

Dr. Prem Chand Pandey
Emeritus Professor
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Educational Qualifications

Degree	University	Major subject	Year
Doctorate	Allahabad University	Physics - Microwaves	1972
M.Sc.	Allahabad University	Physics - Electronics	1966
B.Sc.	Allahabad University	Physics, Chemistry, Mathematics	1963

Research Specialties: Satellite Oceanography/ Atmospheric Sciences, Polar Research, Climate Change Science, Remote Sensing, Disaster Management, Education & Research, Management and establishment of R&D institutions.

Professional Experience

- **Emeritus Professor:** School of Earth, Ocean and Climate Sciences, Indian Institute of Technology Bhubaneswar, Samantapuri, Bhubaneswar-751013, Odisha; Septemeber, 1, 2011 - till date.
- **Emeritus Professor:** Center for Ocean, River, Atmosphere and Land Sciences (CORAL), Indian Institute of Technology, IIT, Kharagpur-72 1302, India, 5th March 2007 to 9th August 2011.
- **Visiting Professor:** Center for Ocean, River, Atmosphere and Land Sciences (CORAL), Indian Institute of Technology, IIT, Kharagpur-72 1302, India, Since 8th December 2005 to 4th March 2007.
- **Founder Director,** National Centre for Antarctic and Ocean Research (NCAOR), Goa: 12th May 1997 to 31st August 2005.
- **Head** (Scientist SG), Oceanic Sciences Division, Space Applications Centre, Ahmedabad-380015: January 1992 to 11 May 1997.
- **Scientist SF,** January 1985 to 1 January 1992, Space Applications Centre, Ahmedabad – 380- 015 (1987 – 1989 at NASA/JPL, USA as a Senior Resident Research Associate and worked on UARS MLS for minor constituent studies in earth’s atmosphere for climate).

Short CV: Prof. P.C. Pandey

- **Scientist SE (Merit promotion):** 10 August 1981 to 1 January 1985). Space Application Centre, Ahmedabad-380015

Honors, Awards and Medals

- **Certificate of Recognition and Cash Award**, National Aeronautics and Space Administration (NASA), USA. 1985.
- **Dr. Shanti Swarup Bhatnagar Award** in the discipline Earth, Ocean, Atmosphere and Planetary Sciences, First Recipient in the Country in the field of Oceanography & Atmospheric Sciences. 1989. Award delivered by the Honorable Prime Minister of India.
- **Hari Om Ashram Prerit Dr. Vikram Sarabhai Research Award and Gold Medal** in Atmospheric Physics and Hydrology, First Recipient in ISRO in the above fields, 1987.
- **Bharat Gaurav Award** and Certificate of Excellence in the field of Science & technology by IIFS, New Delhi, (December, 2001).
- **Felicitation** by Shri Kapil Sibbal, Hon'ble Minister for S/T and Ocean Development, for outstanding achievements in Polar Science & Ocean Science and Technology, on 27 July 2004, on DOD foundation Day.
- **Shri Om Prakash Bhasin Award** for Science & Technology for the Year 2004 in the field of Engineering including Energy and Aero Space , Award delivered by His Excellency Dr A.P.J. Abdul Kalam, the President of India on 26 October 2006 at New Delhi.

Scientific & Technical Innovations, Patents Inventions

- **NASA Tech Briefs**, Vol. 8, No.4, summer 1984, JPL Invention Report No. NPO-16266/5728.
- **NASA Tech Briefs**, Vol. 9, No.1, spring 1985, JPL Invention Report No. NPO-16265/5727.
- **Copyright No. SW-3195/2006** dated 07-09-2006 on 'Tsunami Travel Time Prediction using Neural Networks' by Rahul Barman, B. Prasad Kumar, P.C. Pandey and S.K. Dube , IIT Kharagpur.
- **Copyright No. SW-3529/2007 dated 19 June 2007**, on "A new approach of Ocean Parameter Retrieval using Neural Networks" by Rahul Burman, B. Prasad Kumar, P. C. Pandey, and S..K. Dube, IIT, Kharagpur.
- **Copyright No. L-30729/2008 dated 18 June 2008** "Development of a comprehensive Ocean Atlas for Indian Ocean using ARGO data," Rahul Burman, Prasad Kumar Bhaskran, Prem Chand Pandey, Shishir Kumar Dube, (IIT,Kharagpur) Ravi Chandran and Shailesh Naik (INCOIS, Hyderabad).

Achievements at IIT KGP

- Establishment of the Centre for Oceans, Rivers, Atmosphere and Land Sciences (CORAL) along with Prof. Avijit Gangopadhyaya and Prof. S. Tripathy.
- Launched a multi-disciplinary program “A long term program in Marine Resource Development and Management (MRDM)” costing about 5 crores.
- Launching of multi-disciplinary program in Climate Change under DST costing about 10 crores (under review at DST).
- Co-ordinating with MoES for the establishment of Samudragupta Chair Professor at IIT Kharagpur (1.5 crores) (under final stage).
- Responsible for reviving the OAST program of MoES at IIT Kharagpur, thus creating a long term opportunity for project funding to CORAL and other scientists of IIT Kharagpur.
- Chairman, Advisory Committee to establish a School of Earth, Ocean and Climate Sciences at IIT BBS with a marine campus ”Innovation Center for Climate Change).

Responsibilities at NCAOR, Goa

Major Scientific / Technology/ R & D Programmes completed

- Indian Antarctic Programme, Science & Logistics.
- Established India’s First “National Center for Antarctic and Ocean Research” at Goa, 1999.
- Delineation of the outer limits of the Legal Continental Shelf Programme (Flagship programme of MoES).
- Management of ORV Sagar Kanya Ship.
- **State-of-the-art Ice Core Laboratory established.** Inaugurated by Honorable Minister for S/T on 18th January 2005.

Institution Building

- Established (**Founder Director**) the National Centre for Antarctic and Ocean Research (NCAOR), the **first polar research centre** in the country, an autonomous institution under the Ministry of Earth Sciences, Govt of India, at Goa.
- Responsible for Establishment (Founder Head) of the **Ocean Sciences Division**, at Space Applications Centre,(ISRO) Ahmedabad-380015.
- Played key role in the establishment of **Centre for Oceans, Rivers, Atmosphere and Land Sciences (CORAL)** at Indian Institute of

Technology, Kharagpur and started two Year M. Tech Programme in Earth System Science & Technology, first such course in India.

Membership in National and International Expert Committees/ Bodies (selected only)

- **Chairman:** Res. Adv. Com. Of IITM, Pune; High Power Committee set up by MoES, GOI to Review NCAOR'S activities, 2008
- **Vice Chairman:** OSTC Cell of DOD at Mangalore/ Tamil University
- **Member:** Governing Council, IITM, Pune; Academic Council, Goa University (Governor's Nominee); Special Advisory committee, School of Env Sci. JNU, Delhi; National Acad. of Sc. Allahabad, Kharagpur local Chapter; Res. Adv. Com., Of CAS of IIT, Delhi; Science & Engineering Research Council (SERC), Department of Science and Technology, New Delhi; Governing Council of IITM, Pune; Governing Council, INCOIS, Hyderabad; Programme Advisory Committee on DST on Atmospheric Science/ Glaciology; NNRMS Oceanography, Programme of ISRO; High Power **Ministerial delegation** lead by Hon Shri Kapil Sibal to Antarctica; High Power delegation lead by Secretary, DOD to China; in SCAR, CEP, ATCM, COMNAP/ SCALOP, ICSU, PGIPY-2007-08, Fellowship Award Committee of SCAR, U.K. (1997-2005); ICSU/WMO committee for International Polar Year (IPY) framework documents preparation; Joint Scientific Working Group of SAC-ISRO, for SARAL Mission

Number of research publications - 130

Published work include 98 referred journals (about thirty national/international journal covered including encyclopedia), 18 in books, 10 Technical reports and 4 Atlases, Produced twelve PhD's and several M. Tech/ M Sc thesis work. Antarctic Sea Ice Atlas was released by **SCAR President** at Bremahaven, Germany.

Membership in professional societies (Selected only)

- **President** (sectional): Environmental Science Section, Indian Science Congress Association, 2006-2007.
- **Chairman:** Indian Society of Remote Sensing, Ahmedabad Chapter (1994-96)
- **Vice President:** Indian Soc. of Remote Sensing, (2002-04); India Meteorological Society (1991-93)
- **Fellow:** Indian Academy of Sciences, Bangalore; The National Academy of Sciences, Allahabad; India Meteorological Society; Indian Society of Remote Sensing, Dehradun (1999); Indian Geophysical Union; Geological Society of India, 2009; Earth Sciences India. 2008; ISMMACS, 2011.

Editor/ Member of editorial board

- **Associate Editor**, Editorial Board, Marine Geodesy Journal, USA
- **Joint Chief Editor**, Indian Journal of Polar Science, 2008
- **Member:** Editorial Board, Indian J. Marine Science, India (1995-2000); Editorial Board, Vayu Mandal, Bulletin of Ind. Met. Society, (1995-1996) India; Editorial Board, Indian J Radio & Space Physics; Editorial Board, Mausam; Editorial Board, Proc Ind Acad –Physical Sciences, Allahabad; Editorial Board, J. Indian Society of Remote Sensing JISRS, 2006; Editorial and Advisory Board, Current World Environment, 2009.

Visit Abroad

USA, UK, Russia, France, Germany, China, AIT Bangkok, Malaysia, Japan, Argentina, Mexico, Madrid, South Africa, Peru, Netherlands, Antarctica etc.