee, Institute of Life Sciences, Bhubaneswar (2010-2011)
- 7. Member-Task force committee on Biotechnology, DST, Govt. of Odisha
- 8. Member-Committee for setting up of Biotechnology Incubation Center in Konark Knowledge Park, DST, Govt. of Orissa
- 9. Member-Biosafety Committee Central Rice Research Institute, Cuttack as DBT-Govt. of India nominee
- 10. Member- Advisory committee DBT-Star College Programme, N.L. Khan College, Midnapur, West Bengal
- 11. Member-Board of Studies in Zoology and Life Sciences, Utkal University
- 12. Member-Board of Studies in Biotechnology, Ravenshaw University (2010-2011)
- 13. Member-Board of Studies in Biotechnology, North Orissa University, Baripada (Since 2011)

### 14. Administrative / Executive experience:

- 1. Officer on Special Duty, New Campus, Utkal University (April 2017-February 2021)
- 2. Overall administration of the Department as Head from 2010-2017 and since 2019
- 3. Course Coordinator for M.Sc. Biotechnology programme supported by DBT, Govt. of India under DBT-HRD programme from 2010-2017 and since 2019
- 4. Executive member of OdishaBigyan Academy, DST, Government of Odisha from 2018
- 5. Coordinator, Centre of Excellence in integrated OMICs and Computational Biology from 2018
- 6. Coordinator, Platinum Jubilee distinguished Lecture Series, Utkal university
- 7. Other administrative responsibilities as assigned by University Authority from time to time

## 15. Conference organized as Organizing Secretary:

- National Symposium on Emerging trends in biotechnology :present scenarioandfuture dimensions on 29<sup>th</sup> and 30<sup>th</sup> march,2014
- UGC-sponsored skill development work shop on "Determination of protein content in biological sample" 19th and 20th November, 2015

# 16. Evaluation of Ph. D. thesis from

- Goa University, university of Calcutta, guru nanakdev university, Amritswar, BarkatullaUniversity, Bhopal, University of Burdwan, JNU, New Delhi, Bharttiar University, D D University, Gorokhpur
- 17. Reviewer of various peer reviewed journals from Elsevier, springer, wiley, RSC Advance.

# 18. Professional Membership

- Life member of "The Indian Science Congress Association".
- Life Member of "Association of Gerontology, India".
- Life Member of "Biotechnology Society of India"
- Life Member of "Indian society of cell Biology"
- Life Member of "Society for free radical Research India"
- Life Member of "Society of Biological chemists India"
- Life member of "Association of Aquaculturist", Kausalyaganga, Bhubaneswar, India.