

Sankar Kumar Nath

Vice Chancellor of the University of Burdwan

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Vidwan: https://vidwan.inflibnet.ac.in/profile/43043#personal_information_panel

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Prof. Dr. Sankar Kumar Nath (born on 3rd January 1960) is an Indian Geophysicist, Seismologist and currently appointed as Vice Chancellor of the University of Burdwan. He has been a Senior Professor in Higher Administrative Grade at the Indian Institute of Technology Kharagpur known for his Geotomographical Studies, Seismic Hazard, Vulnerability & Risk, Seismic Microzonation, Landslide Hazard Zonation, Slope Stability Modelling, and Extreme Event Modelling. He is an elected Fellow of the National Academy of Sciences (FNASc),



Indian National Academy of Engineering (FNAE), Indian Geophysical Union (FIGU), West Bengal Academy of Science & Technology (FAScT), Indian Social Science Academy (FISSA). The Council of Scientific and Industrial Research (CSIR), the Apex Agency of the Government of India for scientific & industrial research, awarded him the most coveted **Shanti Swarup Bhatnagar Prize** for Science and Technology, the highest Indian Science Award in recognition of his seminal contributions to Earth, Atmosphere, Ocean and Planetary Sciences in 2002. Apart from National Mineral Award by the Ministry of Mines and Steel, he also received Homi J. Bhabha Award for Applied Sciences by UGC, Lifetime Achievement Award, Honoris Causa Doctorate (D.Sc.) Award in Engineering & Technology, Decennial Award by Indian Geophysical Union and many more.

Biography

Prof. Nath, graduated in Geological Sciences (B.Sc. hons.) in 1979 from the Indian Institute of Technology Kharagpur and completed his Post Graduation (M.Sc.) degree in Exploration Geophysics from the same Institution in 1981, passing both the examinations with first rank that earned him Silver Medals for both the courses. After working as a CSIR Junior Research

Fellow at IIT Kharagpur, he started his career as a Junior Geophysicist with Indicos Computer Services, a Mumbai-based firm in SEEPZ, in 1981. Two years later, he moved to Oil India Ltd. (OIL) Head Quarters in Duliajan, Assam where he worked as a Geo-Scientist and Senior Geo-Scientist till 1988. Returning to his home State in January that year, he had a short stint of 7 months at Computech Ispat Ltd., Kolkata as the Processing Manager in Geophysics before joining IIT Kharagpur as a Lecturer and simultaneously enrolling for Doctoral studies at IIT Kharagpur the same year. He completed PhD in Seismic Prospecting in 1993 and did his Post Doctoral studies in Earthquake & Engineering Seismology and Seismic Microzonation at the Geophysical Institute in the University of Alaska Fairbanks during 1995-96. On his return to India in 1996, he resumed his services at IIT Kharagpur and served in various capacities as an Assistant Professor, Associate Professor and Professor before becoming the Head of the Department of Geology and Geophysics in 2003 and held this position till 2006. He also attended University of Alaska Fairbanks, USA as a visiting scientist for 01 year 02 months. He has been elevated to the position of Professor in the Higher Administrative Grade (HAG+) on 18th August 2009 in which capacity he worked till his joining at the University of Burdwan as Vice Chancellor in the forenoon of 27th December 2024.



Legacy

Prof. Nath is a leading and prolific Geoscientist in the country and in the international Earth Science Horizon teaching mainstream Classical, Exploration and Computational Geophysics courses, writing Text and Reference books, publishing original research articles in high impact

journals, supervising UG/PG/ Research students, conducting sponsored research and industrial consultancy with funding of several billions of rupees, setting up strong motion & broadband seismological observatories in the East and Northeast regions of India, coordinating Mission Projects & Earthquake Engineering Education and Research both in the capacity of an Institute and National Coordinator, collaborating with the Research Agencies in India and abroad. He has been successful in making front ranking contributions in Seismic Microzonation, Vulnerability & Risk Assessment and Damage Potential Modelling so vitally needed for our country and all the earthquake-prone regions in the world. His major research focus has been on Seismicity, Physics of Earthquakes, Strong Motion Seismometry, Seismic Hazard, Vulnerability and Risk Microzonation, Computational Geophysics and Geotomography. Prof. Nath is known to have studied eleven Tectonic Provinces *viz.* Bengal Basin, Indo-Gangetic Foredeep, Central India, Kutch Region, Koyna-Warna Region, Western Ghat Region, Eastern Ghat Region, Kashmir Himalaya, West-central Himalaya, Darjeeling-Sikkim Himalaya, and Northeast India. He has contributed in developing novel applications in Strong Motion and Engineering Seismology, Seismic Hazard Vulnerability & Risk, Seismic Microzonation of megacities and urban Centres located in BIS Seismic Zones III, IV and V having population more than one million, carrying out Damage Potential Modelling together with Landslide-induced Disaster Mitigation and Management in Northeast India, Northwest India, Western Ghats and Bhutan region. His government-sponsored R/D projects includes Seismic Hazard Assessment and Microzonation of Darjeeling-Sikkim Himalaya, Guwahati Megacity, Urban Kolkata, all the capital cities in Northeast India, Bangalore City, NCR Delhi and the City of Thimphu in Bhutan. His other important Ministry of Earth Sciences aided Projects include Disaster Modelling and Landslide Hazard Zonation along with Slope Stability Analysis of Darjeeling-Sikkim Himalaya, and Northeast India, National Programme in Earthquake Engineering Education in India of the Ministry of Human Resource Development, National Programme for Capacity Building of Engineers in Earthquake Risk Management of the Ministry of Home Affairs and the National Earthquake Risk Mitigation Programme of the National Disaster Management Authority. He has also been a strong advocate for disaster preparedness and risk reduction through his involvement in various disaster management committees. He has completed around 50 government funded projects and Industry collaborated consultancy. His studies have been recognized in several peer-reviewed articles; Google Scholar online repositories of scientific articles have listed 130 with citations: 4005, h-index: 36, i10-index: 80. He is the author of the Seismic Microzonation Handbook (2011), Seismic Microzonation Manual (2011), Seismic Hazard, Vulnerability and Risk Microzonation

Atlas of Kolkata (2016), Probabilistic Hazard Atlas of 40 Cities in India (2017) published by the Ministry of Earth Sciences (MoES), Seismic Hazard & Microzonation Atlas of the Sikkim Himalaya (2006), Seismic Microzonation Atlas of Guwahati Region (2007) published by Department of Science and Technology (DST), Govt. of India, Training Handbook for the Faculty of the State Resource Institutions, a reference manual for capacity building in earthquake risk management published by the Ministry of Home Affairs (MHA), he is the author of Schlumberger Geoelectric Sounding in Ground Water (Principles, Interpretation and Application), a text explaining the application of Vertical Electrical Sounding (VES) curves in explorational geophysics. Prof. Nath, who has delivered several keynote and plenary addresses at seminars and conferences in India and abroad, is also credited with contributions in the establishment of a strong motion network 16 earthquake monitoring stations in the Himalayan region and one broadband seismological observatory at the Kharagpur campus of IIT Kharagpur.

Awards and honours

A central figure in academic and scientific circles, Prof. Nath's work has earned him numerous accolades and recognitions. Among his most prestigious awards are the Shanti Swarup Bhatnagar Prize for Science and Technology (2002) in Earth, Atmosphere, Ocean, and Planetary Sciences, one of India's highest honours for scientific and technological excellence.



He was also awarded the National Mineral Award in 1999, followed by a series of prestigious fellowships, including his election as a Fellow of the National Academy of Sciences, India (FNASc) in 2003 and a Fellow of the National Academy of Engineering (FNAE) in 2007. Prof. Nath has also been the recipient of several other accolades, such as the UGC National Hari Om Ashram Trust Award: Homi J. Bhabha Award for Applied Sciences (2004), the SGAT Award of Excellence (2004), the Dr. J. Coggin Brown Memorial (Gold) Medal (2005), D. N. Thakur Award-2006, A. S. Arya-IIT Roorkee Disaster Prevention Award-2009, Decennial Award -2015 by IGU, nominated Fellow of the Indian Geophysical Union-2014, awarded Fellowship of West

Bengal Academy of Science & Technology (FAScT)-2016, Bharat Ratna Indira Gandhi Gold Medal Award-2017, Lifetime Achievement Award-2020 by VDGGOOD Professional Association of Scientists, Engineers and Doctors, Tamil Nadu, Distinguished Scientist Award-2020, by Southern India Professional Council of Science & Technology, Outstanding Scientist Award- 2020, in KISA-2020 by the 11th International Scientist Awards on Engineering, Science, and Medicine Kolkata, Fellow of Indian Social Science Academy (FISSA)-2021 along with International Fame Achievers' Award-2021, for the Most Promising Educational Leadership & Development Services under the aegis of “GOAL AWARDS-2021 & International Summit”, Asia Pacific Excellence – Lifetime Achievement Award-2021, Honoris Causa Doctorate (D.Sc.) Award -2021 in Engineering & Technology for his contribution in Extreme Event Multi Hazard & Risk Modelling, Disaster Mitigation and Management. These awards recognize his exceptional contributions to the fields of seismic hazard assessment, risk management, and environmental sciences.



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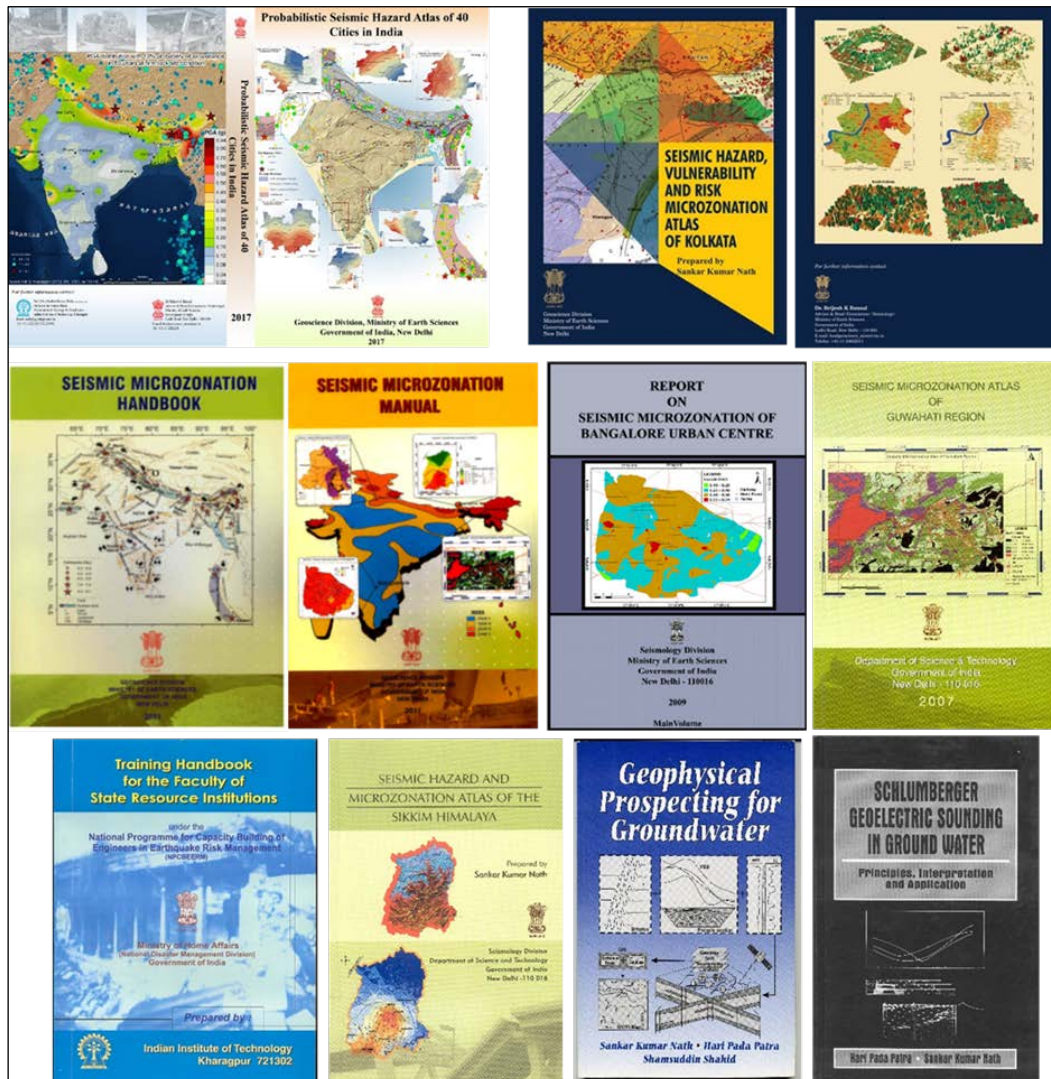
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Geophysical Prospecting for Ground Water [S.K. Nath, H.P. Patra & S. Shahid] published by M/s A. A. Balkema, Rotterdam, Netherlands [ISBN 90 5410 215 1] (Indian Edition by OXFORD & IBH Publishing Co. Pvt. Ltd., New Delhi [ISBN 81-204-1398-9]), © 2000 Copyright, 256p.

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