



# National Bureau of Fish Genetic Resources

(Indian Council of Agricultural Research)

Canal Ring Road, Dilkusha PO, Lucknow-226002, India



**Name** Dr. Ajay Kumar Pandey

**Designation** Principal Scientist

**Date of birth** 01.02.1957

**Professional experience** Since March 1986

**Qualification** M.Sc., Ph.D.  
(University of Gorakhpur)



**Current area of Research**

- Neuroendocrine regulation of reproduction in fish and prawns
- Aquatic toxicology

**Area of Research Expertise**

- Reproductive physiology of carps and catfishes
- Aquatic toxicology
- Endocrinology of drug metabolism

**Awards/ Recognitions (only National and International)**

- **Archana Pallav Gold Medal** of the Academy of Environmental Biology, Lucknow
- **Dr. S.Z. Qasim Gold Medal** of the Society of Biosciences, Muzaffarnagar
- **Eminent Scientist of the Year Award**, National Environmental Science Academy, New Delhi

**Publication (no.)**

- **Research papers** 159
- **Reviews** 13
- **Books** 04
- **Book Chapters** 56
- **Popular articles** 33
- **Others (Editorial Assistance)** 01

## Important Research Publications

**Pandey A K**, Krishna L, Srivastav A K and Swarup K (1982). Response of serum calcium to administration of an extract from Stannius corpuscles in the anurans. *Experientia*, **38**: 1314-1315.

**Pandey A K** (1984). Chemical signals in fishes: theory and application. *Acta Hydrochim. Hydrobiol.*, **12**: 464-478.

**Pandey A K** (1991). Endocrinology of calcium regulation in reptiles: a comparative aspect in lower vertebrates. *Biol. Struct. Morphogen. (Paris)*, **3**: 159-176.

- Pandey A K** (1992). Endocrinology of calcium metabolism in amphibians, with emphasis on the evolution of hypercalcemic regulation in tetrapods. *Biol. Struct Morphogen. (Paris)*, **4**: 102-126.
- Pandey A K** (2005). Recent advances in fish pheromone research with emphasis on their potential applications in fisheries. *J. Appl. Zool. Res.*, **16**: 210-216.
- Pandey A K** and A Kumar (2006). Changes in neurosecretory cells of eyestalk, brain and thoracic ganglia of female giant freshwater prawn, *Macrobrachium rosenbergii*, in relation to gonadal maturation. *J. Environ. Biol.*, **27**: 225-233.
- Mishra D K, K Bohidar and **Pandey A K** (2006). Histopathological changes in kidney of freshwater teleost, *Channa punctatus*, exposed to sublethal concentration of carbaryl and cartap. *J. Inland Fish. Soc. India*, **38(2)**: 67-72.
- Mishra D K, Bohidar K and **Pandey A K** (2007). Occurrence of vesicle in the pituitary gland of the freshwater teleost, *Channa punctatus* (Bloch). *J. Inland Fish. Soc. India*, **39(1)**: 68-71.
- Ruhela S, **Pandey A K** and Khare A K (2008). Histopathological manifestations in kidney of *Clarias batrachus* induced by experimental *Procamlanus* infection. *J. Environ. Biol.*, **29**: 739-742.
- Mishra D K, Bohidar K and **Pandey A K** (2008). Effect of sublethal exposure of cartap on hypothalamo-neurosecretory system of the freshwater teleost, *Channa punctatus* (Bloch). *J. Environ. Biol.*, **29**: 917-922.
- Barai S R, Suryawanshi S A and **Pandey A K** (2009). Levels of plasma sodium and potassium levels as well as alterations in adrenal cortex of *Rattus norvegicus* to sublethal heroin administration. *J. Environ. Biol.*, **30**: 253-258.
- Mani C V and **Pandey A K** (2009). Histo-morphological changes in the hypothalamo-neurosecretory cells and gonadotrophs of *Heteropneustes fossilis* (Bloch) in relation to ovarian maturation. *J Appl. Biosci.*, **35**: 43-50.
- Barai S R, Suryawanshi S A and **Pandey A K** (2009). Responses of plasma calcium and inorganic phosphate levels, parathyroid gland and calcitonin-producing C cells of *Rattus norvegicus* to sublethal heroin administration. *J. Environ. Biol.*, **30**: 917-922.
- Mishra D K, Bohidar K and **Pandey A K** (2009). Response of hypothalamo-neurosecretory system of the freshwater teleost, *Channa punctatus* (Bloch), to sublethal exposure of carbaryl. *J. Inland Fish. Soc. India*, **41 (1)**: 51-56.
- Bhoir K K, Suryawanshi S A and **Pandey A K** (2009). Effects of sublethal heroin administration on serum thyroid stimulating hormone (TSH), thyroid hormones (T<sub>3</sub>, T<sub>4</sub>) and thyroid gland of *Rattus norvegicus*. *J. Environ. Biol.*, **30**: 989-994.