# BRIEF CV Lakshmi Narasimharao Kodali

I was a Faculty Member in the Dept.of Geology, S.V. University, Tirupati-517502, India (1966 - 1999).

I was invited by DAAD (German Academic Exchange Service), twice in 1987 and 1994, to work at Albert-Ludwigs-Universitat, Freiberg i.Br. Germany; and also worked under a French Govt. High Level Fellowship, in Remote Sensing, for an year (1989 - 1990) at CNRS, Montpellier, France.

I had a Memorandum of Understanding, agreed on at the Professional level between S.V.University, Tirupati and Portland State University, OR, USA, in 1999, in furthering Geological and Environmental Research and Education Programs of mutual interest.

Further, University Grants Commission, Govt. of India, has appointed me as Emeritus Fellow, for two years (2002 - '04), after super-annuation.

An International Conference (Natural and Technological Coastal Hazards) and an International Workshop (Storm Surges), was held at S.V.University, Tirupati (Dec.2

- 6,1996),sponsored by UNESCO (IOC),Paris,France,under my Chairmanship.I have participated in about 40 International Conferences abroad. I have published a scientific volume: Progressive Probes into Earth Sciences and Remote Sensing (1998),and one of the Editors of

the Proceedings Volume: 'Volcano,Life,Prosperity and Harmony' of Volcano International Gathering (VIG),held in Yogyakarta,Indonesia (2006).

I was a Member in some of the National Assignments - Executive Board Member, Indian School of Mines; Expert Committee Member, University Grants Commission; and Expert Committee Member, Union Public Service Commission; and was also associated with Union Public Service Commission, Central Groundwater Board, University Grants Commission and Dept. of Science and Technology, in their professional programmes and in refereeing the research schemes and projects. I supervised three research projects, on water resources, sponsored by Govt. of India.

### An Exceptional Achievement

The urban population has increased from less than 40,000 in1947 to over a half million now, in and around Eco- city, Tirupati. The measures taken up to meet the water shortages include large- scale pumping of deep groundwater and import of water from other river basins, which led to drying of surface water bodies, alarming decline of groundwater levels and depletion of groundwater. It is against this background, that construction of sub- surface dams, using a capital- saving and labour- intensive technology, has been suggested to prevent groundwater seepage.

Although use of sub-surface dams as a method of water conservation is not new, Rashtriya Seva Samithi (RASS) and nine other NGOs, in and around Eco-city, Tirupati appear to be almost the first consortium in the entire world for taking up construction of 16 sub-surface dams on such a large scale to maximize groundwater utilization, under our technical expertise, across the dry Swarnamukhi river, during 2001-02, at a cost of around a million EUROs, to make the river perennial. The study after careful monitoring, since 2002, indicated the benefit to about 42,000 small and marginal farmers.

#### **CURRICULUM VITAE**

Name: K.L. Narasimha Rao

Designation & Address: Former Professor & Head; and Chairman, Board of Studies in Geology / Applied Geology and UGC Emeritus Fellow (2002-'04) (Govt.of India). Dept. of Geology, S.V. University, Tirupati-517 502, and

Cosultant, Centre for Water Resources,

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Educational Qualifications: M.Sc. Geology (1963)

Ph. D. Geology (1967)

Teaching Experience: 33 years

Students of Geology / Environmental Science.

Research Experience: 36 years

Teaching Post-Graduate(M.Sc) students.

2 Candidates got M.Phil., Degree

2 Candidates got Ph.D., Degree

Publications: 50 Research papers in National and

International journals

- (1) Published a Scientific Volume: "Progressive Probes into Earth Sciences and Remote Sensing "(1998)
- (2). One of the Editors of the Proceedings Volume: "Volcano: Life, Prosperity, and Harmony of Volcano International Gathering (VIG), held in Yogyakarta, Indonesia (Sept.04-10,2006).
- (3). Edited a Scientific Volume: "Natural and Tehnological Coastal Hazards and Storm Surges" (in press)

Socially related publications:

Edited 3 volumes -- Political, Social and Historical Profiles of Late Prof.N.G.Ranga, Ex M.P. and Deputy Leader in the Parliament..

- i) Prof.N.G.Ranga at the UN (1982).
- ii) Protect Self-employed Peasants and Tribal People (1983).
- iii) Kakatiya Nayaks (1984).
- \* Member, Morphotectonics Working Group (International)
- \* Member, Executive Council of the Indian Association of Geochemists, Varanasi, U.P.,
- \* Member of the Indian Institute of Remote Sensing (IPI), Dehra Dun, U.P., India.
- \* Participated in a number of National Conferences.

#### Visits Abroad:

- \* Unique Participation: Participated in a Scientific Cruise for Poly-Metallic Nodules Survey in the Central Indian Ocean (near Diego Garcia), sponsored by National Institute of Oceanography (NIO), Govt. of India, June-July, 1983 (for 45 days).
- \* Participated in the 25th International Geographical Congress (IGC), held in Paris, France, 1984.
- \* Gave a series of lectures in USA, i.e., Philadelphia, Bethleham, Louisville and Boston,
- \* Attended an International Workshop on "Computer Applications and Management of Petrological Data Bases," in Geology Department, Kuwait University, Kuwait , 1987.
- \* Participated in the 26th International Geographical Congress (IGC), held in Sydney, Australia, 1988.
- \* Participated in the NATO Advanced Research Workshop on "The Solar Engine and its influence on Terrestrial Atmosphere and Climate", held in Paris, France, 1993.
- \* Participated in the Marine Geography Conference of the International Geographical Union Commission, held in Halifax, Nova Scotia, Canada, 1994.
- \* Participated in 14th International CODATA '94 Conference and also Co-chaired Session E-II: Bio-geochemical Cycles, Health Perspectives and Global Change, held at Chambery, France, 1994.
- \* Participated in the "Coastal Change '95" International Conference, Cosponsored by Intergovernmental Oceanographic Commission (IOC) of UNESCO and

Bordomer Organisation, held in Bordeaux, France, 1995.

- \* Participated in the "Coastal Zone '95" International Conference held in Tampa, Florida, USA, 1995.
- \* Participated in the Regional Workshop on "Climate Change Vulnerability and Adaptation for Asia and the Pacific", held in Manila, Philippines, 1996.
- \* Participated in the VII International Congress of Ecology and also chaired Session: "Environmental and Ecosystem Management and Conservation", held in Florence, Italy, 1998.
- \* Participated in the "Coastal Zone ' 99" (CZ'99) International Conference and also cochaired Session "Watershed Management", held in San Diego, CA, USA, 1999.
- \* Participated in the Pacific Northwest Regional Conference entitled "A Watershed Experience: The wonder of Creation", and gave a talk on "Religion and Science", held at Alders gate Conference Centre near Salem, Oregon, USA, 2000.
- \* Participated in The Coastal Society's 17th International Conference "Coasts at the Millennium" and also Co-chaired a technical session (V-F International Perspectives on Integrated Coastal Management), held in Portland, Oregon, USA, 2000.
- \* Participated in the 3rd International Congress on Social Work in Health and Mental Health and gave a talk on "Role of Social Workers in the eradication of Fluorosis in India ", held in Tampere, Finland (July 1-5, 2001).
- \* Was on a lecture program at Albert-Ludwigs-Universitat, Freiburg I. Br., Germany (July 7-13, 2001)
- $\star$  Participated in the World Water Week and the 12th Stockholm Water Symposium held in Stockholm , Sweden (Aug 11-17, 2002).
- \* Participated in the Symposium on Intensive Use of Ground Water: Challenges and Opportunities (SINEX) held in Valencia, Spain (Dec. 10-14, 2002).
- $\star$  Participated in the Coastal Zone '03 International Conference held in Baltimore , Maryland , USA (July 13-17,2003)
- \* Participated in the 13th Stockholm Water Symposium, August 10-14,2003, and also gave a specially invited talk on : Chemical Pollution : Lessons Learnt from Hydrocide Development in India , on August 16, 2003,held in Stockholm , Sweden .
- \* Participated in the 18th Salt Water Intrusion Meeting held in Cartagena, Spain (May 31-June 3, 2004).
- \* Participated in the Conference of the Working Group on Groundwater and Climate Change (April 4 6, 2005), held at the University of East Anglia, Norwich, UK.
- \* Participated in the "Health, Human Rights and Economics: The Value of Human Life", Conference, held in Oregon Health & Science University, Portland, Oregon, USA (17-19, February 2006).
- \* Participated in the VIG 2006 (Volcano International Gathering) International Conference and gave a talk on "Mount St. Helens, Washington, USA: An Overview", held in Yogyakarta, Indonesia (4-10, September 2006).
- \* Participated in the International Conference on "Coastal Zone Environment and Sustainable Development, Vulnerability Adaptation and Beyond (Feb.12-14-2007), held at Jawaharlal Nehru University, New Delhi, India.
- \* Participated in the Coastal Zone'07(CZ'07) International Conference held in Portland, Oregon, USA (July 21-26,'07) and also chaired the session : Shoreline Change Assessment using LIDAR Data.
- \* Participated in the IAHR International Groundwater Symposium held in Istanbul, Turkey (June 18-20-2008).
- \* Participated in the Geological Society of America (GSA) Annual Meeting and Exposition, and Conference, held in Portland, OR, USA (Oct.18-21,'09). Annual Western Regional International Health Conference:
- \* Participated in the 2nd International Conference on: Integrated Water Resources Management and Challenges of the Sustainable Development (GIRE3D)", held in Agadir, Morocco (March 24-25,2010).
- \* Participated in the Integrated Water Resources Management (IWRM) International Conference, held in Karlsruhe, Germany (Nov.24-25,2010).
- Invited as a "Key-note Speaker",to give a talk on "Climate Change and Water

Systems", by the Environmental Research Group, Yaba College of Technology, Lagos, Nigeria, in the 'Second Biennial International Conference & Exhibition', (April, 18-20, 2012).

- Participated in the 5th International Groundwater Symposium,in Kuwait (Nov.19-21,2012),and presented a paper on : Water Resources and Human Health (Fluoride Toxicity).
- Also participated and presented a paper on : Groundwater Resources Management in and around Eco-city, Tirupati and some adaptative measures, in the IWRM Karlsruhe 2012 International Conference, held in Karlsruhe, Germany (Nov.21-22, 2012).
- I was unanimously elected as a co-opted member for the International Association for Hydro-Environment Engineering and Research (IAHR) new Leadership team (Spain), for the next term (2013-'15), for Asia-Pacific region.

#### Awards:

- \* Invited by DAAD (German Academic Exchange Service) to work on Night time Thermal Imagery of 3 satellites NOAA, HCMM, LANDSAT TM for a period of 3 months 1987, in Albert Ludwigs Universitat, Freiburg I.Br., Germany.
- \* Worked under a French Government High-Level Fellowship in the field of Remote Sensing for one year (May 1989 May 1990) at CNRS, Montpellier, France.
- \* Invited by DAAD (German Academic Exchange Service) to work on "Time and Space Variability of Rainfall along the East Coast of India", for a period of 3 months (May 18 August 18, 1994) at Albert Ludwigs Universitat, Freiburg I.Br., Germany

#### Global Meet Organisation:

\* An International Conference on "Natural and Technological Coastal Hazards" and International Workshop on "Storm Surges" (Dec. 2-6-1996) held at S.V. University, Tirupati, India, sponsored by Inter-governmental Oceanographic Commission (IOC) of UNESCO, Paris, France, under my Chairmanship.

Organised 2 (Two) National Workshops and a National Seminar on Problems Relating to Natural Resources and Water Resources.

- \* Natural Resources their Planning and Management for the Prosperity of the Country / State 1998 (National Workshop)
- ★ Depletion, Contamination and Management of Water Resources 1999 (National Workshop).
- \* Sustainability of Groundwater levels in the State of Andhra Pradesh, India in the 21st Century 2000 (National Seminar).

### Organised

\* A one-day Brain-Sailing Session on "Harnessing of River Waters (Ganga-Cauvery linkage) -- Consequential Benefits to the Water-Starved Areas" -- 2002.

#### Research Projects

- \* University Grants Commission (UGC), New Delhi : Major Research Project on "Identification, Development and Management of Water Resources in Chittoor District, A.P., India using Remote Sensing Data"
- \* Central Groundwater Board (CGWB), New Delhi: Major research project on "Study of Trace Metals in Surface and Subsurface Waters in and around Tirupati, A.P., India (Project Report submitted).
- \* National Remote Sensing Agency (NRSA), Dept. of Space, Govt. of India, Sponsored Project: Rajiv Gandhi National Drinking Water Mission, Preparation of Groundwater Prospects Maps in Chittoor District, A.P. Maps interpretation and report submitted to National Remote Sensing Agency, Dept. of Space, Govt. of India, Hyderabad.
- \* Tirupati-Tirumala Devasthanams (TTD) Integrated Multi-stage approach for augmenting water supply to Tirumala township, using Remote Sensing, ground investigations and Geographical Information System (GIS) techniques. Project proposal submitted to Tirumala Tirupati Devasthanams (TTD), Tirupati, for approval.

- \* CAPART, New Delhi Rejuvenation of Swarnamukhi river basin -- work completed and Report Submitted.
- \* Member, Chittoor District Water Conservation and Utilization Committee (Neeru Meeru Programme), Govt. of A.P, Hyderabad.

## National Assignments

- \* Executive Board Member, Indian School of Mines (ISM, A deemed University), Dhanbad, Bihar, India (1996-'99).
- \* UGC Expert Committee Member for reviewing VIII Plan Performance and Assessing IX Plan requirements of Technological University (Indian School of Mines, Dhanbad),
- \* Expert Committee Member of Union Public Service Commission (UPSC), Govt. of India, New Delhi, for selecting Chairman, Central Groundwater Board (CGWB), New Delhi (top slot in the country), 1997 and
- \* University Grants Commission (UGC) Review Committee Member for DSA Program of UGC Dept. of Earth Sciences, Roorkee University, Roorkee, U.P., India, 2000 \* In addition, I was associated with UPSC, CGWB, UGC and DST (Govt. of India) in their professional programmes and in refereeing the research schemes and Projects.

## International: An Exceptional Achievement (1999)

- $\star$  Memorandum of Understanding agreed on at the Professorial level between Sri Venkateswara University (SVU), Tirupati and Portland State University , Portland , Oregon ,
- \* An Unique Achievement as Head of the Dept. in furthering Geological and Environmental Research and Education Programs of Mutual Interest.

(K.L. NARASIMHA RAO)