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Date of Birth	1 <sup>st</sup> January 1961
Sex	Female
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Academic qualifications	
	1987 Ph. D 1982 M.Sc
Academic awards	<ul style="list-style-type: none"> <li>• Nominated as the member of <b>Task Force committee</b> for '<b>Biotechnology based Programme for Women</b>', in Department of Biotechnology, Govt of India.</li> <li>• Nominated as the member in Technical Advisory Committee (TAC) of Technology Development and Utilization Programme for Women (TDUPW), Department of Scientific &amp; Industrial Research , Ministry of Science and Technology, Govt of India.</li> <li>• Appreciation letter from Dr. Mangala Rai, DG, ICAR, for Outstanding progress in project work (2003).</li> <li>• 3<sup>rd</sup> prize in photo contest on “women in fishery” organized by Asian Fisheries Society, Philippines in the year 2002</li> <li>• VG Jhingran Swarna Padak awarded by Nature Conservators, Muzaffarnagar, Professional Society 1992. (As a team member)</li> </ul>
Experience	29 years
Areas of specialization	Fisheries extension, Fish Genetics
Current Research Interests	Fish Genetics & breeding
Research guidance	Ph.D – 2
Highlights of Research Contribution	
<ul style="list-style-type: none"> <li>• Worked on complete mitochondrial genome organization of 10 cold water species.</li> <li>• Worked on Transcriptome profiling and expression analysis of immune responsive genes in the liver of Golden mahseer (<i>Tor putitora</i>) challenged with <i>Aeromonas</i></li> <li>• Characterized the Solute Carriers (SLCs) from kidney transcriptome of golden mahseer (<i>Tor putitora</i>)</li> <li>• Determined the Transcriptional response to heat shock in liver of snow trout (<i>Schizothorax</i></li> </ul>	

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- Developed SSR marker s in important cold water species
- Different population of golden mahseer, snow trouts, rainbow trout and other cold water species were characterized using dna and SSR markers.
- Initiated the systematic gender research for assessing and refining fishery technologies, with women perspective and empowering women through fishery technology.
- Mobilized, motivated and imparted training, exposure to about 800 women from 22 villages in Coastal districts of Odisha under different projects. Demonstrated different aquaculture technologies such as carp poly culture, integrated fish farming, ornamental fish culture in rural area. Increased average fish yield from 0.17t/ha to 2.9t/ha with a maximum fish yield of 5.5t/ha.
- Demonstrated the aquaculture potential of derelict water bodies through action research involving women
- involved in developing a gender sensitive extension model to reach out to more women in rural areas by strengthening village level extension

#### Publications

1. Kumar R., **Sahoo P.K.**, Barat A. 2017. Transcriptome profiling and expression analysis of immune responsive genes in the liver of Golden mahseer (*Tor putitora*) challenged with *Aeromonas hydrophila*. *Fish & Shellfish Immunology*. 67: 655–666.
2. Barat A., **Sahoo P.K.**, Kumar R., Pande V. 2016. Solute Carriers (SLCs) identified and characterized from kidney transcriptome of golden mahseer (*Tor putitora*) (Fam: Cyprinidae). *Comp Biochem Physiol*. 200:54-61.
3. Kumar R., Pande V., Singh L., Sharma L., Saxena N., Thakuria D., Singh A.K. and **Sahoo P.K.** 2016. Pathological Findings of Experimental *Aeromonas hydrophila* Infection in Golden Mahseer (*Tor putitora*). *Fish Aquac J*, 7:1.
4. Barat A., **Sahoo P.K.**, Kumar R., Goel C., Singh A.K. 2016. Transcriptional response to heat shock in liver of snow trout (*Schizothorax richardsonii*)—a vulnerable Himalayan Cyprinid fish. *Funct Integr Genomics*. 16(2):203-13.
5. Kumar R., Goel C., **Sahoo P. K.**, Singh A.K., Barat A. 2016. Complete mitochondrial genome organization of *Tor tor* (Hamilton, 1822). *Mitochondrial DNA*. 27(4):2541-42.
6. **Sahoo P.K.**, Singh L., Sharma L., Kumar R., Singh V.K., Ali S., Singh A.K., Barat A. 2016. The complete mitogenome of brown trout (*Salmo trutta fario*) and its phylogeny. *Mitochondrial DNA A DNA Mapp Seq Anal*. 27(6): 4563-4565.
7. Barat, A., **Sahoo, P.K.**, Kumar R., Mir, J.I., Ali, S., Patiyal, R.S. and Singh, A.K. 2015. Molecular characterization of rainbow trout *Oncorhynchus mykiss* (Walbaum, 1792) stock in India. *Journal of Genetics*, 94:e13–e18.  
Online: <http://www.ias.ac.in/jgenet/OnlineResources/94/e13.pdf>
8. Mir, J.I., Saxena, N., Patiyal, R.S., **Sahoo, P.K.** (2015). Phenotypic differentiation in *Barilius bendelisis* (Hamilton, 1807) from four rivers of the Central Indian Himalaya. *Revista de Biologia Tropical (Int. J. Trop. Biol)*. ISSN-0034-7744) 63 (1): 165-173.
9. Mir, J.I., Patiyal, R.S., **Sahoo, P.K.** 2015. Length-weight relationships of 10 fish species from a tributary of Ganga river basin in Uttarakhand, India. *Journal of Applied Ichthyology*. DOI: 10.1111/jai.12686.

10. Goel C., Sahoo P.K., Barat A. Complete mitochondrial genome organization of *Schizothorax plagiostomus* (Heckel, 1838). Mitochondrial DNA. doi:10.3109/19401736.2013.873928
11. Goel C., Sahoo P.K., Barat A. Complete mitochondrial genome organization of *Schizothorax progastus* (McClelland, 1839). Mitochondrial DNA. doi:10.3109/19401736.2013.861453
12. Sahoo P.K., Goel C., Bhat F.A., Balkhi M.H., Barat A. Complete mitochondrial genome organization of *Schizothorax labiatus* (McClelland, 1842). Mitochondrial DNA. doi:10.3109/19401736.2013.861452
13. Goel C., Sahoo P.K., Bhat F.A., Balkhi M.H., Barat A. Complete mitochondrial genome organization of *Schizopyge niger* (Heckel, 1838). Mitochondrial DNA. doi:10.3109/19401736.2013.843083
14. Sahoo P.K., Barat A., Bhat F.A., Balkhi M.H., Goel C. Complete mitochondrial genome organization of *Schizothorax esocinus* (Heckel, 1838). Mitochondrial DNA. doi:10.3109/19401736.2013.843084
15. Sati, J., Kumar, R., Sahoo, P.K., Patiyal, R.S., Ali S., Barat A. 2015, Genetic characterization of Golden mahseer (*Tor putitora*) populations using mitochondrial DNA markers. Mitochondrial DNA. 26(1): 68-74.
16. Ali, S., Barat, A., Pandey, H., Sivaraman, G.K., **Sahoo, P.K.** and Sati, J. 2014. Mitochondrial DNA variation and population genetic structure of snow trout from Kumaun and Garhwal Himalayan Regions of India. *J. Ecophysiol. Occup. Hlth.*, 14(1&2):23-31.
17. Barat, A., Goel, C., **Sahoo, P.K.**, Rao, A.R., 2014. Development of expressed sequence tags (ESTs) from the brain tissue of snow trout *Schizothorax richardsonii* (Gray, 1832) (Family Cyprinidae) and its preliminary annotation. *Indian J. Fish.*, 61(2), 118-128.
18. Goel, C., Barat, A., Pande, V. and **Sahoo, P.K.** 2014. Molecular cloning and characterization of Mannose Binding Lectin homologue from snow trout (*Schizothorax richardsonii*). *Protein J.* DOI 10.1007/s10930-014-9591-9
19. Kumar, R., **Sahoo, P.K.**, Vishwanath, W., Barat A. (2014) Karyotype of a New Loach *Schistura obliquofascia* and a Mahseer *Puntius chelynooides* from Kumaon Hills of Himalaya. *Cytologia* 79(2): 1-4.
20. Sati J., Goel C., Kumar R., Ali S., Patiyal R. S., Singh V.K., **Sahoo P.K.**, Barat A. 2014, Complete mitochondrial genome organization of *Tor putitora*. Mitochondrial DNA. Vol. 25, No. 4, Pages 278-279: 278-279.
21. Goel, C., Sati, J., Barat, A., Patiyal R.S., Ali S., Sahoo P.K. 2014. Complete mitochondrial genome organization of *Schizothorax richardsonii* (Gray, 1832). Mitochondrial DNA. 25(3): 171-172.
22. Ali, S., Barat, A., Pandey, H., Sivaraman, G.K., Sahoo, P.K. and Sati, J. (2014) Mitochondrial DNA variation and population genetic structure of snow trout from Kumaun and Garhwal Himalayan Regions of India. *J. Ecophysiol. Occup. Hlth.*, 14(1&2):23-31.
23. **Barat A**, Matura R, Sati J, Kumar R, Bhatt F.A, Goel C and Sahoo P.K (2013) Development and Characterization of microsatellite markers in *Schizopyge niger*. (Family: Cyprinidae, Pisces) from Kashmir valley. *Conservation Genet Resour.* Doi: 10.1007/S12686-013-9920-X.
24. Barat A., Goel C., Tyagi A., Ali S., **Sahoo P.K.** (2013) Molecular cloning and expression profile of snow trout GPDH gene in response to abiotic stress. *Mol Biol Rep.* DOI 10.1007/s11033-012-1980-6.

25. **Sahoo P. K.**, Kumar R., Sati J., Matura R. and Barat A. (2013) Isolation and characterization of novel microsatellite markers in endangered mahseer, *Tor putitora* (Hamilton 1822) (Family: Cyprinidae, Pisces). Conservation Genet Resour. 5:759–761.
26. Vipinkumar, **Sahoo P. K.**, Srinath Krishna, Ambrose T. V. and Dash S. S. J (2013) Gender perspectives and dynamics of bivalve farming Self Help Groups. Indian J. Fish., 60(3): 59-66.
27. Goel C., Sahoo P. K., Barat A. (2013) Gene expression analysis of cytochrome c oxidase in *Schizothorax richardsonii* (Family: Cyprinidae) using qRT-PCR. Journal of Ecophysiology & Occupational Health. 13(1&2), 21-23.
28. Barat A., Kumar R., Sati J., Sah S., **Sahoo P. K.**, Ali S., Haldar R. S., Kumar P., Patiyal R. S., Gopikrishna G. (2013) Pattern of morphological variation among five wild populations of endangered *Tor putitora* (Hamilton, 1882) from India using truss network system. Journal of Ecophysiology & Occupational Health. 12 (2012) 1-20.
29. Pandey H., Barat A., Singh B.K., **Sahoo P.K.**, Ali S. and Mahanta P.C. (2013) Comparative phylogenetic study of four coldwater fishes (Family Cyprinidae) based on targeted 16S RNA mitochondrial genes. Journal of Ecophysiology & Occupational Health. 13(3-4): 47-56
30. Barat A, Ali S, Khandelwal S and **Sahoo P.K** (2012) Genetic characterization of two coldwater fishes from Kumaun Hills, Uttarakhand. *Caryologia* 65(4):311-315.
31. Barat A, Goel C, Tyagi A, Ali S, **Sahoo P.K** (2012) Molecular cloning and expression profile of Snow trout GPDH gene in response to abiotic stress. *Molecular Biology Reports* DOI 10.1007/s11033-012-1980-6.
32. J. R. Biswal, **P. K. Sahoo** & P. K. Mohanty (2010) Karyotypic diversity of some fresh water fish species in rural ponds of Orissa, India. *Cytologia*, 75(3): 237-242
33. **P.K.Sahoo**, H.K.Dash & J. Biswal (2009) Promotion of ornamental fish production through women's participation. *Journal of Extension Education* XIV(1 & 2) : 54-60
34. Dash H.K., **Sahoo P.K.** and Biswal J.(2008) Aquaculture potential of derelict water bodies – a case study. *Agricultural Economics Research Review* 21:265-272.
35. Biswal J., **Sahoo P.K.** and Mohanty P.K. (2008) Chromosomal Studies on four Cyprinid Fishes. *J. Aqua*. 16:39-44
36. Barat A. and **Sahoo P.K.** (2007) Karyotypic analysis of *Channa punctatus* (Pisces) using restriction endonucleases. *Cytologia*, 72(4):471-473
37. **Sahoo P.K.**, Nanda P. and Barat A. (2007) Karyotypic diversity among three species of *Garra* (Family: Cyprinidae) from river Dikrong, Arunachal Pradesh, India . *Cytologia* 72(3):259-263
38. **Sahoo P.K.**, Nanda P. and Barat, A. (2007) Karyotypic analysis of *Neolissocheilus hexagonolepis* (mcclelland), *Puntius ticto* (ham.) and *P. chola* (Ham.)(family: cyprinidae, pisces). *Cytologia*, 72(4): 409-413.
39. Ponniah A.G., **Sahoo P.K.**, Dayal R. and Barat A. (1999) Cryopreservation of *Tor putitora* spermatozoa: effect of extender composition, activating solution, cryoprotectant and equilibration time. *Proc. Nat. Acad sci. India* 69 (b),1:53-59.
40. **Sahoo P.K.**, Barat A. and Ponniah A.G. (1998) In vivo sister chromatid differentiation and sister chromatid exchanges in *Channa punctatus*.

	<p>Indian Journal of Experimental Biology, 36: 1041-1043</p> <ol style="list-style-type: none"><li data-bbox="475 235 1412 338">41. Barat A., <b>Sahoo P.K.</b>, Nagpure N.S. and Ponniah A.G. (1997) Variation in NOR pattern in different population of <i>Schizothorax richardsonii</i> (cyprinidae: pisces). <i>Cytobios</i>, 91: 181-185.</li><li data-bbox="475 342 1412 448">42. <b>Sahoo P.K.</b>, Barat A. and Ponniah A.G. (1997) Replication banding in <i>Channa punctatus</i> (channidae,pisces). <i>Chromosome science</i>, 91: 181–185.</li></ol>
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