

Scientist Profile

Name	Dr SURESH CHANDRA	
Designation	Principal Scientist (Fish Pathology)	
Qualification	M.Sc, Ph.D	
Email Address	suresh.chandra@icar.gov.in schandradsfr@gmail.com	
Professional experience (Years)	Thirty five years	
Area of Research Expertise	<p>Diagnosis and control of important freshwater fish diseases</p> <p>Organic manure and biofertiliser based carp culture, intensive and integrated fish farming</p> <p>Freshwater and coldwater aquaculture development and extension in rural areas of Uttarakhand, Odisha, Uttar Pradesh, Punjab and Haryana states of the country</p>	
Google scholar link	https://scholar.google.com/citations?user=X2YKymbkAAAAJ&hl=en	
ORCID ID	https://orcid.org/0000-0003-3870-7610	
Awards/ Recognitions	<p>As a team member in the development of an effective medicine against the Epizootic Ulcerative Syndrome (EUS) named CIFAX commercialized four times, with a total gross license fee of Rs 291 lakhs.</p> <p>Best Extension Worker-2008 of the Central Institute of Freshwater Aquaculture (CIIFA), Bhubaneswar, Odisha.</p> <p>Bioved Society, Allahabad Young Scientist Award-2000 for Aquaculture Research and Development</p> <p>Letter of Appreciation for Outstanding Contribution in Extension in the Fifth Indian Fisheries Forum, held at CIFA in Bhubaneswar, Odisha.</p> <p>As a team member, received Krushakbandhu Team Award-2011 (Bharat Krashak Samaj) for the NAIP-SRL sponsored project on sustainable livelihood improvement in three districts of Odisha.</p> <p>Bioved Distinguished Service Award in 2006 for outstanding contribution to aquaculture at BHU, Varanasi</p> <p>As a team member, received the Best Division Award-2006 of CIFA,</p>	

Bhubaneswar.

Letter of Appreciation as a team member for **exemplary work** carried out in the **breeding of yellow catfish, *Horabagrus brachysoma* and spiny eel, *Mastacemblus aculeatus* from DDG (FY) in the year 2006.**

Letter of Appreciation as a team member for **exemplary work** carried out in **breeding and larval rearing of *Pangasius pangasius*** from DDG (FY), New Delhi in year 2007

Publication (no.)

Research papers 48

Reviews 01

Books 12

Book Chapters 08

Popular articles 56

Others 40(Manual articles)

Projects

(Institutional/

External)

Project completed/ongoing as PI/Co-PI/Associate

- Fish Diseases and Their Control, CIFA, Bhubaneswar, CIFA ICAR, April 1989, Dec 1999
- Development of Intensive Aquaculture Systems for Carps, CIFA, Bhubaneswar, Odisha. DBT, April 1990-December 1995
- ORP on Organic Waste Processing and Utilization in Aquaculture, CIFA Centre, Allahabad, U.P. CIFA ICAR, December 1995-May 2002
- Evaluation and Adoption of Freshwater Aquaculture Technologies in North-Western India for Optimizing Productivity CIFA, Regional Centre, Ludhiana, Punjab. CIFA ICAR, June 2002-May 2004
- Breeding and Culture of *Pangasius pangasius*, CIFA, Bhubaneswar, Odisha . June 2004 - March 2007
- Mass Seed Production and Grow out Culture of Diversified Catfishes Pangas (*Pangasius pangasius*) and Yellow Catfish (*Horabagrus brachysoma*) ,CIFA, Bhubaneswar, April 2007- March 2010)
- Community-Based Management for Sustainable Aquaculture in Rural Areas, CIFA, Bhubaneswar, Odisha. CIFA ICAR, April 2009-March 2011
- An International Consultancy Project on Breeding and Demonstration Project for FRP carp Hatchery in Diptipur, Bargarh District of Orissa, India. NR International, United Kingdom, June 2008–July 2008.
- An International Consultancy Project on Scaling up Aquaculture in Western Orissa. India, Rural Livelihoods Project (WORLP) Districts, India CIFA, Bhubaneswar, Odisha, Nr. International, United Kingdom,



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June, 2009-Sept. 2009

- Project Carp Seed Production in Mobile Hatchery and Rearing for Livelihood Development of SC/ST Communities in Selected Districts of Orissa, DBT, April 2009-Sept 2009.
- CIFA, Bhubaneswar, Odisha, DBT, Project on Economic and Livelihood Development of SC and ST Population through Aquaculture Technologies, April 2006-August 2009.
- Project on Sustainable Livelihood Improvement Through Livestock Development in Mayurbhanj, Keonjhar, and Sambalpur districts of Orissa NAIP-ICAR, April 2009 - March 2011
- Seasonal Incidences of Parasitic, Fungal, and Non-infectious Diseases in Coldwater Fishes and Evaluation of Herbal Extracts for Their Control, DCFR, April 2012 - March 2014
- THDC Consultancy Project on Preparation and Supporting Implementation of a Fish Management Plan for the Vishnugad Pipalkoti Hydro Electric Project (VPHEP) of THDC India Limited. THDC Consultancy, January 2014– Jan. 2018
- Performance Evaluation of Improved Strains of Common Carp, Champa-1 & Champa-2 at Different Thermal Regimes, DCFR, ICAR, April 2011 - March 2015
- Potential Bacterial Pathogens in Rainbow Trout Farms from Northern India and the Maintenance of Bacterial Agents. DCFR, ICRA, April 2011-March 2016
- Decoding the growth, maturation, and captive management constraints of snow trout (*Schizothorax richardsonii*, Gray, 1832). DCFR, ICAR, April 2015-March 2019
- Coldwater fish disease surveillance in Jammu and Kashmir, Himachal Pradesh, and Uttarakhand. NFDB, April 2014-March 2020
- Investigation into fish health disorders associated with mortality in trout hatcheries and farms during seed production. DCFR, ICAR, July 2020-Cont.

Important 10 Publications (recent)

1. **Chandra Suresh**, Singh, S. K., Das Gupta, S. and Sahoo, S. K., 2015. Mass specific oxygen uptake in the freshwater catfish *Wallago attu* (Bloch & Schneider, 1801). *Indian Journal of Fisheries*, 62(3): 137-

140.

2. **Chandra Suresh**, Patiyal, R S, Gupta, S K and Sarma, D.2018.Study on age dependent breeding performance of rainbow trout (*Oncorhynchus mykiss*, Walbaum, 1792). *Journal of Coldwater Fisheries* 1(1):125-128, 2018.
3. Tripathi, S.D., Arvindakshan, P.K., Ayyappan, S., Jena, J.K., Muduli, H.K., **Chandra Suresh** and Pani, K.C. 2000.New dimensions in intensive carp polyculture in India. *J.Aqua.Trop.* 15(2):pp119-128.
4. Mallik, Sumanta Kumar, Shahi Neetu, Joshi Nupur, Pant Kushagra, Kala Krishna, **Chandra Suresh**, Sarma, Debajit. **2019**. The emergence of zoonotic *Fusarium oxysporum* infection in captive-reared fingerlings of golden mahseer, *Tor putitora* (Hamilton, 1822) from the central Himalayan region of India *Transbound Emerg Dis.* 2019;00:1–9 DOI:10.1111/tbed.13367.
5. Shahi, Neetu, Mallik, Sumanta Kumar, Kala Krishna, Joshi Nupur, Ravinder Singh Patiyal, **Suresh Chandra**, Sivam Singh, Debajit Sarma.**2020**. Seasonal emergence of benign epidermal tumor in farm-reared adult grass carp (*Ctenopharyngodon idella*) caused by lymphocystis disease virus at Uttarakhand, India. *Aquaculture*, Volume 526, 15 September 2020 <https://doi.org/10.1016/j.aquaculture.2020.73540>.
6. Raja Aadil Hussain Bhat, Sabeehah Rehman, Ritesh Shantilal Tandel, Pragyan Dash, Ankita Bhandari, Parvaiz Ahmad Ganie, Tarang K. Shah, Kushagra Pant, Dar Jaffer Yousuf, Irfan Ahmad Bhat, **Suresh Chandra**, Sumanta K.Mallik, Debajit Sarma. **2021**. Immunomodulatory and Antimicrobial potential of ethanolic extract of Himalayan *Myrica esculanta* in *Oncorhynchus mykiss*: Molecular modelling with *Aeromonas hydrophila* functional proteins. *Aquaculture*, Volume 533, 25 February 2021, <https://doi.org/10.1016/j.aquaculture.2020.736213>.
7. Ritesh, Shantilal, Tandel, Pragyan, Dash, Raja, Aadil, Hussain, Bhat, Dimpal, Thakuria, Paramita, Banerjee, Sawant, Nityanand, Pandey, **Suresh Chandra**, Narinder, Kumar, Chadha. 2021. Anti-oomycetes and immunostimulatory activity of natural plant extract compounds against *Saprolegnia* spp.: Molecular docking and in-vitro studies. *Fish & Shellfish Immunology*, Volume 114, July 2021, Pages 65-81. <https://doi.org/10.1016/j.fsi.2021.04.018>.
8. Shivam, Singh, Sumanta, Kumar, Mallik, Krishna, Kala, Neetu, Shahi, Richa, Pathak, Abhay, Kumar, Giri, **Suresh Chandra**, Kushagra Pant,

Rabindar Singh Patiyal.2021. Characterization of *Flavobacterium columnare* from farmed infected rainbow trout, *Oncorhynchus mykiss* (Walbaum, 1792) of Central Indian Himalayan region, India. *Aquaculture* Volume 544, 15 November 2021, 737118.<https://doi.org/10.1016/j.aquaculture.2021.737118>.

9. Kumar, G., Sharma, J. G., Goswami, R. K., Shrivastav, A. K., Kumar, N., **Chandra, S.** and Chakrabarti, R. 2021. The study of effect of vitamin C and *Achyranthes aspera* seeds enriched diets on the growth, biochemical composition, digestive enzyme activities and expressions of genes involved in the biosynthesis of fatty acids in Snow trout *Schizothorax richardsonii* (Gray, 1832). *Journal of Applied Aquaculture* <https://doi.org/10.1080/10454438.2021.1985679>. Published online: 19 Oct 2021.
10. Vandana Pandey, Raja Aadil Hussain Bhat, **Suresh Chandra**, Ritesh Shantilal Tandel, Maneesh Kumar Dubey, Prakash Sharma, Bhawna Gehlot, Pragyan Dash, Rini Joshi. 2021. Clinical signs, lethal dose and histopathological lesions in grass carp, *Ctenopharyngodon idella* experimentally infected with *Edwardsiella tarda*. *Microbial Pathogenesis*, <https://doi.org/10.1016/j.micpath.2021.105292>. Published online: 12 November 2021.

Other information's

- As a team member Technology Package developed and transferred for 10 &15 ton/ha/yr fish production under development of intensive carp culture systems (Tripathi, S.D., Arvindakshan, P.K., Ayyappan, S., Jena, J.K., Muduli, H.K., **Chandra Suresh** and Pani, K.C. 2000)
- Radio talks from All India Radio/Prasar Bharti , Allahabad and Almora- 11 nos.
- **Member Secretary**, RAC, ICAR-DCFR,Bhimtal 2019-20- Cont...