




CENTRAL INLAND FISHERIES RESEARCH INSTITUTE  
(Indian Council of Agricultural Research)  
Barrackpore, Kolkata – 700 120, West Bengal



Name	:	Dr B. P. Mohanty	
Designation	:	Principal Scientist & Head of Division, FREM	
Academic Background	:	M.V.Sc (Biochemistry) (IVRI), Ph.D (Biotechnology) (JNU)	
Discipline	:	Biochemistry (An. Sc.)	
Total Research Experience (year):	:	24+	
Research Focus	:	Aquatic Environmental Management, Fish for health and nutritional security, Biomarker discovery under omics platform	
Current area of Research	:	Aquatic Ecosystem Health Management – Pollution Monitoring and mitigation in Indian rivers, Arsenic toxicity and mitigation, Development of biomarkers for pollution monitoring, thermal stress and arsenicosis, Nutrient profiling of food fishes	
Academic contributions	:		
(PG & Ph. D guide)	:	Post-Doc- 1, Ph.D - 4 continuing; M.Sc – 5	
Awards & Recognitions	:		
			<ul style="list-style-type: none"><li>• Biotechnology Overseas Associateship Award (BTOA) from DBT, Ministry of Science &amp; Technology, Govt. of India – 2006</li><li>• Gold Medal and Certificate of Appreciation by the Zoological Society of India (ZSI) at the 21<sup>st</sup> All India Congress of Zoology – 2010</li><li>• '<i>Professor E. P. Odum Gold Medal</i>' for outstanding contribution in the field of Ecological and Environmental Sciences (Environmental Biotechnology) for 2009 by the International Society for Ecological Communication</li></ul>

- Gold Medal and Certificate of Merit conferred by the National Academy of Agricultural Research Management (NAARM), Hyderabad for *Outstanding Group Performance* -1995
- Leading Health Professional of the World (International Biographical Institute, Cambridgeshire, Great Britain) - 2013
- Chaired Session and delivered invited lecture at World Congress of Biotechnology- 2012, Hyderabad, India.
- Referee for International Peer-reviewed Scientific Journals – *Cell Stress and Chaperones*, *Molecular Biology Reports*, *Applied Biochemistry & Biotechnology* (Springer); *Fish & Shellfish Immunology*, *Parasite Immunology* (Wiley-Blackwell); *Acta Tropica* (Elsevier); *Journal of the American College of Applied Nutrition*
- Fellow of the Zoological Society of India (ZSI) since 2011
- Honorary Fellow of the International Society for Ecological Communication for outstanding contribution in the field of Ecological and Environmental Sciences (Environmental Biotechnology) since 2009
- Supervisor for DBT-Post Doctoral Fellowship Program (DBT-PDF) in Biotechnology & Life Sciences since 2008
- Supervisor for DBT-Post Doctoral Fellowship Program (DBT-PDF) in Biotechnology & Life Sciences since 2008
- Supervisor for Doctoral Program (Ph.D) by University of Calcutta, KIIT University
- Nominated Member of The National Academy of Sciences, India (NASI) since 2003

No. of Publications : 60

**National** : **45**

**International** : **15**

List of Important 10 (ten) publications :

- Purohit, G. K., Mahanty, A., Suar M., Sharma, Mohanty, **B. P.**, and Mohanty, S. 2014. Investigating *hsp* gene expression in liver of *Channa striatus* under heat stress for understanding the upper thermal acclimation. *BioMed Research International*. 2014,
- **Mohanty, B. P.**, S. Bhattacharjee, P. Paria, A. Mahanty and A. P. Sharma. 2013. Lipid biomarkers of lens ageing. *Applied Biochemistry and Biotechnology*. 169:192-200. DOI 10.1007/s12010-012-9963-6
- Barik S. K., S. Banerjee, S. Bhattacharjee, S. K. Das Gupta, S. Mohanty and **B. P. Mohanty**. 2013. Proteomic analysis of sarcoplasmic peptides

in two related fish species for food authentication. ***Applied Biochemistry and Biotechnology***. 171: 1011-1021. DOI 10.1007/s12010-013-0384-y

- **Mohanty, B. P.**, Sudeshna Banerjee, Soma Bhattacharjee, Tandrima Mitra, Gopal Krishna Purohit, Anil Prakash Sharma, Dhanasekar Karunakaran and Sasmita Mohanty. 2013. Muscle proteomics of the Indian major carp catla (*Catla catla*, Hamilton). ***Journal of Proteomics and Bioinformatics***. 6: 11.
- Bhattacharjee, S., S. Mohanty, A. P. Sharma and **B. P. Mohanty**. 2011. Effect of storage temperature as a preanalytical variable on the lens crystallins protein quality for proteomic studies. ***Proteomics: Clinical Applications***. 5(9-10): 504-12.
- **Mohanty, B. P.**, S. Bhattacharjee and M. K. Das. 2011. Lens proteome map and  $\alpha$ -crystallin profile of the catfish *Rita rita*. ***Indian Journal of Biochemistry and Biophysics***. 48 (1): 35-41.
- **Bimal Mohanty**, Sasmita Mohanty, Jnanendra Sahoo and Anil Sharma (2010). Climate Change: Impacts on Fisheries and Aquaculture, ***Climate Change and Variability***, Suzanne Simard (Ed.), ISBN: 978-953-307-144-2, InTech. (> 8000 downloads)
- Alam A.K.M.N., **Mohanty B.P.**, Hoq M.E. & Thilsted S.H. (2012) Nutritional values, consumption and utilization of hilsa *Tenualosa ilisha* (Ham.). In ***Proceedings of Regional Workshop on Hilsa: Status of Fishery and Potential for Aquaculture***, 16-17 September 2012 (pp. 183-215). The World Fish Center-Bangladesh & South Asia Office, Dhaka, Bangladesh. (> 3600 downloads)
- **Mohanty, B. P.**, S. Bhattacharjee, K. Mondal and M. K. Das. 2010. HSP70 expression profiles in white muscles of riverine catfish *Rita rita* show promise as biomarker for pollution monitoring in tropical rivers. ***National Academy Science Letters***. 33 (5 & 6): 177 – 182
- Martin, S.A.M., **B.P. Mohanty**, P. Cash, D.F. Houlihan, and C. Secombes. 2007. Proteome analysis of Atlantic salmon, *Salmo salar*, cell line SHK-1 following recombinant IFN- $\gamma$  stimulation. ***Proteomics*** 7(13): 2275-2286.
- **Mohanty, B. P.** 2006. A p53-like protein from a freshwater mollusc *Lamellidens corrianus*. ***Indian Journal of Biochemistry and Biophysics*** 43: 247-250.
- **Mohanty, B. P.**, Satabdi Ganguly, Kajal Chakraborty, D. Karunakaran, Prasanna Kumar Routray Mohapatra and Nihar Ranjan Nayak. 2012. Maternal fish consumption and prevention of low birth weight in the developing world. ***National Academy Science Letters***. 35 (5): 433-438.

#### Database

:

- <http://14.139.208.116/fishprot.html> (FishProt)
- <http://www.cifri.ernet.in/outreach> (Nutrient profiling of Food Fishes)

Research Bulletins : 8

- **Nutritional significance of small indigenous fishes in human health. CIFRI Bulletin No: 162**, 2011 (ISSN 0970-616X); (by B. P. Mohanty, B. K. Behera, A. P. Sharma)
- **Therapeutic value of fish. CIFRI Bulletin No. 170**, 2011 (ISSN 0970-616X); (by B.P. Mohanty, D. Sudheesan, T. V. Sankar, M .K. Das, A. P .Sharma).
- **Tenualosa ilisha- A rich source of omega-3 fatty acids. CIFRI Bulletin No. 171**, 2011 ( ISSN 0970-616X); (B. P. Mohanty, S. Das, U. Bhaumik, A. P. Sharma)
- **Manav swathya mein chhoti desi maachliyan ke poshan guno ka mahatya. CIFRI Bulletin No. 172**, 2011 (ISSN 0970-616X); (by B. P. Mohanty, D Sudheesan, T. V. Sankar, M. K. Das, A. P. Sharma).
- **Maachliyan ka aushadhiya gun. CIFRI Bulletin No. 176**, (ISSN 0970-616X); (by B. P .Mohanty, D. Sudheesan, T. V. Sankar, M. K. Das, A. P. Sharma).
- **Marine fishes in India - Their importance in human health and nutrition. CMFRI Special Publication No. 110**; (by K. Chakraborty, P. Vijayagopal, K .K. Vijayan, B. P .Mohanty)
- **Nutrient Profile and health benefits of coldwater fishes. DCFR Bulletin No. 18**, (by D. Sarma, M.S. Akhtar, N. N. Pandey, N. Shahi, B. P. Mohanty, P. C. Mahanta)
- **Fish Consumption and Human Health: A clinico-epidemiological study. CIFRI Bulletin No. 177**, ( ISSN 0970-616X); (B.P.Mohanty, K. Chakraborty, A.P. Sharma)

Professional websites :

<http://www.linkedin.com/pub/bimal-prasanna-mohanty/18/313/a20>

[http://www.researchgate.net/profile/Bimal\\_Mohanty/](http://www.researchgate.net/profile/Bimal_Mohanty/)

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