

Academic Profile of **Prof. Narendra Bhandari**

Educational Qualifications :

Ph.D. (Physics),	Bombay University	1967
M.Sc. (Physics),	Rajasthan University, Government College, Ajmer 1st Division, 1st rank in the college.	1960
B.Sc.	Rajasthan University Jaswant College, Jodhpur	1958
High School	Sardar High School, Jodhpur	1954

Positions held : 2016-present

	Director, Science and Spirituality Research Institute, Ahmedabad
2007 -2015	INSA Honorary Scientist, and Honorary Professor, Physical Research laboratory, Ahmedabad
Nov. 2003 – Nov. 2004	Visiting Professor Physical Research Laboratory Ahmedabad
1992 - 2003	Senior Professor Physical Research Laboratory Ahmedabad.
1984 - 1992	Professor Physical Research Laboratory Ahmedabad.
1974 - 1984	Associate Professor Physical Research Laboratory Ahmedabad.
1968 - 1973	Fellow Tata Institute of Fundamental Research

Bombay.

- 1966 - 1968 : **Assistant Research Chemist**
University of California
San Diego, USA
- 1965 - 1966 : Post Doctoral Fellow, University of California
San Diego, U.S.A.
- 1961 - 1965 : **Research Associate**
Tata Institute of Fundamental Research
Bombay
- 1960 - 1961 : **Lecturer in Physics**
MBM Engineering College
Jodhpur

Awards/Honours :

- (1) **Vikram Sarabhai Award** for Planetary & Space Science, 1976, instituted by Hari Om Ashram.
- (2) **Certificate of Special Recognition by NASA** (National Aeronautics and Space Administration), USA for Lunar sample analysis, 1979.
- (3) **National Mineral Award** of Government of India for contributions in Earth Sciences for the year 1990.
- (4) **Iyengar-Sahni Award (1998)** of the Birbal Sahni Institute of Paleobotany.
- (5) Conferred the Title of “**Space Visionary**” by the International Society of Space Visionaries, USA
- (6) **Outstanding Achievement Award**, 2010, Indian Space Research Organisation (ISRO)
- (7) **Marwar Ratna Samman** 2016, Mehrangarh Museum Trust, Jodhpur.

Memberships of Academic bodies :

- (1) Fellow, Indian National Science Academy, New Delhi
- (2) **Fellow**, Indian Academy of Sciences, Bangalore.
- (3) **Fellow**, National Academy of Sciences, Allahabad.
- (4) **Fellow** Geological Society of India
- (5) **Fellow**, Gujarat Science Academy, Ahmedabad
- (6) **Member**, New York Academy of Sciences, New York.
- (7) **Fellow**, Indian Geophysical Union, Hyderabad
- (8) **President**, Indian Physics Association(Ahmedabad Chapter)since 1996.
- (9) **Member, National working group IGCP 216**, Global Biological Events in Earth History.
- (10) **Member, National working group IGCP 245**, on Cretaceous Resources Events and Rhythms.

- (11) **Member, International Commission on Atmospheric Chemistry and Global Pollution (ICACGP)** 1983-90.
- (12) **Member**, CSIR Panel on International Hydrological Programme for Ice, Snow and Glaciers (1978-82).
- (13) **Member**, International Astronomical Union (IAU) since 1985.
- (14) **Member**, International Commission on Space Research Committee B1 (COSPAR) on small objects in the Solar System since 1983.
- (15) **Member**, Indian National Committee on Space Research (INCOSPAR) 1975-79.
- (16) **Member**, Editorial Board, Hydrology Review (1978-82).
- (17) **Regional Editor**, International Global Atmospheric Chemistry, News Letter, 1988.
- (18) **Member**, Indian Physics Association.
- (19) **Member**, Indian Association of Nuclear Chemists and Allied Scientists.
- (20) **Member**, Advisory committee on Space (ADCOS and ADCOS-II), Department of Space, Govt. of India.
- (21) **Member** Standing Committee on Earth Sciences, Indian Antarctic Expedition, Department of Ocean Development.
- (22) **Project Coordinator**, National Planetary Science and Planetary Exploration Programme, Indian Space Research Organisation, Bangalore, since inception-2004.
- (23) **Member**, Moon Mission Task Force, Indian Space Research Organisation, Bangalore, 2000-2002.
- (24) **Member** Shishta Parishad (Senate), Jain Vishwa Bharati Institute, Ladnun, Rajasthan.
- (25) **Vice President**, International Lunar Exploration Working Group, 2002-2004.
- (26) **Member**, Scientific Advisory Board, Chandrayaan-1. Indian Space Research Organisation, Bangalore.
- (27) **Member**, International Society of Space Visionaries, USA
- (28) **President**, International Lunar Exploration Working Group, 2005-2007.
- (29) **Member**, Organising Committee, International Heinlein Prize for Space Contest in the Asia-Pacific region "Flying into the future", Beijing, China.
- (30) **Member**, Science Team, X-ray Fluorescence Spectrometer on Chandrayaan-1 Moon orbiter mission.
- (31) **Member**, Instruments selection committee, Mars Orbiter Mission, Mangalyaan, ISRO
- (32) **Member**, Chandrayaan-2 mission Integrated Technical Review.
- (33) **Member**, Core Committee, I-ARTIST, (International Ahinsa Research & Training Institute of Spiritual Technology), Spiritual Technology Research Foundation, Bombay.
- (34) **Peace Ambassador**, International Peace Initiative

Professional Experience :

- (1) **Principal Investigator** of the proposal 'Study of Solar and Galactic Cosmic rays based on their nuclear effects in Lunar samples and Meteorites with NASA, USA, 1973-1981.
- (2) **Co-investigator** of the proposal 'Radiation History of Lunar materials with NASA, USA, 1970-78.

- (3) **Co-Chairman**, Archeology and Hydrology Area at PRL, 1974-1978.
- (4) **Chairman**, Archeology and Hydrology Area at PRL, 1979-1982.
- (5) **Principal Investigator** of "Nuclear fission and Spallation processes and their application to Astrophysical and Geophysical problems" with USSR Academy of Sciences, Moscow, 1974-1979.
- (6) **Principal Investigator**, DST Project on Study of Glaciers in Himalayas 1980-84.
- (7) **Co-Chairman**, Earth Science & Solar System Division of PRL, 1989-1993.
- (8) **Chairman**, Solar System and Geochronology Area, PRL, 1993-1997.
- (9) **Visiting Professor**, University of Turin and Istituto di Cosmogeofisica, Turin : April-October, 1988 and one to three months during 1989, 1990, 1991, 1993, 1994, 1995, 1996, 1999, 2002.
- (10) Lecturer: Lecture series at the **Enrico Fermi International School of Physics** on Past and Present variability of the solar terrestrial system organised by the **Italian Physical Society**, Varenna, 1996.

Current Areas of work :

Study of Moon and meteorites, Cometary and Asteroidal impacts and Mass extinction on Earth, Space missions to Moon, Geochemistry of Cretaceous/Tertiary and Permian Triassic sedimentary sequence & Deccan and Siberian Volcanism, Isotope production in extra-terrestrial objects, Remote Sensing of Planetary Bodies.

Jain philosophy, consciousness, meditation, Buddhist philosophy

Technical Expertise :

Charged particle tracks in minerals; Radiation counting techniques, specially Low-level counting; Neutron activation Analysis; Trace element geochemistry.

Active Areas of Interest :

Jain Philosophy, Consciousness, Cosmic ray effects on Earth, Meteorites and the Moon, formation history of Solar system, planetary physics, Lunar geology, Applications of radioactive tracers in terrestrial reservoirs, specially the atmosphere, hydrosphere and glaciers.

Publications : Over 200

Books authored/edited 10 books

1. **N.Bhandari** and M.N.Rao (Editors), 1974, Luna 16 and 20 samples Indian National Science Academy, New Delhi, New Delhi.
2. **N. Bhandari**, S.K.Gupta, P. Sharma, Prem Sagar, V.Ayachit and B.I.Desai, 1986, Hydrological investigations of the Sabarmati basin using Radioisotopic methods. Published by Ministry of Water resources, Government of India, New Delhi, pp.1-115.
3. **N. Bhandari** Proceedings of the International Conference on Exploration and

- Utilisation of Moon, Jour. Earth system Science, Dec 2005
4. **N. Bhandari**, Mysterious Moon and India's Chandrayaan Mission, Vigyan Prasar, New Delhi, 2008.
 5. **N.Bhandari**, *Chandra nu vaigyanik rahasya tatha Bharat nu Chandrayaan Abhiyan (in Gujarati)*,

**ચંદ્રનું વૈજ્ઞાનિક રહસ્ય
તથા
ભારતનું ચંદ્રયાન અભિયાન**

- Translated by Dr. Tushar Pandya, published by Gujarat Science Academy, Ahmedabad, 2010.
6. **Narendra Bhandari**, Rahasyamay Chandra ani Bharatachi Chandrayaan Mohim (in Marathi) *by* Translated by Raja Ram Bhonsle and Uttam Rao Kharkhande, (2012).
 7. **Narendra Bhandari** (2017) Falling Stones and Secrets of the Universe, Gujarat Science Academy, Ahmedabad **ULKAO 'Falling stones and secrets of the Universe'(2019)** Translated into Gujarati by Dr K.N. Joshipura, Gujarat Science Academy
 8. **Bhandari Narendra** (2015) Jainism: The eternal and Universal Path to Enlightenment (A Scientific synthesis), Prakrit Bharti Academy, Jaipur, India.
 9. Samani Chaitanya Prajna, **Narendra Bhandari** and N.L. Kachhara, Editors. (2017) Scientific Perspectives of Jainism, Jain Vishva Bharati Institute, Ladnun.
 10. Samani Chaitanya Prajna, N.L. Kachhara, **Narendra Bhandari** and K.P. Mishra, Editors (2018) Jain Philosophy: A scientific Approach to Reality, Proceedings of the International Conference on Science and Jain Philosophy, held at Indian Institute of Technology, Bombay, January, 2016, Jain Vishva Bharati Institute Ladnun.