

Annexure - I

AWARDS/FELLOWSHIPS AND OTHER RECOGNITIONS RECEIVED

Name of awards	Conferring Agency	Purpose
i) Indo-US Scholarship for advanced research in Seismology at USA Univ. for one year (1976-77)	Ministry of Education and Culture, New Delhi	For research in Geophysics
ii) Awarded travel grant and subsistence allowance by the Director, Indian School of Mines, Dhanbad to visit Czechoslovakia and the Netherland (May 18 to June 5, 1981) (10 days)	Indian School of Mines, Dhanbad	To attend and present a paper at the 2 nd International Symposium on "Analysis of Seismicity & Seismic Hazard held at Liblice, Czech" and to meet scientists at ITC-Enschede, the Netherland
iii) National Associate ship for three years by the University Grants Commission, New Delhi (1983-1985)	University Grants Commission, New Delhi	To visit various institutes and universities in India for consultations.
iv) Sr. Fulbright scholarship under Indo-US program for post-doctoral research in Resources Eng. at Jet Propulsion Lab., California Institute of Technology, Pasadena, CA, USA 91106 (Oct '83 - Nov '84) for 14 months.	Ministry of Education and Culture, New Delhi	For Post-doctoral research in Natural Resource Management through Remote Sensing Technology
v) Received UNESCO grant to attend Workshop on Pattern Recognition and Analysis of Seismicity organized by the International Center of Theoretical Physics (ICIP), Trieste, Italy (Dec.5-16, 1983) (2 weeks)	Organizer / Director International Center, Trieste, Italy	To learn techniques on Seismic Pattern Recognition
vi) Sr. DAAD fellowship under Indo-FRG Cultural Exchange Program (Sept.- Nov.1986) (6 months)	Indo-FRG & DAAD Office through UGC, New Delhi	For Scientific/Research in Remote Sensing/Seismology
vii) Visited Remote Sensing Center of Imperial College, London & Univ. of Nottingham, UK (Dec'86) (one week)	ISM sponsored visit	For research consultation in Remote Sensing subject

viii) Attended Asian Conference on Remote Sensing at Kuala Lumpur, Malaysia, 1989 (one week)	ISM sponsored	For presenting Research Paper
ix) Visited International Institute for Aerospace Survey and Earth Sciences, the Enschede, Netherlands for 6-weeks (Nov-Dec'96)	UGC, New Delhi Exchange program under Indo-Netherlands Cultural Exchange Programme	For Advanced research in remote sensing and GIS for natural resource management

Awarded Michael Madhusudan Award for meritorious achievements in Remote Sensing and Seismology in the year, 2001.

Nominated as MAN OF THE YEAR 1997 by the American Biographical Institute, USA.

LIST OF PUBLICATIONS BY DR V K Srivastava, ISM

1. Srivastava V K,2004,," Natural Disaster Management through Remote Sensing , Geographic Information System (GIS), and GPS in reference to Coal Mining Hazards – presented at World Congress on Natural Disaster Mitigation, Feb 2004 at New Delhi.
2. Srivastava V K and Ranjana Ghosh, 2003, "Mapping of tectonic lineaments and analysis of earthquake occurrence in Kutchh region of Indian subcontinent using GIS and Remote Sensing techniques" presented at MAP ASIA 2003 Conf at Kualalumpur, Malaysia, Oct 03.
3. Srivastava V.K and Arsalan, S I, 2003, "Seismic risk in Kutch region of India" presented at Seminar Advances in Theoretical and Applied Seismology , Oct. 29-30, Indian School of Mines, Dhanbad.
4. Srivastava V.K, 2002, "Image Processing and Probability Density Function for Enhancing sand Bars: Study along Damodar River Bordering Raniganj Coal Field," GIS India journal, Vol II ,No3,March 2002, p.p 6-8.
5. Srivastava V K,2002,,"Ground water recharge through watershed management practices in west Burdwan District (WB) using remote sensing images and GIS technique" Pubd. in the Proc of Intl Conference on Sustainable Development and Management of Ground Water Resources in Semi Arid Region with special reference to Hard Rock International Conference on Ground Water (IGC 2002), NGRI, Hyderabad , Dindigul pp 103-104.
6. Srivastava V K,2001,," Application of Remote Sensing Technology" As Chapter 15 in the book entitled- Environmental Management Areas

Published by Scientific Publisher, Jodhpur Ed NC Saxena , G singh and R Ghose ISM Dhanbad pp 374 –381

7. Srivastava V K, 2002,” Global Positioning Measurements in Geo Resources Mapping using High Spatial Resolution Remote Sensing Image Data: Analysis” Pubd in Proc of Intl Conference on Remote Sensing, GIS and GPS “ held at Bhopal, 2002,pp177-183.
8. Srivastava,VK,2001,”Significance of Global Positioning Measurements in Geo referencing of Remote Sensing Images an input to GIS” Presented and published in Proc of “Asian GPS Conference “ held in oct,2001, New Delhi, pp 51-52.
9. Srivastava, V K, 2001, “Role of Remote Sensing & Global Positioning System in Land Environment Management in Mining Areas,” Pubd in the 4^h Indian conference on Coal Mine Surveying, held at Godavary Khani, Kothagudem, pp. 11-15.
10. Srivastava V K and Sinharoy R K,2001,”Processing of IRS 1A LISS II multiband image for better delineation of coal and non coal mining areas of part of Jharia Coal field using ERDAS Software”, Mining Engineers Journ, Vol 3 , No. 1,pp 25-30.
11. Srivastava V K,2001,”Book Review on ”Remote Sensing and Geographical Information System” written by Dr Anji Reddy, JNTU, Hyderabad Pubd in GIS India ,Vol;10, No 4,p31.
12. Srivastava, V.K.,2000, “Water Resources Management through Remote Sensing and G.I.S. : a case study of Dhanbad,” Published in Proc. of

National Conference on Geoinformatics 2000 held at PSG College of Technology, Coimbatore, pp.238-243.

13. Srivastava, V.K.,2000, “Watershed Management : Remote Sensing and GIS Approach” published in special issue of PRODUCTIVITY on Water Resource Management, National Productivity Council, New Delhi, pp 413-415.
14. Srivastava, V.K.,2000, “Integrated Geoscientific Study of Mahanadi Basin for deciphering prospective geological features for hydrocarbone potentiality using Remote Sensing and other Geophysical Technique,” presented at 3rd International Conference and Exposition on Petroleum Geophysics, held at New Delhi,(Abstract).
15. Srivastava, V.K. and Birua, M.K.,1999, “Natural Resources Management of Nirsa Chirkunda block (Dhanbad) : Khudia Watershed through Remote Sensing Technique” Published in special issue of MIT Pune Journal, (Book Publ.) pp 56-62.
16. Srivastava, V.K.,1998, “Application of remote sensing and G.I.S. in monitoring urban growth in and around Jharia Coalfield (Dhanbad), India”, Publd in the proc of Intl Conf and Exhibition on GIS,GPS and Remote Sensing, ., New Delhi, pp 63-65.
17. Srivastava, V.K.,1997, “Study of Drainage Pattern of Jharia Coalfield (Bihar), India as observed on False Colour Composite Image of IRS-1A LISS II), Published, Indian Journal of Remote Sensing, Dehradun, , vol.25, No.1 pp.41-46.

18. Kundu, N.K., Srivastava, V.K. and Ghosh, M.K.,1997 “Succession of Plant Communities in coal field areas”, All India Peoples Congress, Calcutta, pp. 57-61.
19. Srivastava, V.K. and Kundu, N.K.,1996, “Physiography and associated soil cover mapping of Dhanbad district through satellite imagery”, Publd in book on” Geomorphology and Remote Sensing” Book Ed. VK Jha, Viswa Bharati, Santiniketan pp 125-155.
20. Srivastava, V.K., 1996,“Application of Landsat-TM Thermal band and IRS-1A LISS II Imagery in Delineation of coal mine fire in Jharia coalfield (Dhanbad) India”, Published in the Proc. of 17th Asian Conference on Remote Sensing held at Nov’96 at Colombo, Srilanka
21. Srivastava, V.K. and Mitra, D.,1995, “Study of drainage pattern of Raniganj coal field (Burdwan District) as observed on Landsat TM/IRS-LISS II Imagery”, publ in Indian Journal of Remote Sensing, Photonirvachak, Dehradun, vol.23, No.4, pp.225-235.
22. Srivastava, V.K. and Jhuma Parial,1995, “Study on the Ground water resources in Raniganj coal field (Burdwan District) during the last 3 years”, published in Burdwan University Journal of Science, vol. VI .
23. Srivastava, V.K.,1994, “Role of Geographic Information System in Natural Resources Management” in Book entitled ‘Perspective in Resource Management in Developing Countries’, Dr. B.Thakur (Ed.), Concept International Series in Geography, A Concept Publishing Co., New Delhi,

24. Srivastava, V.K., Rai, B., Sahai, S. and Mohan, R.1993, "Geo-Environmental Aspects of Maithon and Panchet Reservoirs using Remote Sensing Images", Pubd. in book entitled 'Environmental Issues in Mineral Resource Development' (Ed. Dr. K.L.Rai), Gyan Publishing House, New Delhi, pp. 259-272.
25. Srivastava, V.K. and Rao, T.B.V.M.,1992, "Evaluation of IRS-1A LISS II Data for Landuse study of the Eastern part of the Jharia coalfield", Pubd in book entitled 'Natural Resources Management – a new perspective', a NNRMS, Bangalore Publication, Ed. R.C.Karale, pp.356-359.
26. Srivastava, V.K. and Rao, T.B.V.M.,1992, "Remote Sensing and Geographic Information System for Natural Resources Study", Pubd in book entitled 'Remote Sensing Applications and Geographic Information System', Ed. I.V.Muralikrishna, JNTU, Hyderabad, Tata McGraw Hill Publication, New Delhi, pp.411-415.
27. Srivastava, V.K. and Rao Toleti, B.V.M.,1991, "Application of Remote Sensing in Land Environment Management", Published in Scientific Research journal of Banaras Hindu University, Varanasi, 1991, pp. 117-122
28. Srivastava, V.K.,1991 "Geographic Information System and Remote Sensing", Published in book entitled 'Readings in Remote Sensing Applications' by Scientific Publishers; Jodhpur, (Eds. Chouhan and Joshi), pp.57-62.
29. Srivastava, V.K. and Rao Toleti, B.V.M.,1990 "Digital Analysis of Remotely Sensed Data (Landsat-TM) for Mapping of

Siltation/Turbidity Levels in Maithon Reservoir”, Vol.XX, No.1-4, pp. 187-190, ISEG (GSI), Calcutta.

30. Srivastava, V.K. and Rao Toleti, B.V.M., Devbhuti, D. and Sahai, S.,1989, “Study of Panchet Reservoir using Remote Sensing Images”, Presented at Tenth Asian Conference on Remote Sensing held at Kualalumpur, (Published), pp. Q26-1 to Q26-5.
31. Srivastava, V.K., Yadav, R. and Sadhu, P.,1989, “Status of Environmental Hazard in Jharia coalfield”, Journ. of Engg. Geology, vol. XVIII, No. 1&2, pp.65-73 (Pubd.).
32. Srivastava, V.K. and Chouhan, R.K.S.,1988, “Study of focal mechanism solutions in and around Indian lithospheric plate” pubd. in the Diamond Jubilee Monograph of Dept. of A Geophysics, ‘Advances in Geophysics’, Ed. Prof. B.B.Bhattacharya, ISM, Dhanbad, pp.139-155.
33. Srivastava, V.K., Sarkar, S.N. and Verma, R.K.,1988, “Structural and lithological analysis of Singhbhum region from LANDSAT Imagery”, pubd. in Diamond Jubilee Monograph ‘Advances in Geophysics’, Ed. Prof. B.B.Bhattacharya, ISM, Dhanbad, , pp. 184-192.
34. Srivastava, V.K., Rai, B. and Mohan R.,1988,. “Study of Maithon Dam Reservoir using Remote Sensing Images”, published in Proc. of National Seminar on “Water Resources Development Management”, held at Regional Engineering College, Rourkela.

35. Srivastava, V.K.,1988, "Alteration Mapping in the Cuprite Mining District, Nevada using Multispectral Reflective and Thermal Infrared Scanners Images", Pub. Proc. of Indo-British Workshop on 'Remote Sensing of Environment in Mining Field', held at ISM, Dhanbad, pp.150-176.
36. Rao Toleti, B.V.M., Srivastava, V.K. and Nagrajan, R.,1988 "Remotely sensed data analysis of Jhamar Kotra phosphorite deposits of southern Rajasthan", Pubd. Proc. of Indo-British Workshop on 'Remote Sensing of Environment in Mining Field', held at ISM, Dhanbad, Nov. '88, pp.141-149.
37. Claus Vorbeck, Srivastava, V.K. and Duda, S.J., 1987,"Broad Band Seismograms, Band Pass Seismograms and Spectral Magnitude for a selection of 1982, 1983 and 1984 Earthquakes', Institute for Geophysik, University Hamburg, FRG. (Monograph)1987, pp. 1-112.
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Developing Countries, held at New Delhi, March 11-14, 1986 (Pubd.)ppT4.p/8.1-8.8.

41. Srivastava, V.K., Sarkar, S.N. and Verma, R.K.,1986, “Report on structural and lithological analysis of Singhbhum Chhotanagpur region from LANDSAT Imagery” – presented at Indian Space Research Organisation (ISRO) / Respond Working Group meeting held at Space Application Centre, Ahmedabad, 1981, published in ISRO Technical Report(TR –54-86), 1986.pp 129-136.
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43. Srivastava, V.K.,1982, “Regional Geology of Singhbhum and surrounding area from BHASKARA-II TV Imagery”, Pubd. in the proceeding of the Seminar cum Workshop on ‘Applications of Bhaskara II IV and SAMIR data’, held at Space Application Centre, Ahmedabad, Oct 1982, pp. CL 6.1-6.1.3.
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45. Srivastava, V.K.,1982, “Reflectance Spectra over the LANDSAT MSS response for various rock samples from Singhbhum region – A Laboratory Study”, presented at the National Space Science symposium held at Indian Institute of Science, Bangalore, 1982.

46. Srivastava, V.K. and Roy, A.K.,1982, "Seismotectonics and Seismic Risk study in and around Delhi region", Pubd. in Proc. of IV International Engineering Geological Congress held at IIT New Delhi, 1982, vol. VIII, pp.77-86.
47. Srivastava, V.K. and Verma, R.K.,1982, "Application of Landsat-Imagery to Tectonics and Seismicity of North Eastern India and Northern Burma", Published in Geoviews, vol. X, No.9, 1982, pp. 413-422.
48. Srivastava, V.K. and Chouhan, R.K.S ,1981, "Relation between Seismic Activity maps and Tectonic maps of the Indian subcontinent", Presented at 2nd International Symposium on Analysis of seismicity and seismic hazard at Liblice, Czechoslovakia, May'81. Published in Proceedings of Symposium, vol. I, pp. 302-310.
49. Srivastava, V.K., 1978,"Geologic structure and their possible correlation with the Earthquake Activity in Kashmir region of India from Landsat Imagery", Presented at Aerial Photography Appreciation Seminar, held at New Delhi, 1978.
50. Srivastava, V.K., Chouhan, R.K.S. and Singh, J.,1977, "Seismotectonic study of North West Kashmir", presented and published in the proceedings of the Sixth World Conference Earthquake Engineering held at New Delhi, pp. 903-904.

51. Srivastava, V.K., Chouhan, R.K.S. and Rajiv Nigam,1977, "Application of the theory of the Largest value to Earthquake occurrence in N-W Kashmir region", Published in Bull. of Indian Society of Earthquake Technology, Univ. of Roorkee, Roorkee, pp. 19-23.
52. Chouhan, R.K.S., Singh, J. and Srivastava, V.K.,1976, "Focal mechanism studies of the Nepal Aftershock sequence of June 27, 1956", published in Indian Journal of Earth Sciences, Calcutta, vol.3, No.2, pp. 229-233.
53. Chouhan, R.K.S. and Srivastava, V.K.,1976, "Focal mechanism solutions of the North Eastern India and their Tectonic Implications", published in Pure and Applied Geophysics (PAGEOPH), vol. 113 pp469-482.
54. Srivastava, V.K., Chouhan, R.K.S. and Rajiv Nigam, 1975, "The aftershock sequence of the Northwest Kashmir earthquake of September 3, 1972", published, Annali de Geofisica, Rome, 1975, pp. 139-149.
55. Chouhan, R.K.S. and Srivastava, V.K.,1971, "Statistics of Indian Earthquake frequency energy distribution", published in Annali de Geofisica, vol. XXVII, No.1-2.pp 59-68.
56. Chouhan, R.K.S. and Srivastava, V.K., 1970,"Global variation of 'b' in the Gutenberg Richter's relation $\log N = a - bm$ with depth", published in PAGEOPH, vol.82 pp124-132.

APPENDIX – III

RESEARCH PROJECTS CARRIED OUT

1. “Structural and Lithological Analysis of Singhbhum Chhotanagpur area from Landsat Imagery”, An Indian Space Research Organisation, Bangalore, ISRO RESPOND Project (Amount nearly Rs. 1.00 lakh; 1979-82) – Project completed and Final Report submitted – **Principal Investigator**.
2. “Precambrian Crustal Evolution of the Singhbhum-Orissa Iron Ore Belt”, Sanctioned by Dept. of Science and Technology, New Delhi, in coordination with Dept. of Geology, Presidency College, Calcutta (**Co-investigator** for Remote Sensing Data Analysis).
3. “Remote Sensing Application of Monitoring Environmental Impact of Mining in Jharia-Raniganj Coal Belt, India – A project approved and sanctioned by the sub-Group of Environmental Impact of Mining, PC-NNRMS – Standing Committee on Bioresources and Environment, Govt. of India, Min. of Environment & Forest; completed; **Principal Investigator**, 1991. Taken in collaboration with IIT KGP, GSI Cal, CMPDIL RANCHI.
4. **Principal Investigator** of Human Resources and Development Programme, New Delhi on “Application of Remote Sensing in Earth Resources Mapping with Special Reference to Microwave Remote Sensing”, under creation of infra-structural development of Emerging Technology, (1989-90).
5. “Environmental Impact Assessment of Dhanbad with particular reference to forest and soil cover through remote sensing image”, Sponsored by Min. of Env. & Forest, New Delhi under PC-NNRMS programme, January 1995 for 3 years – **Principal Investigator**.

6. On the basis of R&D work in Remote Sensing Applications ISM has been declared Entrepreneur to take up work for the preparation of thematic map, digitisation etc under Integrated Mission for Sustainable Development (IMSD) programme of Dept. of Space, Govt. of India, 1996.
7. Declared a Scientific Member for Advanced Space Borne Thermal Emission and Reflection Radiometer (ASTER-AO) applications programme administered by the Earth Remote Sensing Data Analysis Centre (ERDAS) of Tokyo, Japan, 1997.

ANNEXURE – IV

TECHNICAL REPORTS / CONSULTANCY REPORTS PREPARED ON GEOPHYSICAL FIELD INVESTIGATION / CASE STUDIES ON REMOTE SENSING / MINERAL EXPLORATION

1. Consultancy Report on the “Magnetic Survey for Location of Dykes in Pathakhera Area (M.P.), May 1980, R.K.Verma, M.K.Rao and V.K.Srivastava – ISM Consultancy Project No.1111, Indian School of Mines, Dhanbad (unpublished).
2. Report on “The geophysical investigation for graphite in Panch Mahal district, Gujarat”, Geological Survey of India Report, 1974, R.N.Agarwal and V.K.Srivastava (unpublished).
3. Report on “The geophysical investigation for groundwater in the drought affected villages of Ambajogai and Kaij Taluk, Bhir district, Maharashtra State”, GSI Report, January 1975, B.C.Sakia, S.Chakravarty and V.K.Srivastava (unpublished).
4. Report on “Geophysical investigations for Base Metals in the Deora Area, Jhunjhunu district, Rajasthan”, S.R.Singh and V.K.Srivastava, GSI Field Report, 1976 (unpublished).
5. Report on “Geophysical investigation for Base Metals in Banwas Area, Khetri Copper Belt, Jhunjhunu district, Rajasthan”, S.R.Singh and V.K.Srivastava, GSI Field Report, 1976 (unpublished).
6. Consultancy Report on “Slope stability studies at Jharia Block II Opencast Project”, Dept. of Mining Engineering, ISM, Dhanbad, Project No. 1281/86, 1986 (unpublished) under Co-ordinatorship of Prof B K Mazumdar.
7. Final Report submitted on “Structural and Lithological Analysis of Singhbhum Chhotanagpur area from Landsat Imagery”, ISRO-

RESPOND Project Report has been submitted to ISRO, April, 1983 (unpublished) – Rs. 1.5 lakh.

8. Final Report submitted on “Remote Sensing Application in monitoring impact of coal mines in Jharia-Raniganj coal belt”, PC-NNRMS, Min. of Env. & Forest, New Delhi (unpublished), Rs.25 lakhs, jointly taken with GSI, IIT/KGP and CMPDIL/Ranchi.
9. Consultancy Report on “Ground water prospecting at Adityapur-Dindly Housing Colony, Jamshedpur”, Consultancy No.PCE/Cons/1559/97 under co-ordinatorship of Dr B P Jha.
10. Consultancy Report on “Ground water prospecting at Dhaiya village near ISM boundary”, sponsored by ISM, 1999.
11. Consultancy Report on “Groundwater prospecting at Hirapur MADA colony and in MADA office area, Dhanbad”, sponsored by Mineral Area Development Authority, Dhanbad, March 2001.

BOOKS PUBLISHED

Proc. of Indo-British Workshop on “Remote Sensing of Environment in Mining Field” organized jointly by the Indian and British Experts during November 1988 has been published, pp.1-170 (Published : Smriti Patra, Calcutta).

ISRO - Indian Space Research Organization
GSI - Geological Survey of India
ISM - Indian School of Mines, Dhanbad