

Resume

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Name: **Dr. Venni V.Krishna**

Current Position: Professor in Science Policy
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Date of Birth and Nationality: (1.9.1951) Indian
(Married with two children - Australian citizens)

Educational Background:

Ph.D	Sociology & Mgt. of Science	The University of Wollongong, NSW, Australia	1987
M.Phil	Appropriate Technology	Osmania University Hyderabad, India	1981
M.A	Sociology	Osmania University	1975
B.Sc	Maths,Physics Chemistry	Osmania University	1973

Positions held in Institutions:

Scientist/Senior Scientist	National Institute of Science, Technology & Development Studies Council of Scientific and Industrial Research (CSIR), New Delhi, India	1982 - 1997
Associate Professor in Science Policy	Jawaharlal Nehru University(JNU) New Delhi, India	1997- 1999
Professor in Science Policy	Jawaharlal Nehru University New Delhi, India	1999- continuing
Visiting Professor Australia	AEGIS, University of Western Sydney, Sydney, (2004-05)	

International Links and Project Collaborations:

<i>Institutions/Country</i>	<i>Collaborators</i>	<i>Period</i>
Knowledge & Development Group	Dr Roland Waast	1992- Present
Institute for Research and Development, Paris, France	Dr Rigas Aravanitis	1992-Present
GEMAS, CNRS, France	Prof Terry Shinn	1992-1997
MSH, Paris, France	Dr Tarabout/Dr Racine	1992- Present
Unesco, Paris, France	Dr Howard Moore	1997-1999
Science Div. & Science Policy/History	Dr Jens Boel	2005---
IVIC, Caracas, Venezuela	Prof Hebe Vessuri	1997-2004
Technology Management	Prof Nazrul Islam	2000-Present
Asian Institute of Technology(AIT)		
AEGIS, University of Western Sydney, NSW	Prof Tim Turpin	2001-Present
CSIRO, Australia	Dr Ron Sandland Dep. CEO, CSIRO	2004-2005
University of California Santa Barbara, USA	M.Osborne	2000- Present

Special Skills, Experience and Core Competencies Gained :

- **Research leadership in inter and multi-disciplinary science and technology policy Research Centre (CSSP)** at the Jawaharlal Nehru University from 1997 to 2004. Rejuvenated the centre and developed post graduate/Ph.D programme by designing and writing courses, teaching and promoting research. Two courses teaching at the Centre are a) Science and Technology in Social Context; and b) Management of Innovation and Technological Change (focus on new technologies). As a Chair of this Centre, was responsible to recruit and manage multidisciplinary faculty (political science, economics, history, sociology and business management) and provide research leadership for programmes of the Centre.

- **Managing multi-disciplinary research group and collaboration: 15 years:**

From 1990 to 1997 in collaboration with IRD and CNRS, Paris (Dr Roland Waast and Dr Gaillard; and Prof Terry Shinn) developed a network of 15 interdisciplinary researchers from Latin America, Asia and Africa and Europe to work on two book projects on Scientific Communities; and Science, Technology and Development. As Editors and coordinators of the project relating to these two volumes (see the list of books) developed competencies in coordination and collaborative research across different disciplines and countries. These books are used as course and reference material in some universities. Similar skills are currently extended from 2001 to coordinate a project on national systems of innovation in 10 Asian and Pacific countries in collaboration with AEGIS, UWS (Dr Tim Turpin) during 2004-2005. This

book project involves collaboration and coordination with researchers from government, academic and NGO institutions.

- **Management of Research & Knowledge of Research Users:** As Editor of an international interdisciplinary journal published through (Sage Publications) for the last **10 years** – gained practical experience in strategic management of interdisciplinary research to justify research funding and aid from IRD, Paris and Development and Cooperation, Ministry of Foreign Affairs, Netherlands for the research and production of knowledge in the journal. Another important competency gained as Editor of journal and Guest Editor for two special issues (see the list under) is the ability to communicate, coordinate and work closely with diverse scholars around the world. Evaluating research papers and research contributions has also been the main task during the last 10 years as Editor of STS Journal.

Consultancy Research/Projects Funding:

- Consultancy research work from **UNESCO, Paris**, for its programmes on electronic publishing in the developing countries and the publication of the ***World Science Report 1998 & Unesco Science Report 2004***. (7000 US\$)
- Consultancy project on skills, training and decent work in the informal sector from the **International Labor Organisation (ILO), New Delhi**. 2000-01(US\$5000)
- STS Journal(Society for the Promotion of Science and Technology Studies), obtained funds from the **Development and Cooperation, The Ministry of Foreign Affairs, Netherlands; and Institute for Research and Development, Paris, France**.(US\$50000 for 10 years) for running the research office of the journal

Research Experience & Themes of Research (23 Years: 1982 to 2005 continuing):

- a) **Science and Technology Policies, Skills, Innovation and Development in Asia and Pacific Countries (2004-2006):** In collaboration with AEGIS, University of Western Sydney; and STEPI, Seoul, South Korea. A special issue of an international journal and two books on the changing national systems of innovation in Asia and Pacific are under progress involving 10 country case studies.
- b) **Scientific Communities, Professionalisation and Development (1993-2004):** **In collaboration with IRD, Paris and GEMAS, CNRS**, involved in research for over 18 years at the international level involving developed and developing countries. Out of this, involved in research management for about 10 years on two projects. Two books, two special issues in journal and more than 10 papers published relating to the above theme (see below).

c) **Setting up and Managing Sociology of Science and History of Science Groups (1987-90):** At NISTADS involved in the project relating to the promotion of sociology of science communities in the developing countries in collaboration with IRD, Paris. A study on the early social history of CSIR was taken up along with the study of S.S.Bhatnagar, the founder-director of CSIR

d) **Orientations of Scientists and Science Organisation at CSIRO and CSIR Institutions (1982-87):** Ph.D project at the University of Wollongong, New South Wales, Australia. Thesis completed and awarded in 1987.

e) **Management of R&D and Sociology of Science (1980-82):** At NISTADS involved in projects dealing with management of R&D and problems of technology transfer from national laboratories of CSIR to industry in the area of food processing, building materials, ceramics and electronic components.

Academic Teaching & Research at Jawaharlal Nehru University, New Delhi (1997-2005 continuing):

- **Professor in Science Policy**, Centre for Studies in Science Policy (CSSP), Jawaharlal Nehru University, New Delhi from 1997 continuing at present.
- **Post Graduate Supervision:** 7 M.Phil students and 6 Ph.D students (currently supervising 3 Ph.D students in 2005-07)

Topics of Ph.D students under my supervision

- a. National Agriculture Research Systems in India and Sri Lanka (completed by Seetha Wicremasinghe)
 - b. Emergence of Scientific Communities in India and China (completed by V.P.Kharbanda)
 - c. Technical Change, Innovation and Development: The Case of Two Clusters (under completion by Mohini Gulrajani)
 - d. National Innovation System in India (under completion by Mahesh Sarma)
 - e. Academia – Industry Interface: The Case of IITs (under completion by Nimesh Chandra)
- **Courses:** Designed and teaching two courses on Science and Technology in Social Contexts and Management of Innovation and Technical Change at the M.Phil/Ph.D programme level.

Professional Recognition, Membership and Special Invitations:

- Editor: *Science, Technology & Society - An International Journal* (Sage Publications, Thousand Oaks, London and New Delhi) for the last 10 years.

- Member: Task Force of on Industrial Clusters and Regional Innovation (2003-2005) UNIDO, New Delhi
- Council Member of the Society for Social Studies of Science (4S),2000-2002, USA.
- Member, International Council for Science Policy Studies, ICSU, UNESCO, Paris.
- Invited contribution to the *International Encyclopedia of the Social and Behavioral Sciences*, UK: Pergamon and Elsevier Science Publications, 2000
- Member: Board of Studies, Academic Council and Court, Jawaharlal Nehru University 2002-2004.
- Referee for research proposals of the program on Societal Dimensions of Engineering, Science and Technology Program, National Science Foundation (NSF), USA.
- Visiting Professor, Maison des Sciences del homme, Paris and IRD, Paris, in 1993-1994 (for 10 months); and one month each in 1995, 1996, 1997, 1998, 1999, 2000-2002; 2004.
- Visiting Professor, AEGIS, University of Western Sydney, Australia 2004-2005 (10 months)

Books Published

Science and Technology in a Developing World (Sociology of Sciences Year Book 1995), The Netherlands : Kluwer Academic Publishers, 1997 (with Terry Shinn and J. Spaapen).

Scientific Communities in the Developing World, New Delhi : Sage Publications, 1997, (With Jacques Gaillard and Roland Waast).

Brain Drain: A Sociological Study of Scientific Communities, New Delhi: Gyan Publishers, 1995 (with S.Mahanti, V.K.Jairath, E.Haribabu and A.Basu).

S.S.Bhatnagar on Science, Technology and Development, 1938-54, New Delhi: Wiley Eastern Ltd, 1994.

Books (forthcoming 2006)

Science, Technology Policy and Diffusion of Knowledge: Understanding the Dynamics of Innovation Systems in Asia-Pacific (UK: Edward Elgar 2006/07) with Tim Turpin

Changing Innovation Systems in Asia (Sage Publications, New Delhi 2007) with Deok Yim and Pradosh Nath

Forthcoming Papers:

‘Dynamics at the Sectoral System of Innovation: Indian Experience in Software, Biotechnology and Pharmaceuticals’, chapter in the forthcoming volume *Science and Technology Policy and Diffusion of Knowledge in Asia-Pacific Economies: Understanding the Dynamics of National Systems of Innovation* (UK: Edward Elgar) with Tim Turpin

Special Issues of Journal Edited on South Asia and China; and Africa

Science and Technology for Development in South Asia and China, Special Issue, *Science, Technology & Society*, 6(1) Jan-July 2001

The Status of Science in Africa, Special Issue, *Science, Technology & Society*, 8(2), July-Dec, 2003

Published Papers in Journals and Books

“South Asia” (Status of Science in South Asia), *Unesco Science Report – 2005*, Paris : Elsevier and UNESCO Publishing, 2005.(Commissioned by Unesco)

‘Education, Training and Skills Formation for Decent Work in the Informal Sector: Case Studies from North India’ in M. Singh (ed) *Meeting Basic Learning Needs in the Informal Sector- Integrating Education and Training for Decent Work, Empowerment and Citizenship*, Unesco Institute for Education and Springer, Berlin and The Netherlands, 2004

‘Institutional Support Structures and Models of Skills Transmission’, in M. Singh (ed) *Meeting Basic Learning Needs in the Informal Sector- Integrating Education and Training for Decent Work, Empowerment and Citizenship*, Unesco Institute for Education and Springer, Berlin and The Netherlands, 2004

“The Status of Science in Africa”, *Science, Technology & Society*, 2003, pp.145-152. (With R. Waast)

Science in Africa: From Institutionalisation to Scientific Free Market- What Options for Development?, *Science, Technology & Society*, 2003, pp.153-182, (with R. Waast)

“Changing Policy Cultures, Phases and Trends in Science and Technology in India”, *Science and Public Policy* (UK), 28(3), 2001, pp.179-194.

“Reflections on the Changing Status of Academic Science in India”, *International Social Science Journal*, UNESCO No.168, 2001, (commissioned paper in special issue on Sciences and Cultures).

Introduction to Science and Technology for Development in South Asia and China” *Science, Technology and Society*, 6(1) 2001.

“Science Funding: Asia”, *International Encyclopedia of the Social and Behavioral Sciences*, UK: Pergamon and Elsevier Science Publications, 2000.(commissioned contribution to the encyclopedia)

“The Changing Structure of Science in Developing Countries”, *Science, Technology and Society*, 5 (2) 2000 (With Roland Waast and Jacques Gaillard).

“Globalisation and Scientific Communities in the Developing World”, *World Science Report*, 1998 Paris: UNESCO, 1998 (With Roland Waast and Jacques Gaillard).

“Science, Technology and Counter Hegemony: Some Reflections on the Contemporary Science Movements in India”, in Terry Shinn, J. Spaapen and V.V.Krishna (eds) *Science and Technology in a Developing World* Sociology of the Sciences Year Book 1995, The Netherlands : Kluwer Academic Publishers, 1997.

“Introduction : Scientific Communities in the Developing World”, in Jacques Gaillard, V.V. Krishna and Roland Waast (ed) *Scientific Communities in the Developing World*, New Delhi : Sage Publications, 1997, pp. 11-52.

“Twists and Turns in the Formation of the Chinese Scientific Community” in Jacques Gaillard, V.V. Krishna and Roland Waast (ed) *Scientific Communities in the Developing World*, New Delhi : Sage Publications, 1997, pp. 207-35 (With Yang Anxian, Shen Aiqun and V.P. Kharbanda).

“A Portrait of the Scientific Community in India : Historical Growth and Contemporary Problems”, in Jacques Gaillard, V.V. Krishna and Roland Waast (eds) *Scientific Communities in the Developing World*, New Delhi: Sage Publications, 1997, pp.236-80.

“Phasing Scientific Migration in the Context of Brain Gain and Brain Drain in India”, *Science, Technology & Society*, 2(2), 1997 (with Binod Khadria).

“Organisation of Industrial Research: The Early History of CSIR, 1934-47”, in Roy MacLeod and Deepak Kumar (eds) *Technology and the Raj*, New Delhi: Sage Publications, 1995.

“Science Policies to Innovation Strategies: ‘Local’ Networking and Coping with Internationalisation in Developing Country Context”, *Knowledge and Policy*, USA, (3-4), 1993/1994, pp.134-57.

“Introduction: Shaping Scientific and Industrial Research – Biographical Reflections on S.S.Bhatnagar”, in V.V.Krishna, eds, *S.S.Bhatnagar on Science, Technology and Development, 1938-54*, New Delhi: Wiley Eastern Ltd, 1993, pp.1-28.

“The Colonial ‘Model’ and the Emergence of National Science in India, 1876-1920”, in P.Petitjean, C.Jami, and A.M.Moulin (eds), *Sciences and Empires: Historical Studies*, Boston Studies in the Philosophy of Science, The Netherlands: Kluwer Academic Publishers, 1992.

“The Emergence of Indian Scientific Community”, *Sociological Bulletin (Journal of the Indian Sociological Society)*, 40(1&2) March – September, 1991, pp.89-107.

“Patterns of Urbanisation” in *Society in India: Social Structure Rural and Urban, Sociology Course, ESO 02*, New Delhi: Indira Gandhi National Open University, 1991.

“Urban Social Structure”, in *Society in India: Social Structure Rural and Urban, Sociology Course, ESO 02*, New Delhi: Indira Gandhi National Open University, 1991.

“Invitation to Sociology of Science: Agenda for Science Studies in India”, *Sociological Bulletin (Journal of the Indian Sociological Society)*, 38(2), September, 1989 (with V.K.Jairath).

“Biogas Technology: A Case Study in Haryana Villages”, in N.N.Mehrotra, Mohd Abdul Aleem and M.Sathish (eds), *Management of Indian S&T for Development and Self Reliance*, New Delhi: Allied Publishers, 1983.

“Appropriate Technology: More Problems than Prospects”, in S.N.Ghosh and N.P.Chowbey (eds), *Impact of Science and Technology on Indian Society*, Calcutta: Naya Prakash, 1981 (with S.S.Solanki and M.A.Qureshi).

“Biogas in the Context of Appropriate Technology: A Case Study of Haryana Villages”, in S.K.Vyas and N.S.Grewal (eds) *Biogas Technology*, Ludhiana: USG, 1981 (with S.S.Solanki).

“J.D.Bernal on Science”, *Science and Culture* (Calcutta), 46(8), 1980, pp.279-289.

Reports

Education, Training and Skill Formation for Decent Work in the Informal Sector in India, (Northern State Case Study), Report Prepared for ILO-UNESCO, 2001.

Science and Globalisation: Implications for Developing Countries, *International Network of Engineers and Scientists for Global Responsibility (IWES). Newsletter* NO: 25 May 1999.

Technology Transfer from National Laboratories to Industry, New Delhi: NISTADS, 1984 (with M.A.Qureshi, P.S.Nagpaul, L.Singhal and S.Pangasa).