

11.0 DISCLOSURE OF CONSULTANTS ENGAGED

11.1 SGS India Private Limited

SGS India Pvt. Ltd., a member of SGS (*Société Générale de Surveillance*), is one of the pioneers in providing Inspection, Testing, Certification and Consultancy services to the trade in India.

SGS is represented in more than 140 countries, by 210 affiliated companies. Vast network of companies yields more than 2,000 offices (39,000 employees) that maintain over 340 laboratories. SGS is recognized globally for analytical and technical excellence in environmental assessment. This undisputed reputation is based upon an exceptional record of progressive growth and development by continuing to exceed the standards of most full-service environmental laboratories.

SGS India was founded in 1950 and has expanded Environmental Services and resources at Gurgaon, Chennai & Kolkatta. The growth of SGS India Pvt. Ltd is a prodigy of SGS's strength and experience, designed to fulfill the necessary demands of our clientele by keeping abreast of ever-changing environmental standards. The details of SGS India's accreditations and experience statement in environment are as per given in **Annexure-11.1 & 11.2**.

11.2 Environment Services

SGS India offers following environment services:

□ Environment Consultancy

- Environmental Impact Assessment/Environmental Management Plan ;
- HAZOP ;
- Risk Assessment ;
- Disaster Management Plan ;
- Noise Modeling ;
- Air Dispersion Modeling ;
- Source Emission modeling for Storage of Petroleum Product;
- Environment, Health & Safety Audit ;
 - Due Diligence for Assessment of EHS liabilities – For merger & acquisition
 - Regulatory Compliance
 - EMS compliance
- Waste Audit ;

- Assessment of Site Contamination ;
- Solid/Hazardous/bio-medical waste;
- Approach to Zero Water Discharge ; and
- Approach to Water Management.

❑ **Sustainable Development–Clean Development Mechanism Programs (CDM)**

SGS is approved agency for GHG emission validation and verification by UNFCCC.

❑ **Environment Laboratory**

SGS India Pvt. Ltd. is having a full-service, environmental laboratory.

11.3 Team Members

The team as per given below has executed the REIA study for the proposed expansion and detailed CVs of the individuals are enclosed as **Annexure 11.3**.

S.N	Team Member	Status
1	Mr Sunil Gupta	EIA Coordinator
2	Dr Rahul Srivastava	EIA Expert
3	Ms Parichay	EIA Expert
4	Dr A Alagappa Moses	Ecology expert – External
5	Dr G Areendran	Remote Sensing Expert – External
6	Mr Vinod Gautam	Risk Assessment Expert-External
7	Mr Suresh Sadasivan	Testing Expert



List of Membership/Accreditations/Approvals

Laboratories

- NABL Accredited (National Accreditation Board of Laboratories) based on ISO/IEC Guide 17025, in Chemical & Biological Testing Field;
- Ministry of Environment & Forests, New Delhi;
- Himachal Pradesh State Pollution Control Board;
- Haryana State Pollution Control Board;
- Jharkhand State Pollution Control Board;
- Kerala State Pollution Control Board;
- Orissa State Pollution Control Board;
- West Bengal State Pollution Control Board;
- Rajasthan State Pollution Control Board; and
- Drug Controller of India-Haryana.

Indoor Air Quality

- Member of Indoor Air Quality Association, USA; and
- Member of Indian Green Building Council, Hyderabad.

Climate Change Program

- Validation & Verification for CDM (GHG Emission) Projects;
- Verification for GHG Inventory as per ISO 14064, Carbon Neutrality, Carbon Foot Printing and WBCSD;
- Validation & Verification for Joint Implementation (JI) Projects;
- Validation & Verification for Voluntary Carbon Standards (VCS) Projects; and
- Validation & Verification for Chicago Climate Exchange (CCX) Projects.

Energy Audit

Our company has started Energy Audit services in 1998 and has executed more than 200 comprehensive energy audits in various industry verticals. SGS is recognized as approved Energy Auditing Agency by:

- BEE (Bureau of Energy Efficiency);

- Petrochemicals conservation Research Association (PCRA- Ministry of oil and natural gas government of India); and
- Small Industries Service Institute, Government of India & other State Nodal Agencies like GERC, PSEB, MEDA, MPUVN and NCT Delhi etc.

Relevant Experience Statement

1. AUDITS

Sn	Particulars
EHS Audit	
1	SIBC, Chennai
2	Samalpatti Power Corporation, Chennai
3	The Chemplast Sanmar Limited, Panruti, TN
4	Balaji Power Corporation (P) Ltd, TN
5	Gujarat Electricity Board, Wanakbori
6	Gujarat Electricity Board, Gandhinagar
7	Gujarat Electricity Board, Sikka
8	Gujarat Electricity Board, Dhuvaran
9	Jetpur Dyeing & Printing Association, Jetpur (Total 3 nos. contract for three years)
10	Oil & Natural Gas Corporation, Ahmedabad
11	Digvijay Cement Co. Ltd , Sikka
12	Gujarat Ambuja Exports Ltd, Himmat Nagar
13	DCW Ltd, Dhrangadhra
14	Panchmahal Steel Limited, Panchmahal
15	THE WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED (A Government of West Bengal Undertaking)
EMS Audit	
1	M/s.Akzo Nobel Ltd., Hoskotte, Bangalore
2	Arkema Project
3	Cadbury Mint
4	Coca Cola
5	Nestle India (8 units)
6	Areva TND, Noida
7	New Holland Wood Tractors, Noida
8	HPCL, Jhalandar
9	Perfetti Vanmella, Chennai
10	Radisson Hotel, Delhi
11	WPIL, Ghaziabad
12	HR International, Jhalandar

13	Era Infra, New Delhi
Electrical Safety/Energy Audit	
1	Delhi Jal Board
2	Delhi Jal Board
3	Gail India Ltd.
4	Asian Mills Pvt. Ltd.
5	Asian Tubes Ltd.
6	Parkin Industries – II
7	Vardhman Spinning & General Mills Unit.- II
8	FC Sondhi & Co.
9	ICICI Bank
10	Udaipur Milk Plant
11	A.B. Sugars
12	Brooks Laboratories Ltd.
13	Bhandari Hosiery Exports Ltd., Ludhiana
14	Bhandari Hosiery Exports Ltd., Lalroo
15	DSM Anti-infectives Ltd.
16	Anand Metals

2. ENVIRONMENTAL IMPACT ASSESSMENT & RISK ASSESSMENT

Sn	Name of the Client	Industry Sector & Location	Scope of Work
Projects in Progress			
1	Airport Authority of India	Proposed Air port in Arunachal Pradesh	EIA
2	KGSL Steel	Expansion of Steel Plant in Andhra Pradesh	EIA/RA
3	TATA Power	Proposed Thermal Power Plant in Orissa	EIA/RA
4	Nestle India	Proposed two LPG bullets in Existing plant in Goa	RA/DMP
Projects Completed			
1	SIBC	Existing Bottling Plant in Tamil Nadu	EIA
2	Sujana Power(G) Ltd.	Proposed Combined cycle Power Plant in Tamil Nadu	EIA
3	Lakshmi Precision Tools	Precision Tools Manufacturing Units in Tamil Nadu	EIA
4	V.R. Foundries	Diecasting Unit in Tamil Nadu	EIA
5	MALCO	Bauxite Mining in Tamil Nadu	EIA
6	Gujarat Electricity Board	Power Plant in Gujarat	EIA
7	Roofit Industries Ltd.	Asbestos Sheet Plant in Gujarat	EIA
8	Jetpur Dyeing & Printing Association	Proposed Landfill Site in Gujarat	EIA
9	Digvijay Cement Company Limited	Existing Cement Plant in Gujarat	EIA

Sn	Name of the Client	Industry Sector & Location	Scope of Work
10	Crescent Foundry Chemical Limited	Existing Foundry in West Bengal	EIA
11	Mahadev Asbestos Pvt. Ltd	Proposed Asbestos Cement Pressure Pipes Manufacturing Unit in West Bengal	EIA
12	M N Dastur & Co. Ltd	Commissioning of CRM at Tisco in Jharkhand	EIA
13	West Bengal Industrial Infrastructure Development Corporation	Mega Growth Center in West Bengal	EIA
14	Himgiri Castings Pvt. Ltd.	Casting Plant in West Bengal	EIA
15	Environmental Engineers Consortium	Augmentation of Haldia-Barauni Crude Oil Pipeline	EIA
16	West Bengal Power Development Corporation Limited	Sagardighi Thermal Power Project in West Bengal	EIA/RA/DMP
17	West Bengal Power Development Corporation Limited	Santadilh Thermal Power Project in West Bengal	EIA/RA/DMP
18	Stup Consultants Ltd.	Vivekananda Road Flyover in West Bengal	EIA
19	Shalivahana Power Corporation	40 MW Diesel Generator Sets in Andhra Pradesh	EIA/RA/DMP
20	Kannur Power Project	500 MW Naptha based Combined Cycle Power Plant in Kerala	EIA/RA/DMP
21	Pallakad Power Generating Company	330 MW Naptha based Combined Cycle Power Plant in Kerala	EIA/RA/DMP
22	Nagarjuna Electric Generating Company	20 MW LDO based Combined Cycle Power Plant in Andhra Pradesh	EIA/RA/DMP
23	Nagarjuna Electric Generating Company	20MW Biomass Based Power Plant in Hyderabad	EIA/RA/DMP
24	Southern Petrochemical Industries Corporation	Coal Based 18MW Power Plant In Tamil Nadu	EIA/RA/DMP
25	Hukumchand Jute Mill	Coal Based 22 MW Captive Thermal Power Plant in Madhya Pradesh	EIA/RA/DMP
26	Gautami Power Plant	220 MW Naptha based Combined Cycle Power Plant in Andhra Pradesh	EIA/RA/DMP
27	Central India Power Generating Company: Ispat Industries Limited	475 MW Naptha based Combined Cycle Power Plant in Andhra Pradesh	EIA/RA/DMP
28	NCC Power Corporation Ltd	227 MW Naptha based Combined Cycle Power Plant in Andhra Pradesh	EIA
29	DLF Power Limited	55MW DGSet Based Power Plant in Tamil Nadu	EIA
30	DLF Power Limited	32.5 MW DGSet Based Power Plant in Karnataka	EIA
31	DLF Power Limited	50 MW DGSet Based Power Plant in Haryana	EIA
32	Ukai Thermal Power Plant	Thermal Power Plant In Gujarat	EIA
33	Vorin Laboratories Limited	Existing Pharmaceutical Plant in Andhra Pradesh	EIA/RA/DMP
34	Max Pharma Limited	Existing Pharmaceutical Plant in Karnataka	EIA/RA/DMP
35	Fine Drugs Ltd.	Pharmaceutical Plant in Andhra Pradesh	EIA/RA/DMP
36	Siris India Ltd.	Pharmaceutical Plant in Andhra Pradesh	EIA/RA/DMP

Sn	Name of the Client	Industry Sector & Location	Scope of Work
37	Sigachi Labs	Pharmaceutical Plant in Andhra Pradesh	EIA/RA/DMP
38	Vasant Organics Pvt.Ltd	Chemical Plant in Andhra Pradesh	EIA/RA/DMP
39	Sri Ram Laboratories	Pharmaceutical Plant in Andhra Pradesh	EIA/RA/DMP
40	Twinstar Laboratories Ltd.	Chemical Plant in Andhra Pradesh	EIA/RA/DMP
41	Pharmasia Laboratories Ltd	Pharmaceutical Plant in Andhra Pradesh	EIA/RA/DMP
42	Hetero Drugs Ltd.	Pharmaceutical Plant in Andhra Pradesh	EIA/RA/DMP
43	Suven Pharmaceuticals	Pharmaceutical Plant in Andhra Pradesh	EIA/RA/DMP
44	Vorin Laboratories Limited	Existing Pharmaceutical Plant in Andhra Pradesh	EIA/RA/DMP
45	Siris India Ltd.	Pharmaceutical Plant in Andhra Pradesh	EIA/RA/DMP
46	Betalact Laboratories	Pharmaceutical Plant in Andhra Pradesh	EIA/RA/DMP
47	KAC Chemicals Pvt. Ltd.	Sulphuric Acid Plant in Andhra Pradesh	EIA/RA/DMP
48	Krebs Biochemical Ltd.	Biochemical Plant in Andhra Pradesh	EIA/RA/DMP
49	Artemis Pharmaceuticals	Pharmaceutical Plant in Andhra Pradesh	EIA/RA/DMP
50	Kekule Chemicals	Chemical Plant in Andhra Pradesh	EIA/RA/DMP
51	NATCO Pharma Ltd.	Pharmaceutical Plant in Andhra Pradesh	EIA/RA/DMP
52	Coromondal Fertilizers Ltd.	Fertilizer Plant In Andhra Pradesh	EIA
53	Doctors Organics Ltd.	Pharmaceutical Plant in Andhra Pradesh	RA
54	Vins Biochemicals Ltd.	Chemical Plant in Andhra Pradesh	EIA/RA/DMP
55	Igor Dyespec Pvt. Ltd.	Chemical Plant in Andhra Pradesh	EIA
56	Medicorp Technologies India Ltd.	Pharmaceutical Plant in Andhra Pradesh	EIA/RA/DMP
57	Coastal Papers Ltd.	Paper Plant In Andhra Pradesh	EIA
58	Servall Paper Company	Paper Plant In Tamil Nadu	EIA
59	Someshwara Cement Ltd.		EIA
60	Penna Cement Ltd.	Cement Plant in Andhra Pradesh	EIA/RA/DMP
61	Vishnu Cement Ltd.	Limestone Mine in Andhra Pradesh	EIA
62	Raasi Cements Ltd.	Limestone Mine in Andhra Pradesh	EIA
63	Lok Cement Ltd.	Cement Plant in Andhra Pradesh	EIA
64	Visaka Cememnts Ltd.	Cement Plant in Andhra Pradesh	EIA
65	Aditya Cements Ltd.	Limestone Mine in Rajasthan	EIA
66	Tamil Nadu Granite Mines	Granite Mines in Tamil Nadu	EIA
67	Dungsam Cement Project	Cement Plant in Bhutan	
68	Priyadarshini Cement Limited	Cement Plant in Andhra Pradesh	EIA
69	SJK Steel Corporation	Expansion in Steel Plant in Andhra Pradesh	EIA
70	Sponge Iron India Limited	Sponge Iron Plant in Andhra Pradesh	EIA
71	Metastrips Limited	Brass Strips Manufacturing Unit in Goa	EIA
72	HBL Limited	Lead Acid Battery Division in Andhra Pradesh	EIA
73	NED Energy Limited	Battery Manufacturing Industries in Andhra Pradesh	EIA
74	ONGC	Oil Well Blow Out in Andhra Pradesh	DMP
75	APPCB	Oil Well Blow Out in Andhra Pradesh	DMP
76	NDMC	Ultra Pure Ferro Oxide Plant in Andhra Pradesh	RA/DMP
77	PCBL, Kochi	Carbon Black Plant in Kochi, Kerela	EIA
78	PCBL, Mundra	Carbon Black Plant in Mundra, Gujarat	EIA

NAME : Mr. Sunil Chandra Gupta, EIA coordinator

NATIONALITY : Indian

SEX : Male

QUALIFICATIONS

- M.E. (Chemical) with specialisation in Industrial Pollution Abatement from IIT, Roorkee (year 1990) –obtained marks 78%
- B.E. (Pulp & Paper) from IIT, Roorkee (year 1988) –obtained marks 70%

PRESENT JOB PROFILE

Heading the consultancy division of SGS India Pvt. Ltd.

SUMMARY OF RELEVANT WORK EXPERIENCE

ENVIRONMENT IMPACT ASSESSMENT AND ENVIRONMENT MANAGEMENT PLAN (EIA/EMP)

Associated in execution of the following projects:

Hydel Power

- Hydel Power Project in HP
- Preparation of proposal for number of projects

Steel Sector (Plant & mines)

- SJK Steel, AP
- Deepak Steel, orissa
- Hari Machine Beneficiation Plant, Orissa
- Tata Iron Ore mines- Khonbond , Orissa
- MISL Iron Ore Mines, Orissa
- Expansion of existing plant and New Green field Steel plant,OCL Rajgangpur, Orissa
- Pradan Steel, Orissa
- BRG Steel, Orissa
- BRPL-Beneficiation Plant for Iron Ore at Orissa
- BRPL-Pelletisation plant for Iron Ore at Orissa
- Sponge Iron Plant at Rajgangpur;
- Mini Steel Plant at Rajgangpur;
- Ferro- alloys plant at Cuttack;
- Tata Sponge Iron Plant, at Jodha;
- TISCO Iron Ore mines at Jodha;
- Nalco, Orissa
- Bokaro Steel Plant; and
- Magenese Ore Mines, Orissa.

Cement Sector (Plant & mines)

- Golden Redimix, grinding unit, Dubai
- Second Expansion of OCL, Orissa
- NCC, Aden, Yemen
- TAMA Cement Plant, Erbil in Iraq
- Expansion of MCCL at Meghalaya;
- UNICEM, Nigeria;
- JK Cement, Nimbhera (plant & mines);

- Expansion of OCL, Orissa;
- New Cement Plant (CMCL) at Meghalaya ;
- Expansion of M/s Dalmia Cement(plant ,mines and captive power plant) ;
- Expansion of M/s Binani Cement in Rajasthan(plant & mines);
- Limestone mines in Meghalaya;
- Larsen & Toubro Limited, Chamba(plant & mines);
- Binani Cement, Udaipur(plant & mines) ;
- Prism Cement, Satna (Expansion of mines) ;
- Prism Cement, Satna (Existing mines) ;
- Captive Power Plant, Binani Cement, Udaipur;
- Chettinad Cement , Tamilnadu (plant & mines);
- Harish Chandra Engineers (P) Ltd., Sundernagar;
- Jaypee Rewa Cement, Rewa(for existing unit);
- Orient Cement, Chittorgarh(plant) ; and
- Laxmi Cement, Sirohi, Rajasthan (plant)

Oil & Gas Sector

- Expansion of oil field (onshore) in Hazira, Gujarat
- Two Oil Storage and Handling Terminals of ENOC at UAE
- Exploratory drilling (on shore) in Nagapattinam district of Taminadu
- Integrated Gas Development project at Kauther , for HMR consultant , Oman
- Exploratory drilling of oil and gas in Tamilnadu
- Exploratory drilling of oil and gas project in west coast ie Gulf of Khambhat;
- Development of oil and gas project in west coast ie Gulf of Khambhat;
- Expansion of oil and gas project in west coast ie Gulf of Khambhat;
- Expansion of SMPL crude oil pipeline of IOCL;
- Exploratory drilling of oil and gas project in East coast ie Bay of Bengal;
- LNG terminal and Port in Gujarat;
- Seismic survey for Oil & Gas Exploration in Assam;
- Seismic survey and drilling for Oil and Gas Exploration Gujarat;
- Exploratory drilling of oil and gas project in Rajasthan; and
- Gas field development project in east coast ie Bay of Bengal;

High Way and Infrastructure sector

- Airport at Arunachal Pradesh
- Impact of Traffic movement of gaseous emission in Township at Dubai, UAE
- Township at Dubai, UAE
- Township, NALCO, Orissa
- DLF, Noida
- Intel Commercial Complex, Bangalore
- Call Center at Jaipur for GE India;
- Shara City for Jaipur, Jhansi and Gwalior ;
- Commercial Mall at Noida;
- Widening & Strengthening of Krishnagarh – Udaipur Highway in Rajasthan;
- Agra – Gwalior Highway;
- Chandikhol to Pradeep port, Orissa ;
- Bhuvneshwar to Bolangir Highway, Orissa;
- Metro Railway, Delhi; and
- Transmission Lines associated with the Balagarh

Thermal Power Plant

- TATA Power, Orissa
- Ind Bharat thermal power plant (2x350MW) in Orissa
- VISA thermal power plant (4x300MW) in Chhattisgarh
- VISA thermal power plant (4x250MW) in Orissa
- VISA thermal power plant (4x250MW) in Gujarat
- Navbharat Thermal Power Plant, Orissa
- Captive power plant, Binani Cement; and
- Captive power plant, Dalmia cement.

Miscellaneous

- Sulphuric Acid plant at UAE
- Paint formulation unit at UAE
- ITC, Haridwar
- ITC, Pune
- BRG Steel at Orissa
- Single Super Phosphate, Udaipur ;
- Sethi Sand stone mines, Haryana and Rajasthan ;
- Golcha Soap stone mines, Bhilwara (ongoing);
- Jagatjit Industries(Distillery), Sikandrabad, UP;
- National Fertilizer Limited, Panipat;
- National Fertilizer Limited , Bathinda;
- Maruti Udyog, Gurgaon; and
- PPCL, Saladipura (Rajasthan).

DISPERSION MODELLING

Associated for dispersion modeling for the following projects exclusively in addition to EIA projects by using ISCST3 (point source and area source) and Caline3 (highway)

- Tata Coal mines, Angul
- Nalco coal mines , Angul
- Mesco Iron Ore mines, Barbil
- OCL Limestone mines, Rajgangpur
- Shara City for Jaipur, Jhansi and Gwalior ;
- JK cement, Nimbhera (mines and plant);
- Sethi Sand stone mines, Haryana and Rajasthan;
- Glocha Soap stone mines, Bhilwara; and
- Imparted training on Dispersion modeling for point source, area source and volume source (ISCST3) and traffic on highway (Caline) in five days workshop organized by Association of Air Pollution Control supported by CPCB and M/s Envirotech Instruments at Delhi from November 3 to 8, 2003.

RISK ASSESSMENT & DISASTER MANAGEMENT PLAN

Associated in the execution of the following projects :

Cement Sector

- Thermal power plant, Dalmia Cement, Dalmiapuram (ongoing);
- Expansion of Thermal Power Plant , Binani Cement, Udaipur
- Thermal Power Plant, Binani Cement, Udaipur

Oil & Gas Sector

- Nestle India, Goa for LPG bullet

- Two Oil Storage and Handling Terminals of ENOC at UAE
- LNG terminal at Dahej in Gujarat;
- Development and expansion of offshore oil production facilities in Bay of Bengal;
- Exploratory drilling of oil and gas project in west coast ie Gulf of Khambhat;
- Exploratory drilling of oil and gas project in East coast ie Bay of Bengal;
- Gas field development project in east coast ie Bay of Bengal.

Miscellaneous

- Dr Reddy's Laboratory, AP
- SJK Steel
- Paint formulation Plant, Dubai
- Hazardous impacts of CO2 releases from process for confidential client
- Captive power plant, Erbil, Iraq;
- Bindal Agro & Chemical Limited, Shajhanpur;
- IBP, Gurgaon
- Hindustan Petroleum Corporation Ltd., Vishaka Terminal, Malkapuram
- East India Petroleum Ltd., Opp Navel Dock Road
- Vishaka LPG Bottling Plant, Malkapuram
- Indian Oil Corporation Ltd., Visakha Terminal, Malkapuram
- Rashtriya Ispat Nigam Limited, Visakhapatnam Steel Plant
- Bharat Petroleum Corporation Ltd, Visakha Installation Naval base
- Ultra Pure Ferric Oxide, NMDC, Autonagar
- Godavari Fertilisers & Chemicals Ltd, VIZAG Storage Installation, Inner Harbour Area
- The Andhra Petro Chemicals Ltd., Opp. Naval Dockyard
- Coromandal Fertilisers Ltd., PB No. 125, Sriharipuram, Malkapuram (PO)
- L.G. Polymers India Pvt. Ltd., Unit of MC. Dowell & Co Ltd., RR Venkatapuram
- Bharat Heavy Plate & Vessels Ltd., Nathayapalem
- Hindustan Petroleum Corporation Ltd., Visakha Refinery, Post Box No. 15

ENVIRONMENT AUDIT (STATEMENT)

Associated in execution of the project for following organizations.

- TATA Refractory, Orissa
- Sulphuric Acid Plant, Dubai
- Paint formulation Plant, Dubai
- Confidential Client in Dubai for HSBC
- Larsen & Toubro Limited, Faridabad;
- National Fertilizer Limited, Bathinda;
- National Fertilizer Limited, Nayanangal;
- Punjab Alkali & Chemical Limited, Nayanangal; and
- Jaypee Rewa Cement, Rewa.

SOCIAL ASSESSMENT

- TAMA Cement Project, Erbil, Iraq;
- NCC Cement Project, Aden, Yemen
- PPCL, Salidpura
- NMDC, Bailadela
- Laxmi Cement, Sirohi Road

HAZOP STUDY

- Dr Reddy's Laboratory, AP
- Nestle India Ltd, Goa
- Bulk Storage of Petroleum Products and loading & Unloading, UAE
- Retail Storage of Petroleum Products and loading & Unloading, UAE

HAZARD ANALYSIS AND SAFETY AUDIT

- SHV Energy South East Ltd, Pendurthy Mandalam
- Bolt Lock, Modinagar;
- Brawn Laboratory, Faridabad;
- UP Twiga & Fiberglass, Bulandshahr;
- Mauria Udyog, Faridabad;
- Rama Processing, Faridabad;and
- Malt India Limited, Gurgaon.

EFFLUENT TREATMENT PLANT (DESIGN AND TROUBLE SHOOTING)

- Nuchem Chemicals, Faridabad;
- Dalmia Cement, Dalmiapuram;
- Prism Cement, Satna;

CERTIFICATION AND VERIFICATION STUDY

- Verification of Environment Performance Report, Coca Cola, India;
- Verification of Element Chlorine Free Technology adopted by ITC, Bhadrachalam;

BIO-MEDICAL/SOLID WASTE MANAGEMENT

- Imparted Training to Municipal Corporation of six districts of India - sponsored by MoEF and funded by United Nation
- Environment Assessment report based on Due Diligence Audit of brick manufacturing units in India using FaL-G technology under CDCF program for World Bank
- Solid Waste Management (includes management of municipal, hazardous and biomedical waste) and preparation of training manual for NTPC, Singoli;
- Assessment and preparation of Bio-Medical waste management plan for UP State;
- Assessment and preparation of Bio-Medical waste management plan for Punjab state including preparation of training modules; and
- Prefeasibility report of Municipal Solid Wastes of three cities of UP namely Agra, Lucknow, Kanpur in collaboration with NIDC.

MISCELLANEOUS

- Assessment of contamination of warehouse site after fire at Dubai and preparation of plan for removal of debris's from the site.
- Coordinating HSE issues at construction site near creek, Dubai
- Estimation of VOC emission from oil storage terminal by using Tank 4.09 and AEROMOD at Saudi Arabia
- Site suitability study for Paint formulating unit at UAE
- Audit of Hazardous Waste dumping site at Tata Sponge Iron Plant
- Hazardous waste management study at NTPC
- Sustainable Development Of Cement Industry for Battelle Memorial Institute (USA).
- Preparation of Transactional Guidelines on Environmental Matters for Public Sector Enterprises of UP Government coordinated by PICUP.
- Environmental prefeasibility study of proposed cement plant in Srilanka.
- Assessment of pollution load on proposed Technology Park, Gurgaon for M/s Unitech, New Delhi
- Certification of Pollution load on the basis of production capacity for M/s PCPL, Bhankarpur, Punjab
- Site incharge of environmental data generation project for M/s Bokaro Steel Plant, Bokaro

Name : Dr. Rahul Srivastava, EIA Expert

Nationality : Indian

Sex : Male

PRESENT EMPLOYMENT: SGS India Private Limited from 2007. (Presently posted at Gurgaon, Haryana)

QUALIFICATIONS

- Ph.D. in Environmental Science (Lichen Ecology & Biomonitoring): Thesis topic: "*Distribution Diversity and Pollution status of Lichens in Great Himalayan National Park, Kullu District, Himachal Pradesh*" from Lichenology Laboratory, National Botanical Research Institute, Lucknow, India Awarded from Department of Environmental Sciences, Dr. Ram Manohar Lohia Avadh University, Faizabad in 2006
- MSc in Environmental Sciences from Dr. Ram Manohar Lohia Avadh University, Faizabad in 2001.
- BSc in Botany, Zoology, Chemistry from Deen Dayal Upadhyay Gorakhpur University, Gorakhpur, Uttar Pradesh in 1999.

Present Job profile:

Execution of EIA studies

SUMMARY OF RELEVANT WORK EXPERIENCE

- ☐ Site Visits, base line data collection.
- ☐ Preparation of EIA application and questionnaire, Appendix I/TOR prior to submission and technical presentation to expert appraisal committee of MOEF.
- ☐ Monitoring and data compilation of Base Line Data Generation for Environmental Impact Assessment Study.
- ☐ Analysis of Air, Water & Soil Samples parameters

EIA Projects done

Distillery

- M/s. N.V. Distilleries & Breweries Pvt. Lmt. Village Kellar Khera, Tehsil Abohar, Distt. Ferozpur, Punjab, (90KLPD Project.)
- M/s. Radico Khaitan Ltd, Rampur Distilleries, Rampur (Uttar Pradesh) (Modernization of Existing Grain Based to Dual Fed (Grain/Molasses)
- M/s. United Spirits (Unit: Merrut) (Dual Fed (Grain/Molasses based 70 KLPD project)

Cement

- M/s. Revati Cements Pvt. Ltd. Cement Plant of 2.19 mio tpa of Cement Capacity and 6060 tpa Clinker Capacity Satna (Madhya Pradesh)
- M/s. Wonder Cement Pvt. Ltd. Cement Plant of 2.0 mtpa at Nimbahera Distt. Chittorgarh

Mining

1. Bauxite:

- Pushpa Ben P. Makheecha (K.M.Mehta) 168.30 Hect. Bauxite Mine of M/s Ashapura Mine Chem Pvt. Lmt. Khambaliya, Jamnagar, Gujrat
- Prabhudas Vithaldas 67.18 Hect. Bauxite Mine of M/s Ashapura Mine Chem Pvt. Lmt. Khambaliya, Jamnagar, Gujrat
- Virpur Kenedy 70.81 hect. Bauxite Mine of M/s Ashapura Mine Chem Pvt. Lmt. Khambaliya, Jamnagar, Gujarat
-

2. Limestone:

- Limestone Mine of M/s. Revati Cement Pvt. Ltd. Satna, Madhya Pradesh
- Limestone Mine of M/s Wonder Cement Pvt. Ltd, Nimbahera, Chittorgarh (Rajasthan)
- Tantwas Limestone Mine of M/s. Shree Cement Ltd. Nagaur, Rajasthan
- Limestone Mines of M/s Lucky Minmat (P) Ltd. Neem Ka Thana, Sikar, Rajasthan
- Limestone Mines of M/s Best Chemicals Pvt. Ltd Neem Ka Thana, Sikar, Rajasthan

3. Lignite:

- Nimbri Chandawatan Lignite Mine of M/s. Binani Cement Ltd. Nagaur

4. Chromite:

- Kaliapani Chromite Mine (64.463 Hect.) of M/s. Balasore Alloys Pvt. Lmt. District Jajpur, Orrisa.
- Ispat Sukinda Chromite Mine (35.6 of M/s. Balasore Alloys Pvt. Lmt. District Jajpur, Orrisa.
- Bhimtangar Chromite Mine (23.8 Hect.) of M/s. Ferro Alloys Corporation District Jajpur, Orrisa.

Pharmaceutical

- IPCA Laboratories, Sejavata, Ratlam Madhya Pradesh

Real Estate

- Residential Township of M/s Radiant Hotels in Jaipur.
- Residential Township of M/s. Unitech Residential Township in Gurgaon, Haryana.
- Pushpanjali Hospital of M/s Crosslays Remedies Ltd at Vaishali, Ghaziabad, (U.P.)
- TCG-IGIB (CSIR) extension Campus at Mathura Road, New Delhi.
- IT Park of M/s. Unitech (P) Lmt. in Noida, Uttar Pradesh.
- M/s. Silver City Constructions, Zirakpur, Chandigarh (2 Residential Township and 3 Shopping Malls cum Multiplex

Power

- M/s HEG Ltd Mandideep,(32 MW Project) Distt. Raisen (Madhya Pradesh)

Name : Parichay (Ms) , EIA Expert

Nationality : Indian

Sex : Female

PRESENT EMPLOYMENT

SGS India Private Limited. (Presently posted at Gurgaon, Haryana)

QUALIFICATIONS

- M.Phil. at TERI University, New Delhi
- Qualified UGC-NET [Reference No. 4271/(NET-DEC.,2003)]
- Master of Science in Environmental Science from Banaras Hindu University, Varanasi in 2004
- Bachelor of Science in Environmental Science, Botany & Zoology in 2002

Present Job profile

Presently working as Executive - environmental Services with SGS India Pvt. Ltd. Involved actively in consultancy services, coordinating EIA studies in SGS-India, partially involved in Business Development.

SUMMARY OF RELEVANT WORK EXPERIENCE

- Environmental Audit of Western U.P. Distillery Plant & Chemical Works.
- Social & Ecological Impact Assessment of Kimberlite mining on wildlife values of the Panna Tiger Reserve
which also include R&R.
- Social Impact Assessment on wild life values of petroleum pipeline extension project from Mangalya to Bijawasan
- Social & ecological Impact Assessment of Cement Plant & Captive Limestone Mine at Sundernagar, Himachal Pradesh
- Study on Waste Water Management in Distilleries which also includes social and R& R plan.
- Biodiversity in National Environment Policy.
- Monitoring of Flue Gas, Ambient Air Quality, Noise Level, Sampling of Water / Effluent / Soil Sludge
- Monitoring and data compilation of Base Line Data Generation for Environmental Impact Assessment Study.
- Analysis of Air, Water & Soil Samples parameters
- Base line data for AFR project (at one of the site for stack)

1.	Name	DR. A. ALAGAPPA MOSES					
2.	Designation	Ecological & Fisheries Expert					
8.	Academic Qualification (Commencing from Graduation)						
No.	Degree	Subject / Specialization	Name of the College	Name of the University	Year of passing	Percentage of Marks / grade	Class
1.	B.Sc.	Zoology	Bishop Heber College, Tiruchirappalli	University of Madras	1984	61.3	First
2.	M. Sc.	Environmental Sciences	Bishop Heber College, Tiruchirappalli	Bharathidasan University	1986	78.3	First Gold Med alist
3.	Ph.D.	Registered for Ph.D. Degree Thesis will be submitted by March 2006 <u>Title of Thesis</u> Environmental Assessment of Kalrayan Hills, Eastern Ghats for Eco-Development					
		Environmental Assessment / Management	Research Dept. of Environmental Sciences	Bharathidasan University, Tiruchirappalli – 620 017	Work in progress Research Guide Dr. G. Edwin Chandrasekaran		
8a	Professional Experiences especially indicating the experience in R & D management						
	20 years since August 1986 to till date						

Aquatic Ecology		Terrestrial Ecology		
1. Watershed Management		6. Flora and Fauna Assessment under E.I.A.		
2. Water Quality Monitoring		7. Soil Quality Assessment		
3. Water Pollution & its Control		8. Environmental Impact Assessment		
4. Environmental Engineering		9. Applications of Remote Sensing and GIS		
5. Industrial Pollution control		10. Sustainable Development		
	Special Courses Attended			
1.	Orientation course for College Teachers	Sponsored by UGC, NEW DELHI Academic Staff College, Bharathidasan University, Tiruchirapalli. July 1988		
2.	Refresher Course in Environmental Studies	Sponsored by UGC, NEW DELHI Academic Staff College, Department of Environmental Sciences Jawaharlal Nehru University, New Delhi September 1994		
3.	Programme on Management of Environmental Research for Principal Investigators	Sponsored by World Bank and Ministry of Environment and Forests, Govt. of India Administrative Staff College of India, Bella Vista Hyderabad March 2002		
4.	Workshop on Environmental Studies for College Teachers	Council for College and Curriculum Development Bharathidasan University, Tiruchirapalli January 2004		
5.	Refresher Course in Microbiology – Recent Trends Advances in Microbial Technology	Sponsored by UGC, NEW DELHI Academic Staff College, Department of Microbiology National Facility for Marine Cyanobacteria November 2004		
8b. Research Experience				
List of Major / Minor Projects completed as Principal / Co-principal Investigator				
Completed Projects				
Subject of Research		Under whose auspices	Period	Emolument s drawn (Rs.)
1.	Integrated Environmental Research Programme on river Kaveri	Ministry of Environment and Forests, Govt. of India.	1989-1992	6, 08,336
2.	Inventorisation of Pollution sources (Point and Non-point) and related demographic studies	Ministry of Environment and Forests, Govt. of India.	1989-1990	50,000
3.	Dental Fluorosis among School Children in Selected areas of Tamil Nadu	All India Association of Christian higher Education (AIACHE), New Delhi	1989-1990	20,000

External Consultant for SGS

4.	Nutritional Blindness among School Children in selected districts of Tamil Nadu	All India Association of Christian higher Education (AIACHE), New Delhi	1991-1992	10,000
5.	National Environmental Awareness Campaign – Biodiversity	MOEF, New Delhi through CPRAF, Chennai	1992-1993	5,000
6.	Project Living Machine	Au Sable Institute of Environmental Studies, Mancelona, Michigan, USA	1994-1995	15,000
7.	National Environmental Awareness Campaign – Animal Welfare	MOEF, New Delhi through CPRAF, Chennai	1993-1994	5,000
8.	National Environmental Awareness Campaign – Women and environment	MOEF, New Delhi through CPRAF, Chennai	1994-1995	15,000
9.	National Environmental Awareness Campaign – Forests	MOEF, New Delhi through CPRAF, Chennai	1995-1996	10,000
10.	National Environmental Awareness Campaign – Medicinal Plants	MOEF, New Delhi through CPRAF, Chennai	1997-1999	12,500
11.	Artificial Wetland System for the Treatment of Municipal Sewage	Au Sable Institute of Environmental Studies, Mancelona, Michigan, USA	1997-1999	65,000
12.	Water Quality Monitoring Programme in River Cauvery from Bhavani to Tiruchirappalli	National River Conservation Directorate, Ministry of Environment and Forests, Govt. of India, New Delhi	1998-2004	37, 50, 000
13.	Noise Pollution Survey in Karur, Tiruchirappalli, Pudukkottai, Thanjavur and Perambalur Districts of Tamil Nadu	University Grants Commission, New Delhi	2000-2002	42,000
14.	Environmental Assessment and Monitoring of Kalrayan Hills, Eastern Ghats, Tamil Nadu, using Remote Sensing and Geographical Information System (GIS)	Ministry of Environment and Forests, Govt. of India, New Delhi	1998-2001	14, 51,000
Ongoing Projects				
1.	Campus Environmental Audit – A Guide for Assessing Environmental Quality and Creating Strategies for change	University Grants Commission, New Delhi	2004 – 2006	80,000
8c.	Student Project Work at M.Sc., level			

	1. 85 M.Sc., Environmental Science Students were supervised for their M.Sc. research project work during the past seven years. 2. 3 M.Sc., Environmental Science students are being supervised at present.			
8d.	Consultancy Services Flora & Fauna Assessment for Environmental Impact Assessment Aquatic and Terrestrial Ecology			
	Subject of Research	Under whose auspices	Period	Emoluments
1.	EIA for the proposed pig Iron plant to M/s. SISCOL near Salem	Esquire Engineers and Consultants Ltd., Chennai	1993-1994	39,000
2.	EIA for the proposed steel rolling mill to M/s. SISCOL near Salem	Esquire Engineers and Consultants Ltd., Chennai	1995-1996 Attended Defense Meeting at the MOEF, N. Delhi	37,500
3.	EIA – Biotic Assessment for the Proposed Thapar Dupont Nylon 6, 6 Plant at Gummidipoondi, Chennai	ESSAARE Enviro-Services, Chennai	1995-1996	30,000
4.	EIA – Biotic Assessment for the TAMIN Graphite Mines near Sivagangai	ESSAARE Enviro-Services, Chennai	1996-1997	10,000
5.	EIA – Biotic Assessment for the Tamilnadu Petrochemicals – Epoxy Resin Epichlorohydrin expansion projects	Tata Consultancy Services (TCS), Pune	1996-1997	22,500
6.	EIA – Flora and Fauna study for the Construction / Expansion of Wharf and Jetty at Port Blair, Andaman Islands.	Richardson and Cruddass (1972) Ltd., A Govt. of India Undertaking, Chennai	1997-1998 Attended Defense Meeting at the MOEF, N. Delhi	1, 50,000
7.	EIA – Flora & Fauna study for the Construction / Expansion of Wharf, at Huddo	Richardson and Cruddass (1972) Ltd., A Govt. of India Undertaking, Chennai	1997-1998 Attended Defense Meeting at the MOEF, N. Delhi	
8.	Flora & Fauna study for the Construction / Expansion of Wharf, Jetty and Shore Protection Wall at Rangat, Andaman Islands	Richardson and Cruddass (1972) Ltd., A Govt. of India Undertaking, Chennai	1997-1998 Attended Defense Meeting at the MOEF, N. Delhi	

9.	Flora & Fauna study for the Construction / Expansion of Wharf, Jetty and Shore Protection Wall at Little Andamans	Richardson and Cruddass (1972) Ltd., A Govt. of India Undertaking, Chennai	1997-1998 Attended Defence Meeting at the MOEF, N. Delhi	
10.	Flora & Fauna study for the Construction / Expansion of Wharf, Jetty and Shore Protection Wall at Car Nicobar	Richardson and Cruddass (1972) Ltd., A Govt. of India Undertaking, Chennai	1997-1998 Attended Defence Meeting at the MOEF, N. Delhi	
11.	Flora & Fauna study for Construction / Expansion of Wharf, Jetty and Shore Protection Wall at Campell Bay, Nicobar Islands.	Richardson and Cruddass (1972) Ltd., A Govt. of India Undertaking, Chennai	1997-1998 Attended Defence Meeting at the MOEF, N. Delhi	
12.	EIA – Biotic Assessment for the Expansion unit of Sangam Organic Chemicals LTD., Tiruchirappalli.	Enviro Science Engineering, Chennai	1997	5,000
13.	EIA – Flora and Fauna study for the Proposed Gas based 30 MW Turbine Power Project at Paganur, Tiruchirappalli	ESSAARE Enviro Services, Chennai	1998-1999	10,000
14.	EIA – Flora & Fauna study for the Chennai – Tiruchirappalli – Madurai Pipeline Project	Tata Consultancy Services (TCS), Pune	1999	50,000
15.	Flora & Fauna study for the Expansion project of JNPT Oil Tank Farm at Mumbai	Tata Consultancy Services (TCS), Pune	1999-2000	25,000
16.	Flora & Fauna study for Expansion project of WCPM, Dandeli	Tata Consultancy Services (TCS), Pune	2000	30,000
17.	Flora & Fauna study for the Cochin – Coimbatore – Karur Pipeline project	Petronet – CCK and Tata Consultancy Services (TCS), Pune	2001	65,000
18.	Rapid Environmental Impact Assessment (EIA) A Report on Flora and Fauna Study for the proposed Expansion Activities around Dalmia Cement Factory, KVK and KVK Mines	Dalmia Cements (Bharat) Limited, Dalmiapuram, Tiruchy	2003 – 2004 Attended Defense Meeting at the MOEF, N. Delhi	1, 25, 000

19.	Rapid Environmental Impact Assessment (EIA) A Report on Flora and Fauna Study for the proposed Expansion Activities around Periyagalur Mines	Dalmia Cements (Bharat) Limited, Dalmiapuram, Tiruchy	2003 – 2004 Attended Defense Meeting at the MOEF, N. Delhi	
20.	Rapid Environmental Impact Assessment (EIA) A Report on Flora and Fauna Study for the proposed Expansion Activities around Periya Thirukonam Mines	Dalmia Cements (Bharat) Limited, Dalmiapuram, Tiruchy	2003 – 2004 Attended Defense Meeting at the MOEF, N. Delhi	
21.	Rapid EIA for the Proposed Housing Construction Project at Purasawalkam– Buckingham Real Estate And Asset Developers LTD. Chennai	Buckingham Real Estate And Asset Developers LTD. Chennai. Binny Mills	2006 – 2007	25, 000
22.	Rapid EIA for the Proposed Housing Construction Project at Anna Nagar.	OZONE Group, Chennai.	2006 – 2007	35, 000
23.	Rapid EIA for the Proposed Housing Construction Project at the Indian Express Property, Royapettah	Indian Express Estate, Royapettah, Chennai	2006 – 2007	35, 000
24	Rapid EIA for the Proposed Limestone Mining activity around Cuddappah – Dalmia cements	Aquara Labs, Jaipur and HOLTEC consultants, Haryana	2006 – 2007	1, 00, 000
25	Rapid EIA for the Proposed Limestone Mining activity around Kurnool – Dalmia cements	Aquara Labs, Jaipur and HOLTEC consultants, Haryana	2006 – 2007	1, 00, 000
26	Rapid EIA for the Proposed Limestone Mining activity around Nawabpet, AP – Dalmia cements	Aquara Labs, Jaipur and HOLTEC consultants, Haryana	2006 – 2007	1, 00, 000

27	Rapid EIA for the Proposed Limestone Mining activity around Gulbarga – Dalmia cements	Aquara Labs, Jaipur and HOLTEC consultants, Haryana	2006 – 2007	1, 00, 000
28	Rapid EIA for the Proposed Limestone Mining activity around Belgaum – Dalmia cements	Aquara Labs, Jaipur and HOLTEC consultants, Haryana	2006 – 2007	1, 00, 000
29	Rapid EIA for the Proposed Limestone Mining activity around Shillong, Meghalaya – Dalmia cements	Aquara Labs, Jaipur and HOLTEC consultants, Haryana	2006 – 2007	1, 00, 000
30	Rapid Environmental Impact Assessment – Flora and Fauna study for the Proposed Thermal Power Plant of Adani Power Private Limited	M/s. Aquara Labs Pvt. Ltd., “Ashirvad”, 4/449, Malviya Nagar Jaipur, Rajasthan – 302017	2006 – 2007	1, 00, 000
31	Rapid Environmental Impact Assessment – Flora and Fauna study for the Proposed Developmental Activities along the Stretch of Mundra SEZ	M/s. Aquara Labs Pvt. Ltd., “Ashirvad”, 4/449, Malviya Nagar Jaipur, Rajasthan – 302017	2006	1, 00, 000
32	Rapid Environmental Impact Assessment – Flora and Fauna study for the Proposed Shin Et Su Polymer Company	Global Environ Tech, Guindy Industrial Estate, Chennai	2007	40,000
33	Rapid Environmental Impact Assessment – Flora and Fauna study for the Proposed DLF Info Park Developers, Chennai	Global Environ Tech, Guindy Industrial Estate, Chennai	2008	50,000
34	Rapid Environmental Impact Assessment – Flora and Fauna study for the Proposed River Diversion Project, River Cauvery	Global Environ Tech, Guindy Industrial Estate, Chennai	2008	1, 00,000

External Consultant for SGS

35	Rapid Environmental Impact Assessment – Flora and Fauna study for the Proposed Expansion activities in and around Micro Hydel Projects from Mettur to Bhavani , Tamil Nadu.	Global Environ Tech, Guindy Industrial Estate, Chennai	2008	1, 00,000
36	Rapid Environmental Impact Assessment – Flora and Fauna study for the Proposed Satyam Development Centre, Chennai	Global Environ Tech, Guindy Industrial Estate, Chennai	2008	50,000
37	Rapid Environmental Impact Assessment – Flora and Fauna study for the Proposed India Rare Earth Minerals Limited, Manavalakurichi, Kanniyakumari	ENSYSCON , Chennai.	2008	75,000
8e.	Paper Published / Presented	50 papers		
8f.	Seminars / Work shops attended	30 Seminars / Workshops / Symposium / Training Programmes / Conferences	At National and International Level	

Research Papers Published / Presented In Conferences / Seminars

1. **Alagappa Moses, A** and Edwin Chandrasekaran, G – Drinking water system in Tiruchirapalli Town – Proceedings of the Seminar on Environment and Development Activities. Society of Environmental Services and Research Group for youth (ESRG) **1985**.
2. **Alagappa Moses, A** and Edwin Chandrasekaran, G – Effect of Distillery Effluent on the biochemical constituents of *Anabas scandens (Cuvier)* – Paper presented in the All India Symposium, Bharathidasan University, Department of Botany, Tiruchirapalli. **1986**.
3. **Yamuna, R. T., Alagappa Moses, A** and Edwin Chandrasekaran, G – The Effect of Dimecron (Phosphamidon) on a fresh water fish *Cyprinus carpio(Linnaeus)*. Paper presented in the seminar on Environmental Pollution and biological System, Sri. Vasavi College, Erode. **1986**.
4. **Alagappa Moses, A and Edwin Chandrasekaran, G** – The Effect of Distillery Effluent on the Blood of *Anabas scandens (Cuvier)*. Paper presented in the Seminar on Environmental Pollution and Biological Systems, Sri. Vasavi College, Erode. **1986**
5. **Alagappa Moses, A and Edwin Chandrasekaran, G** – The Physico – Chemical Characters of Distillery Effluent and their effect on the biochemical Constituents on *Anabas scandens (Cuvier)*. Proceedings of the All India Symposium on Aquatic Organisms. A.V.V.M Sri Pushpam College, Poondi, No. 126, p.80. **1987**
6. **Alagappa Moses, A and Edwin Chandrasekaran, G** – Effect of Distillery Effluent on the blood of *Anabas scandens (Cuvier)*. Tamil Nadu journal Science. Doctor's Forum. Vol. 1. Madras. **1987**
7. **Alagappa Moses, A and Edwin Chandrasekaran, G** – Biological Effects of Chromium on Industrial Workers. Proceedings of the 10th Tamil Science Seminar on Biology and Biotechnology, Madurai Kamaraj University, Vol.1, p.231. Madurai. **1988**.
8. **Alagappa Moses, A, Edwin Chandrasekaran, G and Daisy Caroline Mary, A** – Effect of Distillery Effluent Before and After Treatment on the Biochemical Constituents of *Sarotherodon mossambicus (Peters)*. Proceedings of the 10th Tamil Science Seminar on Biology and Biotechnology, Madurai Kamaraj University, Vol.1, p.243. Madurai. **1988**.
9. **Alagappa Moses, A, Edwin Chandrasekaran, G and Daisy Caroline Mary, A** – Effect of Tannery Effluent Before and After Treatment on the Biochemical Constituents on *Sarotherodon mossambicus (Peters)*. Proceedings of the National Seminar on Pollution control of Industrial Effluents, organized by Department of Civil Engineering, Lukhdhirji Engineering College, Morbi, Gujarat. **1987**
10. **Alagappa Moses, A, Edwin Chandrasekaran, G and Sunil Jacob** – Sewage Treatment using an Up flow Reverse Filter – COSSIP Campus Science Journal. Bishop Heber College, Vol.1.Tiruchirapalli. **1988**
11. **Alagappa Moses, A, and Edwin Chandrasekaran, G** – Effect of Lead on the Biochemical Constituents of *Oreochromis mossambicus*. – Proceedings of the National Seminar on Aquatic Environment and Organisms, Chichaiyah Naicker College, Erode, A. A. 58, p.38, October **1989**.

12. **Alagappa Moses, A, Edwin Chandrasekaran, G and Stephen Leo** – Effect of Automobile Exhaust - Lead on the Traffic Policemen in Tiruchirapalli City (Tamil Nadu). Proceedings of the International Conference on Environmental Education. Indian Environmental Society (New Delhi). Panjim – Goa, India. No.88,p.135, October – **1989**.
13. **Alagappa Moses, A, Edwin Chandrasekaran, G and Sumathi** – Ambient Air Quality in Tiruchirapalli City. Proceedings of the 12th Tamil Science Seminar on Environmental Pollution, Mayiladuthurai. 1990
14. **Alagappa Moses, A, Edwin Chandrasekaran, G, Bennet Chandran, C d Andrew Isaac, T** – Impact of Mining and Cement Industries on the Environment of Ariyalur. Proceedings of the UGC Conference on Pollution Prevention. The Technology for the future. Tiruchirapalli. **1994**.
15. **Alagappa Moses, A, Edwin Chandrasekaran, and Johnsely Sajitha, C** – Design and Layout of Wastewater Treatment Plant for Bishop Heber College, **Tiruchirapalli**. Proceedings of the UGC Conference on Pollution Prevention. The Technology for the future. Tiruchirapalli. **1994**.
16. **Ravichandran, C., Alagappa Moses, A, and Koijam K.K. Mani bhushan Singh** – Suspended Carbon Particulate Matter in the ambient Air of the Cement plant at Ariyalur - Proceedings of the UGC Conference on Pollution Prevention. The Technology for the future. Tiruchirapalli. **1994**.
17. **Alagappa Moses, A., Edwin Chandrasekaran, G and Andrew Isaac, T** – Air Pollution in Ariyalur – A Case study - Proceedings of the 3rd Seminar on Environment, Tamil Science Congress, pondicherry, P.64 – 66, **1994**.
18. **Alagappa Moses, A** – Wastershed Management – The Concept and Strategies. Nature Club – Magazine Sylvanica. Tiruchirapalli. P.53 – 57. **1995**.
19. **Alagappa Moses, A, Narendran, K., and Edwin Chandrasekaran, G** – A Novel and Innovative Management Plan for Solid Waste Disposal in Tiruchirapalli City. Paper presented in the One day seminar on Solid Waste Management for Tiruchirapalli City Corporation held on 1st April 1995. Bishop Heber College, Tiruchirapalli. **1995**.
20. **Alagappa Moses, A and Narendran, K** – Waste Management in Thillainagar, Tiruchirapalli. Problems and Suggestions. Paper presented in the One day seminar on Solid Waste MAnagemtn for Tiruchirapalli City Corporation held on 1st April 1995. Bishop Heber College, Tiruchirapalli. **1995**.
21. **Edwin Chandrasekaran, G, Alagappa Moses, A, Bennet Chandran, C and Andrew Isaac, T**.- Impact of Dam Construction on the Air Environment of Vanjitemproon. Indian Journal of Environmental Protection, Vol. 14. No. 8, Varanasi, Aug. **1994**.
22. **Alagappa Moses, A, Edwin Chandrasekaran, and Johnsely Sajitha, C** – Design and Layout of Wastewater Treatment Plant for a College Community - Indian Journal of Environmental Protection, Vol. 14. No. 8, Varanasi, Aug. **1994**.
23. **Relton, A and Alagappa Moses, A** – Methods of Capturing Birds illegally in Tiruchirapalli area, Tamil Nadu – Our Immediate Concern. Proceedings of the Pan – Asian Ornithological Congress and XII Bird Life Asia Conference, Coimbatore, Tamil Nadu. P.101. November, **1996**.
24. **Alagappa Moses, A, Edwin Chandrasekaran, G and Ramsay Benjamin** – Photocatalytic Degradation of Dyestuffs using Semi-conductors TiO₂ and Zn O – Proceedings of the Second National Symposium on Student's projects on Correlation analysis. Organized by International Group for Correlation analysis Chemistry – Indian chapter, Trichy, p 10. August **1997**.

25. **Rebecca Vinnamudhu Srinivasan and Alagappa Moses, A** – The Role of Water Hyacinth in Wastewater Treatment – Proceedings of the one day State Level Conference on Environmental Chemistry and Awareness (Jointly Sponsored by TNCST, Chennai OP 5, p 2. Tiruchy, January **1999**.
26. **Alagappa Moses, A and Xavier** – ARESNIC – The Under Ground Killer of Millions in West Bengal and Bangladesh – From a Toxicological point of View. Proceedings of the 3rd National Symposium on Student's projects on Correlation analysis, (Organized by International group for Correlation Analysis in Chemistry – Indian Chapter), Tiruchirapalli, March **2000**.
27. **Alagappa Moses, A, Edison Raja, R and Kavitha, T** – Distribution of Fluoride in Ariyalur, Survey of Dental Fluorosis and Determination of Efficiency of Defluoridation by Herbal Treatment Methods using *Eclipta prostrate (L)*. Proceedings of the 3rd National Symposium on Student's projects on Correlation analysis. Tiruchy, March **2000**.
28. **Alagappa Moses, A., Jeevan Raj, S., Ranjani, R., Sangeetha, P., Seeba, M. and Uma Maheswari, G.** – Reuse of Treated Municipal waste water for Pisciculture. International Conference on sustainable development and management of natural resources Holy Cross College, Trichy 15-17 March **2003**.
29. **Alagappa Moses, A., Ranjani, R., Sangeetha, P, and Uma Maheswari, G.** - Biomedical waste Management – A case Study in Tiruchirappalli City. National Seminar on Solid waste management, Bangalore University, Bangalore. 12-15 Dec. **2002**.
30. **Alagappa Moses, A and Ranjani, R.,** Future perspective for Conservation of Environment Regional Seminar on People, Plants and Future Gandhigram University, Dindigul 12-13 Feb. **2003**.
31. **Alagappa Moses, A., Ranjani, R., Sangeetha, P, and Uma Maheswari, G.** - Safe and sustainable strategies for an effective Biomedical waste Management for a city International Conference on sustainable development and management of natural resources Holy Cross College, Trichy 15-17 March **2003**.
32. **Alagappa Moses, A., Uma Maheswari, G., Ranjani., R and Sangeetha, P.** - Building local Watershed partnership A watershed Management decision frame work International Conference on sustainable development and management of natural resources Holy Cross College, Trichy 15-17 March **2003**.
33. **Sakthivel, R., Manivel, M., Kamaraj, R and Alagappa Moses, A.** – Natural Resources Management on Watershed basis for Sustainable Development of Kalryan Hills, Tamil Nadu – An integrated Remote Sensing and GIS Approach. International Conference on sustainable development and management of natural resources Holy Cross College, Trichy 15-17 March **2003**.
34. **Alagappa Moses, A., Sangeetha, P and Alice Emerenshiya, C.** – Wastewater Management – Current Status and Strategies for the Future. National Seminar on pollution Management Strategies and Environmental Protection. Nirmala College, Coimbatore, Tamil Nadu, **Abs. O – 06. 10th Oct. 2003**.
35. **Alagappa Moses, A and Madhumathi, J.** – Directives for Environmental Education – A Strategy for Environmental Management. Current Status and Strategies for the Future. National Seminar on pollution Management Strategies and Environmental Protection. Nirmala College, Coimbatore, Tamil Nadu, **Abs. O – 04. 10th Oct. 2003**.
36. **Alagappa Moses, A and Leef Damaries, L.** – Management of River Cauvery Watershed - Redefining The Responsibility of Stakeholders. National Seminar on pollution Management Strategies and Environmental Protection. Nirmala College, Coimbatore, Tamil Nadu, **Abs. O – 04. 10th Oct. 2003**.

37. **Alagappa Moses, A and Jeya Shobana, V,** - Exploring Economic instruments for Improving Industrial Environmental Management in India. National Seminar on pollution Management Strategies and Environmental Protection. Nirmala College, Coimbatore, Tamil Nadu, **Abs. O – 04. 10th Oct. 2003.**
38. **Alagappa Moses, A and Madhumathi, J.** – Directives for Environmental Education – A Strategy for Environmental Management. Current Status and Strategies for the Future. National Seminar on pollution Management Strategies and Environmental Protection. Nirmala College, Coimbatore, Tamil Nadu, **Abs. O – 07.10th Oct. 2003.**
39. **Kalavathi, S., Sebastian Rjasekaran, C., Alagappa Moses, A., Peter Francis, S., Rajendrakumar, S., Mophin Kani, K., and Nithya Kalyani, B. R.,** - Environmental Strategies in Tanning industries around Sembattu area.
40. **Alagappa Moses, A and Madhumathi, J.** – Directives for Environmental Education – A Strategy for Environmental Management. Current Status and Strategies for the Future. National Seminar on pollution Management Strategies and Environmental Protection. Nirmala College, Coimbatore, Tamil Nadu, **Abs. P – 06. 10th Oct. 2003.**
41. **Alagappa Moses, A., Ranjani, R., and Alice Emerenshiya, C.** - Safe and sustainable strategies for an effective Biomedical waste Management for a city. UGC Sponsored Seminar Organized by Department of Biochemistry, Seethalakshmi Ramasami College, Tiruchirapalli. 3rd and 4th March **2004.**
42. **Alagappa Moses, A and Jeya Shobana, V.** – **Biomedical Waste Management** – Biomedical Waste Management – Impacts in Implementing the BMWM Rules in Coimbatore city. UGC Sponsored Seminar Organized by Department of Biochemistry, Seethalakshmi Ramasami College, Tiruchirapalli. 3rd and 4th March **2004.**
43. **Alagappa Moses, A, Ranjani, R., Uma Maheswari, G and Leef Damaries, L** – Minimal Programmes of Biomedical Waste Management in Colleges. UGC Sponsored Seminar Organized by Department of Biochemistry, Seethalakshmi Ramasami College, Tiruchirapalli. 3rd and 4th March **2004.**
44. **Alagappa Moses, A, Ranjani, R., and Uma Maheswari, G.** – **Plasma Pyrolysis** – A Safe and Sustainable Technology for the Disposal of Biomedical Waste. UGC Sponsored Seminar Organized by Department of Biochemistry, Seethalakshmi Ramasami College, Tiruchirapalli. 3rd and 4th March **2004.**
45. **Alagappa Moses, A and Alice Emerenshiya, C.** – Environmental Management in Limestone Mines. Social Problems in India – Perspectives for Intervention. Environmental Issues. P.583 – 593. Allied Publishers Pvt. Limited, New Delhi. **2004.**
46. **Alagappa Moses, A., Sangeetha, P and Alice Emerenshiya, C.** – Wastewater Management – Current Status and Strategies for the Future. Social Problems in India – Perspectives for Intervention. Environmental Issues. P.483 – 493. Allied Publishers Pvt. Limited, New Delhi. **2004.**
47. **Alagappa Moses, A and Sheeja, K. M.,** - Eco-Friendly Plastics – A New Wave of Alternative for the Non – Biodegradable Plastics. Social Problems in India – Perspectives for Intervention. Environmental Issues. P.511– 522. Allied Publishers Pvt. Limited, New Delhi. **2004**
48. **Alagappa Moses, A., Ranjani, R., Alice Emerenshiya, C and Leef Damaries, L.** – Minimal Programmes of Biomedical Waste Management in Colleges and Research Laboratories. Social Problems in India – Perspectives for Intervention. Environmental Issues. P.543 – 552. Allied Publishers Pvt. Limited, New Delhi. **2004**
49. **Alagappa Moses, A and Alice Emerenshiya, C** – A Comprehensive Environmental Management in Mining Industries. Social Problems in India – Perspectives for Intervention. Environmental Issues. P.561 – 573. Allied Publishers Pvt. Limited, New Delhi. **2004.**
- 50.

50. Alagappa Moses, A., Kumaraswamy, K and Vasanthi, M – Multidisciplinary Nature of Environmental Studies. Remote Sensing for Environmental Studies, Bharathidasan University. P. 19 – 32. First edition August, 2005.		
51. Building Local Watershed Partnerships – A Watershed Management Decision Making Framework. JJ College of Engineering and Technology, Tiruchirappalli, September 2006		
8g.	Books Published	
1	Environmental Studies – A Text Book for All Under Graduate Students. (Published by Bharathidasan University, Tiruchirappalli. ENGLISH	Released on 2 nd October 2004
2	Environmental Studies – A Text Book for All Under Graduate Students. (Published by Bharathidasan University, Tiruchirappalli. TAMIL	Released on 4 th March 2005
3	Advances in Environmental Studies, GEM Publications, Tiruchirappalli – 620 017	Released on 31 st March 2007

8h. Seminars/Workshops/Training Programmes Organized as Deputy Director / Resource Person				
8h.	Seminars / Work shops conducted to	39 Seminars / Workshops / Symposium / Training Programmes / Conferences	<u>Target group</u> Teachers and students of Colleges / Schools; NGOs, PWD, Agriculture Engineering Depts. and TWAD; Church leaders etc.	
No.	Topic / Theme	Sponsoring Agency	Venue	Year
1.	Training Programme in Rural Development	AIACHE, New Delhi	Tiruchirappalli	Jan. 1991
2.	Workshop on Environmental Education for Christian College Teachers	AIACHE, New Delhi	Bangalore	May 1991
3.	National Workshop on Environmental Education for Christian College Teachers	AIACHE, New Delhi	Bangalore	May 1992
4.	National Workshop on Environmental Education for Christian College Teachers	AIACHE, New Delhi	Kodaikanal	May 1993
5.	National Workshop on Environmental Education for Christian College Teachers	AIACHE, New Delhi	Bangalore	May 1994
6.	Workshop on Environmental Education for Primary School Teachers and Students	AIACHE, New Delhi	Tiruchirappalli	Feb. 1994
7.	Experiential Learning – Experience with Environment for Elementary School Children	AIACHE, New Delhi	Tiruchirappalli	Feb. 1994
8.	New Strategies for Environmental Education for School Children. i. for School Teachers ii. for College Teachers iii. for Church Workers	AIACHE, New Delhi	Tiruchirappalli	Nov. 1994

External Consultant for SGS

9.	'Back to Eden' Environmental Awareness Programme for Sunday school children	AIACHE, New Delhi	Tiruchirapalli	Mar. 1994
10.	Leadership Training Programme on Environment for Church Workers	C.S.I Synod	Madras	Aug. 1994
11.	Regional Workshop on Environmental Stewardship – Tamil Nadu	C.S.I Synod	Madurai	Oct. 1994
12.	Regional Workshop on Environmental Stewardship – Kerala	C.S.I Synod	Melukavu	May 1995
13.	National Workshop on Environmental Education for Christian College Teachers	AIACHE, New Delhi	Bangalore	May 1995
14.	Regional Workshop on Environmental Stewardship – Karnataka	C.S.I Synod	Bangalore	May 1995
15.	Workshop on Environmental Education for School Children	C.S.I Synod	Karur	March 1996
16.	Workshop on Environmental Education for School Children	C.S.I Synod	Erode	March 1996
17.	Workshop on Environmental Education for School Children	C.S.I Synod	Vellakoil	March 1996
18.	Workshop on Environmental Education for Social Workers	World Vision of India, Madras	Trichy	March 1996
19.	One Day Seminar on Solid Waste Management in Tiruchirapalli city	EXNORA International	Trichy	June 1996
20.	Seminar on Urban Environment in Tiruchirapalli City	Madras Institute of Developmental Studies, Madras	Trichy	July 1996
21.	Environmental Awareness to N. S. S Volunteers	YWCA, Trichy	Trichy	May 1995
22.	Workshop on Environmental Stewardship	C.S.I Synod	Trichy	Aug. 1996
23.	Workshop on Environmental Stewardship for Pastors and Teachers – Kerala	C.S.I Synod	Calicut	May 1997
24.	Training Programme on Environment and Eco – Development for Agricultural Engineers	A.E.D Trichy	Trichy	Sep.1997
25.	Training Programme on Environment and Eco – Development for Agricultural Engineers	A.E.D Trichy	Trichy	Feb.1998
26.	Training Programme on Water Quality Management for Tamil Nadu Water and Drainage Board Engineers	TWAD, Trichy	Trichy	March 1998
27.	Workshop on Environmental Education and Awareness to Non – Governmental Organizations in Trichy, Perambalur, Pudukkottai, Thanjavur, and Karur Districts	Directorate of Environment, Govt. of Tamil Nadu	Trichy	Feb. 1999
28.	Training Programme on Environment and Eco – Development for Agricultural Engineers	A.E.D Trichy	Trichy	Feb. 2000

External Consultant for SGS

29.	Say No to Plastics – An Awareness Campaign	Holy Cross College	Trichy	Feb. 2004
30.	Biomedical Waste Management – Awareness Programme to College Students	Thanthai Hans Roever College	Perambalur	Feb. 2004
31.	Dimensions of Environmental change	Dhanalakshmi Sreenivasan College	Perambalur	Feb. 2005
32.	Workshop on Environmental Education for College Teachers	Bharathidasan University	Trichy	Jan. 2004
33.	National Workshop on Remote Sensing for Environmental Studies	ISRO, Bangalore	Trichy	Feb. 2005
8i.	Membership	1. Board of Studies in Environmental Studies, Bharathidasan University, Tiruchirappalli – 1992 – 1994; 1998 – 2000. 2. Board of Studied in Environmental Sciences, Thiruvalluvar University, Vellore, Tamil Nadu, 2006 - 2009		
8j.	Extracurricular Activities	1. Member in the following Committees of Bishop Heber College, Tiruchirappalli a. Campus Facility b. Students Services Centre c. Leadership Training d. Fine Arts e. Students Help Line 2. Staff Adviser – Part IV Environmental Awareness club – 2000 – 2005		
8k.	Visits to Foreign Countries			

	1. Attended an Inter-Continental youth conference at TAIZE, FRANCE, from 1st week of July to 2nd week of August 1987. 2. Visited various universities and organizations in Zeist of Rotterdam, Netherlands during the 3rd and 4th week of August 1987. 3. Visited Vatican City, Rome during the 1st week of September 1987 4. Attended the following Certificate courses at the Au Sable Institute of Environmental Studies, Mancelona Michigan, USA: June – August 1998. a. Conservation Biology b. Land Resources Studies, c. Restoration Ecology, d. Global and Sustainable Development 5. Visited the following Universities and States in USA during August 1998. a. Attended Watershed management conference at Traverse City, MI, USA b. Visited the Michigan University, Dearborn. c. Visited the Michigan University, Ann Arbor. d. Visited the Tuskegee University, and Tuskegee National Forest, Montgomery, Alabama. e. Visited Auburn University, Alabama. f. Attended the meeting of the Community based water monitoring groups and State regulatory personnel. g. Attended Alabama Water Watch Association – Watershed Programs meeting of the Alabama Department of Environment. h. Visited the Fishery Research Station of the Auburn University, Alabama. i. Attended the Meeting of the Living Water International group at the Auburn University, Alabama. j. Attended the Meeting of the International center for Aquaculture and Aquatic Environment, Auburn University, Alabama.
--	---

Alagappa Moses, A

Name Dr.G. Areendran, GIS Expert (External Expert)

Nationality Indian

Current Position Director, Remote sensing & GIS

Educational Qualifications:

- Ph.D –Wildlife Institute of India, Dehradun, Affiliated to Saurashtra university, Gujarat
- M S – Ecology & Environmental science –Pondicherry Univeristy
- B .Sc – Botany Honors- Madurai Kamraj Univeristy

PhD project

A Study on Vegetation Ecology in Pench Tiger Reserve with reference to Gaur (Bos gaurus) using Remote Sensing and GIS techniques.

Work Experience: Total of 15 years experience in the field of Nature conservation, resource management, using remote sensing and GIS techniques.

May 2001-till date

Joined the IGCNC section of WWF-India (www.wwfindia.org) and have been able to build up the GIS Lab by successful installation of various Remote Sensing and Geographical Information Systems (GIS software and related hardware). My work involves handling of Image Processing and GIS software's including ERDAS imagine, ArcGIS, Arcview.

Involved as Principal Investigator in the following scientific projects using a range of GIS and Remote Sensing techniques:

- Mapping and Data base development Project for Municipal Corporation of Delhi (MCD) by JBIC (Japan Bank for International Cooperation).
- Baseline Mapping of Valmiki Tiger Reserve in Bihar
- Mapping and Image Interpretation of North Bank Landscape with emphasis to Elephants and Rhino Conservation by the Asian Rhino and Elephant Action Strategy
- Creation of digital Thematic layers for Satpuda Maikal Tiger Landscape for Tiger Conservation Programme
- Change detection analysis for Pilibhit and Lakhimpur districts forest, Uttar Pradesh, India.
- Biodiversity mapping of southern portion of Eastern Ghats, India funded by US Centre, New Delhi.
- Delineation of changes in landcover/landuse practice in the fragile ecosystem of Ladakh, Trans- Himalayan zone, India.
- Identification of Rhododendron Habitat in the western Tawang, Arunachal Pradesh, eastern Himayalan zone, India
- Impacts of Man made fires on the cultivation patterns of Dang District in Gujarat India.
- Preparation of Asian Pacific Ecoregion Climate Vulnerability Map

- Creation of spatial database of Gangetic dolphin, fresh water dolphin & mapping of their population distribution
- Determine Landuse/landcover status and creation of digital database for the [Kaziranga-Karbianglong](#) landscape, Eastern Himalaya ecoregion, India
- Creation of spatial database and delineation of landuse/landcover practice and their changes for a period of ten years in the Kanha-Achnakmarg Landscape
- Mapping of River course Change and their impacts on the Dudhwa National Park
- Digitalization of protected area and reserve forest boundary, between Kanha-Pench corridor, India.
- Assessment of landuse- landcover status of Moyakatti Valley, Elephant corridor in the Nilgiri landscape.
- Mapping of vegetation & DEM Creation of Panna National Park (Madhya Pradesh) India
- Identification of distribution pattern of medicinal plants in Ladakh valley, India
- Mapping & identification of probable Red panda habitat in sikkim landscape, India.
- Creation of Spatial Database & Thematic layers for Terai-Arc Landscape.
- Landuse/landcover mapping of Terai-Arc landscape using Remote sensing techniques.
- Forest cover mapping and their changes in Satpuda Maikal Landscape, using remote sensing & GIS techniques.
- Identification of landcover changes in Central Hill Landscape (southern Eastern ghats) using Remote sensing & GIS techniques. Project Funded by American Science Centre, New Delhi.
- Mapping of pollution source of Hudhara drain in Amritsar District, Punjab, Using GIS techniques, an UNDP funded Project.
- Assessment of impact of nomadic population on the Tsombarari Wetlands using LISS IV MX High resolution multispectral images.
- Assessment of forest cover changes due to impact of mining activities in singrouli coalfields, using Remote sensing techniques.
- Glacial Change assessment of Gangotri glaciers, using advance remote sensing techniques.
- Chotasigri glacial changes assessment using advance remote sensing & GIS techniques.
- Forest cover assessment of area's nearby Palamau Tiger reserve, using Remote sensing technique. 2007
- Mapping of Residential welfare associations locations, NDPL districts and zonal office for Delhi region, using Satellite imagery and GIS , 2007
- Identification , demarcation, of CCA, forest resource, and forest density mapping of Tawang and west kameng district, Arunachal Pradesh, India. 2007
- Identification and mapping of built-up structure on the banks of River kosi , along the boundary of Corbett Tiger reserve, using high resolution satellite data IRS LISS IV MX. 2007
- Forest cover changes, village level mapping, drainage, and encroachment mapping of selected village in sundarban island using high resolution image and GIS. 2007
- Detection of minimal water column in river ganges (rishkesh to narora) during the peak summer, using multi dated remote sensing data techniques. 2007
- Detail mapping of two villages, using high resolution imagery LISS IV on the river Ganges basin around Rishikesh to Narora using mapping techniques. 2007.

- Mapping the impact of sea-level rise under the climate witness program of island in sundarbans using high resolution satellite images. 2008
- Mapping of extend of *Prosopis sps* in keoladeo National Park, Rajasthan, using high resolution imagery LISS IV data. 2008
- Assessing the encroachment status in Mousni Island of sundarbans using remote sensing and GIS techniques. 2008
- Mapping of critical elephant corridor of Chattisgarh forest divisions using toposheets and Remote sensing techniques. 2008
- Analysis of critical corridor for elephants in Tipi and Darrang area, using high resolution satellite imagery. 2008-09
- Assessment of High Altitude wetlands and its characteristics, using high resolution satellite imagery. 2009
- Vulnerability assessment for adaptation of climate change impact, in Uttarkhand and Uttarpradesh states of India, along the river Ganga, using GIS and Remote sensing techniques. 2008-09

Nov 1995- April 2001

Research fellow, Wildlife Institute of India, Dehradun in the project Ecology of Gaur (*Bos gaurus*) in Pench Tiger Reserve, Madhya Pradesh since November 1995. In this project I was involved in carrying out the vegetation mapping, Gaur habitat modelling, Fire risk model and resource distribution model using remote sensing and GIS as a tool.

As a subcomponent of the above I also worked as Resource person in the World Bank funded project titled, "Mapping of Protected Area and its surroundings in the Pench Tiger Reserve, Madhya Pradesh". In this project, I was involved in preparing the complete baseline Maps (Vegetation map, road network, waterhole & watchtowers distribution, infrastructure location, compartments, animal distribution, village locations) that had extensive usage of Remote Sensing and GIS techniques.

Sept 1994 to Oct 1995

Worked as a Junior Research Fellow at Salim Ali Centre for Ornithology and Natural History (SACON), in the project titled "Rapid Assessment of Biodiversity in Mehao Wildlife Sanctuary (Mishmi Hills) Arunachal Pradesh, using Remote Sensing and GIS.

Mar 1994-Aug 1994

Worked as Education Co-ordinator in the Madras Environmental Society (MES), Chennai. Under this conducted a series of lectures and awareness programmes for schools and colleges in Chennai and nearby places.

June 1993 to Dec 1993

Undergone training towards completion of the MS degree. This was at Institute of Remote Sensing, Anna University, Chennai. During this period I have been trained for visual and

Digital Interpretation of Remote sensing data and Geographic Information System (GIS) techniques.

Paper Presentations

- “Ecological Studies of Mehao Wildlife Sanctuary Arunachal Pradesh: Vegetation characterization through LANDSAT TM digital data analyses “ In: National Symposium on Remote Sensing of Environment with special emphasis on Green Revolution and Annual convention of Society of Remote Sensing presentation. (Nov 22-24 1995 at Punjab Agriculture University, Ludhiana)
- “Monospecific dominance of *Cleistanthus collinus* in Pench Tiger Reserve Madhya Pradesh” in the XII Annual Research Seminar at Wildlife Institute of India, Dehradun. *Sept 1998 at WII, Dehradun*
- Mapping of food plant species of gaur (*Bos gaurus*) in pench tiger reserve Madhya Pradesh in the XIII Annual Research Seminar. *Oct 1999 at WII, Dehradun*
- Developing a resource database for the management of pench tiger reserve Madhya Pradesh was presented in the XIV Annual Research Seminar. *Oct 2000 at WII, Dehradun*
- Second Prize for Poster presented at Asia Pacific ESRI regional meet, held in New Delhi (APUC 18-19 Jan, 2007):
 - GIS-Remote sensing application in biological diversity; environmental management
 - Vegetation types of the Southern Eastern Ghats: a remote sensing perspective.
- Presented Paper titled “Application of GIS and remote sensing techniques to assess the status of forest types of the Southern Eastern Ghats, India. In the 27th ESRI International User Conference, June 18-22, 2007, in San Diego , California . and Society for Conservation 10th Annual Conference. June 25-28, Monterey, California .
- Presented paper title “Rhododendron habitat assessment using remote sensing in western Arunachal Pradesh” in the Tenth international High Mountain Remote sensing and cartography confereence held at Kathmandu. Nepal. September 8-11.
- Presented paper titled “Invasion of *Prosopis juliflora* in Keoladeo Nationla Park, Bhartpur: A case study using Remote sensing and GIS “ in the National symposium on Prosopis: Ecological , Economic significance and Mangement challenges held at Bhuj, Gujarat, India. February 20-21.

Reports

- Mapping of protected area and their surroundings in Pench Tiger Reserve, Madhya Pradesh. (A consultancy task assignment report under the India Ecodevelopment project for Pench Tiger Reserve, Madhya Pradesh). October 2000

- Ecology of Gaur (*Bos gaurus*) in Pench Tiger Reserve submitted to Wildlife Institute of India (Project funded by Ministry of Environment and Forests, Govt of India) March 2002
- Mapping and Data base development for a project titled, “Location of Community Toilet Complexes under Yamuna Action Plan for JJ Slum Clusters located in NCT Delhi under the Municipal Corporation of Delhi (MCD). This project was supported by JBIC (Japan Bank for International Cooperation). June 2002
- Spatial data creation of Valmiki Tiger Reserve in Bihar. This study was the first of its kind in this thickly forested area and was undertaken under WWF-India’s Tiger Conservation Programme. September 2002
- To promote biodiversity conservation in the Eastern Ghats using Remote sensing & GIS , (Study funded by The embassy of the united states of America, Public affairs section, New Delhi), Report submitted to Public affairs office, United states of America Embassy, 2005.
- Assessment of forest cover changes due to impact of mining activities in singrouli coalfields, using Remote sensing techniques, submitted to Climate change division, WWF-India, 2006.
- Geospatial analysis of Glaciated environment in Gangotri, Technical report , submitted to Climate and energy division, WWF-India, 2008.
- Temporal change analysis of vegetation (with special reference to *Prosopis juliflora*) in Keoladeo National park, Bharatpur, Report submitted to Rajasthan forest Department, 2008.
- Technical report on Remote sensing and GIS work in Satpuda Maikkal Landscape, submitted to WWF-India, Species division. 2009.
- Technical report on Remote sensing and GIS work in Terai-Arc Landscape, submitted to WWF-India, Species division. 2009.

Research Publications

- Note on Sighting of Takin in Mehao Wildlife Sanctuary, Arunachal Pradesh in Journal of Bombay Natural History Society 93 (3): (1996) Page 585.
- Comments on the nesting habits of Jungle Bush Quail. WPA News - Asia.
- Predation by Tiger *Panthera tigris* Linn.on (*Bos gaurus* H.Smith) in Pench Tiger Reserve, Madhya Pradesh. J. Bombay. Nat. Hist. Soc. 98(3) page 432.

- Debarking of teak (*Tectona grandis* Linn. F.) by Gaur (*Bos gaurus* H.Smith) during summer in Pench Tiger Reserve, Madhya Pradesh. (India) J. Bombay. Nat. Hist. Soc. 99 (2) page 238.
- A Preliminary Checklist of Snakes of Pench Tiger Reserve, Madhya Pradesh: Cobra Vol 40, June 2000.
- Birds of Pench Tiger Reserve, Madhya Pradesh, Central India: OBC Bulletin.
- Article on Road Kills on NH-7 along Pench Tiger Reserve: included in book titled Roads, Sensitive Habitats and Wildlife—an Environmental guideline for India and South Asia. Published by Wildlife Institute of India (WII) in collaboration with Canadian Environmental Collaborative Ltd (CEC). ISBN: 81-8544966-10-2.
- Article on Gaur (*Bos Gaurus*) in the book on Mammals of South Asia by Dr A.J.T Johnsingh (under preparation) .
- Occurrence of wolf (*canis lupus pallipes*) in Pench Tiger Reserve, Madhya Pradesh. J. Bombay. Nat. Hist. Soc. (Published).
- Article on “Indian Bison or Gaur (*Bos gaurus*)” in Ungulates of India, ENVIS publication, Wildlife Institute of India: Vol. 07, (1), 2004. ISSN 0972-088X.
- Article on “Himalayas Retreat of the glaciers” in Survey of the Environment 2007, Published by The Hindu.
- Published a paper titled “Vegetation types of the endangered Eastern Ghata mountain ecosystem- A Remote sensing Perspective” in the proceedings of Tenth international High Mountain Remote sensing and cartography conferenece held at Kathmandu. Nepal. September 8-11, 2008.
- Published a paper titled “Invasion of *Prosopis juliflora* in Keoladeo National Park, Bharatpur: A case study using remote sensing and GIS” in the proceedings of the National symposium on *Prosopis*: Ecological, Economic significance and management challenges, held Bhuj, Gujarat, India. February 20-21, 2009.

Books

- Directory of Environmental NGO’s in India, Published by ENVIS Centre WWF-India, 2005. ISBN: 81-904053-2-2
- Vegetation types of the Southern Eastern Ghats – A Remote Sensing perspective. 2006. ISBN: 81-904053-0-6
- Environment in the Indian parliament: An analysis. 2006. ISBN: 81-904053-3-0, ISBN: 81-904053-4-9, ISBN: 81-904053-5-7, ISBN: 81-904053-6-5, ISBN: 81-904053-7-3 , ISBN: 81-904053-8-1.

- Chapter to the book on *Global Change and Sustainable Development: Asia-Pacific Perspectives* to be published by Cambridge University Press in 2008.

Seminars, Training & Workshops

- Completed training on **Working with ArcGIS Spatial Analyst & Advanced Analysis with ArcGIS, Data Production and Editing Techniques, Introduction to the Multiuser Geodatabase** from Environmental Systems Research Institute – **Redlands, California, USA. from 4th june to 15th june 2007.**
- Completed a training in “Using High resolution Images and creation of DEM “conducted by NRSA (National Remote Agency, Hyderabad, February, 2005.
- Completed a course in Above- Ground Biodiversity Assessment, organised by WWF-India and Centre for Biodiversity Management, Queensland, Australia. (Dec 2003, Guwahati, India).
- Visiting Researcher at Conservation GIS Lab, **Smithsonian Institution, Front Royal, Virginia, USA - Mar 03 to May 03.**
- ISPRS TC- VII International Symposium on Resource and Environmental Monitoring and ISRS Annual Convention. Dec 3-6,, 2002, Hyderabad .
- 12th Users Interaction Meet on Application of Remote Sensing and GIS held by NRSA. Jan 30-31st 2002, Hyderabad.
- ARCGIS Certificate program by ESRI India. Aug 5- 9, 2002.
- ERDAS Imagine Certificate program by ESRI India. Dec 20-27, 2001.
- Tutorials on Remote Sensing and GIS (CARG 2002) at Goa State Remote Sensing Centre. Aug 19-22,2002. Organized by Indian Society of Remote Sensing, Space Application Centre (ISRO) and Indian Society Of Geomatics.
- "Wild animals Tranquilization Technique", organised by Maharashtra forest Department at melghat Tiger Reserve, Maharastra. 14th to 15th May, 1996.

Guidance/Supervision

I have supervised and provided guidance for completion of the following academic accomplishments:

- **Fourteen post graduate** students have completed their master’s thesis work. The topics were related to Natural Resource management.

- **Six graduate** students from School of Planning, New Delhi, have completed their summer training projects under my supervision.
- **Three post graduate** students from Guru Govind Singh Indraprastha University, New Delhi have completed their summer training under my guidance.
- **One post graduate** student from HND Garwal University, worked on summer project related to GIS software development.
- **One post graduate** student from Aligarh Muslim University has completed her thesis work related to NGO sector in India.
- **Two PGDM students of IIFM** completed training under my guidance for their summer projects.

Additional Expertise

- Fluency in English, Hindi and Tamil
- Excellence in wildlife photography and have won several awards.
- Excellent computer skills

Name: **Mr. Vinod Gautam**

Profession: **Risk Assessment Expert -External**

Nationality: Indian

Sex: Male

Membership of Professional Societies:

1. Associate Member of The Institution of Engineers (India)
2. Affiliated as **Chartered Engineer** with “The Institution of Engineers (India)”

Key Qualification

Has more than 15 years of extensive experience in the field of Initial Environmental Examination (IEE), Environmental Screening (ES), Environment Impact Assessment (EIA), Environmental Management Plan (EMP) for chemical process plants, thermal power plants, cement plant, mines, hazardous waste disposal site project, cross country petroleum pipelines, off shore and onshore drilling and exploration projects, infrastructure & development projects including road and highways, new construction, township projects, etc..

In past years, executed 50 Environmental Impact Assessment and Environmental Management Plan studies as per guidelines of Ministry of Environment and Forests (MoEF), Government of India, Asian Development Bank (ADB) and CEDA with total responsibility. He has expertise in Air pollution dispersion modeling using USEPA software ISCST-3 for point emission source for process industries and CALINE software for modeling of vehicular emissions on highways.

Educational Qualification:

- AMIE (**Equivalent to Bachelor Degree in Engineering**) in Chemical Engineering from “**The Institution of Engineers (India)**”, Calcutta, 1993.
- On Year Diploma in **Industrial Safety** from Annamalai University 2000.

Other Specialised Course:

Advanced Environmental Auditor for ISO 14001 **Environmental Management System (EMS)** approved by **Institute of Environmental Management and Assessment (IEMA)**, U.K.

Advance OHSAS Auditor For ISO 18001 Approved by NRBPT (GOI)

PROFESSIONAL TRAINING

- Training on **Dispersion Modeling and Impact Calculations (for fire and toxic release)**, Regional Labour Institute (Govt. of India), Kanpur, U.P., 1999
- Training on **Personal Sea Survival** (for offshore studies) from B.P. Marine Academy, Mumbai, 2000
- Specialized Training on **Hazardous Waste Management** from National Safety Council (in the Association of Ministry of Environment & Forests), Mumbai, 2001

PROFESSIONAL EXPERIENCE

April 2002 onwards

Working as Independent Environmental and Safety Consultant since last four years.

Intensively engaged in environmental impact assessment and environmental management plan, air pollution dispersion modeling, risk assessment & safety studies and hazardous waste management for different kind of projects including chemical process industries, oil and gas sector, cement plant, mines, construction project, highways, etc.

Also worked on proposed inventorisation and categorization of Hazardous waste including EIA/EMP for TSDF project for hazardous waste management covering more than 1000 industries in entire Haryana State. The project was funded by CIDA.

Also involved in solid waste management project for city and township projects. The few projects were funded by CIDA.

2001 – 2002

Consultant with KLG-TNO Safety Technology Ltd., New Delhi (Netherlands Based Consultancy Organization)

Job responsibilities include environmental impact assessment studies and risk assessment specially for chemical process industries, up stream and down stream petroleum sectors industries, industrial process review for quantification of various pollution streams, identification of adverse impacts and to prepare environmental management plan.

2000 – 2001

Consultant with ERM India Private Limited, New Delhi (UK Based Environmental Consultancy Organization)

Job responsibilities include environmental impact assessment studies especially for oil exploration projects and chemical process industries, Air pollution dispersion modeling and process review for quantification of various pollution streams, identification of adverse impacts and to preparation environmental management plan.

1996 – 2000

Manager (Environment Management) with Envirotech Consultants Pvt. Ltd., New Delhi

Job responsibilities include environmental impact assessment studies especially for thermal power plant, chemical process industries, bulk drug plant, cement plant, petroleum products pipelines, oil exploration project and chemical process industries. Critical industrial process review, energy and mass balance for quantification of various pollution streams were also part most of the assignments.

1992 - 1996

Environmental Engineer with Envirotech Consultants Pvt. Ltd., New Delhi.

Job responsibilities include field data collection, industrial site visits, environmental impact assessment studies especially for thermal power plant, chemical process industries, bulk drug plant, cement plant, petroleum products pipelines, oil exploration projects and chemical process industries, critical industrial process review, energy and mass balance for quantification of various pollution streams, etc. Headed large number of stack emission monitoring for various pollutants for inventorisation and quantification of emissions to design air pollution control equipment.

I. Professional Experience for Environmental and Safety Studies

A. Hydro-electric Project

- EIA studies for Bina Irrigation and Multi Purpose Project (on going)
- EIA studies for Kerang Hydro Project, Kimachal Prad (2006)

B. Oil and Gas Sector Projects

- EIA studies for City Gas Distribution (Natural Gas) for Adani Energy Ltd, Noida, Team Leader.
- EIA studies for City Gas Distribution (Natural Gas) for Adani Energy Ltd, Khurja, Team Leader.
- EIA studies for City Gas Distribution (Natural Gas) for Adani Energy Ltd, Faridanbad, Team Leader.
- Risk Assessment studies for Exploratory Drilling for Oil & Gas in Tamilnadu for Niko Resources (NELPV) Ltd. Team Leader.
- EIA/EMP and Risk Assessment for MRPL Depot in Karnataka, Kerala and Tamilnadu
- Rapid EIA for Indian Oil Corporation Ltd. (IOCL) Marketing Terminal at Paradeep (2006), Team Leader.
- EIA studies for Extension of Kurkshetra to Nazibabad Petroleum Product Pipeline, Indian Oil Corporation Ltd., 2002 Team Leader,
- Rapid EIA Studies for Ravva Satellite Gas Development Projects. Godavari Basin at East Coast of Andhra Pradesh. 2000.Consultant.
- Rapid EIA Studies for Tullow India Operations Ltd. (Offshore Drilling Project) Gulf of Katuch (Gujarat State). 2000. Team Leader. Supervision of Ambient air quality (2000)
- EIA of Mathura –Tundla Petroleum Product Feeder Pipeline, Indian Oil Corporation Ltd. 1999. Team Leader.
- EIA of Sonipat – Meerut Petroleum Product Branch Pipeline, Indian Oil Corporation Ltd. 1999. Team Leader.
- EIA of Kurukshetra – Saharanpur Petroleum Product Branch Pipeline, Indian Oil Corporation Ltd. 1999. Team Leader

- HAZOP and Dispersion modelling of Chittorgarh Terminal (Raj) , 2007
- Risk Assessment for Paradeep Oil Terminal, IOCL, 2006
- Risk Assessment for Salaya Mathura Pipeline (1100 km), IOCL, 2006
- Team Leader and Safety Auditor for Compliance Safety Audit for Karaikal Asset of ONGC (Production Installations, Drilling Rigs, Work over Rigs and Connected Wells) (2004).
- Prepared check lists and wrote safety Audit reports of Various Assets for ONGC Onshore Installations (2004)
- Team Leader and Safety Auditor for Compliance Safety Audit for Rajahmundry Asset of ONGC (production installations, drilling rigs, work over rigs and connected wells) (2004).
- Safety Audit for Lubrizol India Pvt. Ltd., Turbhe, Mumbai, 2003
- Risk Assessment and Disaster Management Plan for Palam Dept.(IOCL), New Delhi (2003)
- Safety Audit for LPG Import and Export facilities of Indian Oil Patrons Pvt. Ltd., Haldia, 2002.
- Rapid EIA Studies for Salaya – Mathura Crude Oil Pipeline (SMPL),(2001) Viramgam (Gujarat) to Panipat Haryana .
- Rapid EIA for Petroleum Product Depot of IBP Co. Ltd. Rewari (Raj), 1997. Project Leader.

C. Hazardous Waste Management

- Inventorisation & Categorisation, Environmental Impact Assessment for Hazardous Waste Management Project in Haryana (2003).

D. Solid Waste Management

- Inventorisation and categorisation for solid waste for preparation of solid waste management plan for group housing project, township and metro cities.
- Environmental Impact Assessment for Municipal Waste Management Project Vadodara (2003).

E. Chemical Process Industries

- Safety Audit for IFFCO Kandla, 2005
- Rapid EIA of expansion project of Narmada Chemetur Pvt. Ltd. (Chemical Plant) at Baruch (2005),
- Rapid EIA for India Glycol Ltd., Kashipur, U.P., 1993.
- Rapid EIA for HPM Industries Ltd., Alwar, 1993.
- Comprehensive Safety Audit for Chemfeb Alkalies Ltd, Pondicherry, 2004

F. Bulk Drugs Plant

- Rapid EIA for Vitalife Laboratories, Gurgaon. 2000. Team leader.
- Risk Assessment, Safety Report for Vitalife Laboratories. Gurgaon, Haryana. 2000.
- Safety Audit for Lupin Laboratories Ltd. Mandi Deep, 1999
- Rapid EIA for Lupin Laboratories Ltd., Mandideep, M.P., 1999. Team Leader.
- Comprehensive EIA of Ranbaxy Laboratories Ltd. For Taunsa and Mohali plants, 1998. Project Manager.
- Rapid EIA for Lupin Laboratories Ltd., Mandideep, M.P., 1996. Team Leader.
- Rapid EIA for Lupin Laboratories Ltd., Mandideep, M.P., 1994. Team Leader.

G. Cement and Mines

- Risk Assessment for Iswar Cement, AP, 2006
- Rapid EIA of expansion project of Cement plant and Limestone Mines of Khyber Cements Pvt Ltd. Jammu & Kashmir (2006), Team Leader
- Rapid EIA of expansion project of Cement plant, Lime stone mines and captive power plant of Binani Cement Ltd. (2003), Team Leader.
- EIA of Dalli Rjahara Iron Ore Mine. Dalli Rajahara, Durg, M.P. 1996, Team Member.
- Disaster Management Plan for Cement Complex (Binani Cement Ltd). 2002

H. Thermal Power Plant

- EIA/EMP for NTPC, Sipat Super Thermal Power Project (3000 MW). Sipat, Bilaspur, Chhatisgarh, 1998, Engineer-in-charge.
- Rapid EIA for Electric Supply Co. (India) Ltd. Ghaziabad, U.P. 1997. Project Leader.
- Risk Assessment for NTPC Thermal Power Plant (NTPC) in AP (Sub Contract) (2004).
- Risk Assessment and Safety Report for GFL Power Ltd. Mugal Sarai, Varanasi, 1997.
- Risk Assessment and DMP for Electric Supply Co. (India) Ltd. 1996

I. Road and Highways

- Feasibility and Detailed Project Report for 4/6 laning of Mangalor -Kanoor Section of NH-17 in State of Karnataka and Kerala.
- Feasibility and Detailed Project Report for 4/6 laning of Jammu -Udhampur Section of NH-1A in State of J&K.
- EIA/EMP for Feasibility and Detailed Project Report for 4/6 laning of Khalghat – MP / Maharashtra Border Section of NH-3 in State of Madhya Pradesh.
- EIA/EMP for Feasibility and Detailed Project Report for 4/6 laning of Hyderabad-Vijayawada Section (km 160.000 to km 221.400) and Vijayawada- Machhalipatnam Section (km 0.000 to km 64.000) of NH 9.
- EIA/EMP for Feasibility and Detailed Project Report for 4/6 laning of Jorhat - Dibrugarh Section of NH-37 in State of Assam under NHDP Phase III.
- EIA/EMP for Preparation of Detailed Project Report for four laning of Khagaria to Purnia Stretch (km 270.000 to km 410.000) of NH-31 in Bihar.
- Environmental & Social Screening, Environmental Impact Assessment (EIA), Resettlement Action Plan (RAP) for Four Laning of Maibong - Lumding Road NH-54 E (km 140.000– km 40.00).
- Environmental & Social Screening, Environmental Impact Assessment (EIA), Resettlement Action Plan (RAP) for Construction of Agra Bypass Road.
- Environmental & Social Screening, Environmental Impact Assessment (EIA), Resettlement Action Plan (RAP) for Strengthening/updating of Jalandhar -Pathankot NH-1A (km 26.00 – km 110.00), 2003.
- Environmental & Social Screening, Environmental Impact Assessment (EIA), Resettlement Action Plan (RAP) for Strengthening/updating of Nagpur -Dhule NH-6 (km9.20 – km 100.00), 2003.

J. Air Pollution Dispersion Modeling

- Comprehensive Air Pollution Dispersion Modeling for Hind Lever Chemical Ltd. Haldia, 2001.Project Manager

K. New Construction and Township Projects

- EIA of Stanza Heights Group Housing Project, Panipat (2008), Team Leader

- EIA for Flatted Building Project, National Small Industries Corporation NISC, New Delhi (2008), Team Leader
- EIA of Devine City Township Project, Ganaur, Sonipat (2008), Team Leader
- EIA of Mall and Multiplex at Kundli Sonipat (2007), Team Leader
- EIA of Mall and Hotel at Ahmedabad (2006), Team Leader
- EIA of Parker Residency: Residential Buildings Project at Sonipat (2006), Team Leader
- EIA of Devine Paradise Group Housing Project, Ganaur, Sonipat (2007), Team Leader
- EIA of Max Heights: Residential Buildings Project at Sonipat (2006), Team Leader
- EIA of Vrinda City: Residential Buildings Project at Greater Noida (2006), Team Leader
- EIA for Group Housing Project: GurgaonOne” at Gurgaon (2006), Team Leader
- Rapid EIA for three High Rise Buildings at Mumbai (2005), Team Leader
- EIA for Maitreya Buddha 500 feet Bronze statue Project, Bodgaya, Gaya, (2000)Bihar, Team Leader.

L. Major Accident Hazards

- District Wise Hazard Analysis of 31 Major Accident Hazard Industries (MAH) in Tiruvallur District in Tamilnadu. (Ministry of Environment and Forest, MoEF) project (2004)
- Hazard Analysis and Risk Assessment for Maximum Accident Hazard (MAH) industries in Vishakhapattanam District in A.P. awarded by Ministry of Environment & Forests (MOEF), Govt. of India, 2001

M. Others

- Rapid EIA of Existing Talbros Automotive Components Ltd at Faridabad (Haryana) (2006), Team Leader.
- Comprehensive Safety Audit for TISCO Plant Tata Nagar , 2005
- Rapid EIA of Electroplating and Painting Project Neel Metals Pvt. Ltd. at Haridwar (2004), Team Leader.
- HAZOP Studies of Hankel Teroson India Pvt. Ltd., 2004
- Rapid EIA for Ranjev Alloys Ltd. Ghaziabad, 1995, Project Leader.

NAME : Mr. S Suresh Kumar
NATIONALITY : Indian
SEX : Male
PROFESSION : Testing Expert
DESIGNATION : Manager (Technical) Environment

- ***Undergone training by German Experts (GTZ) and Indian Experts on Ambient & Work Environment Air, Stack Emission monitoring, Water and Noise Pollution Monitoring and analysis for about 5 years in NPC.***
- Marketing, obtaining and providing consultancy and training services to small, medium and large enterprises, Industry associations, Government and International agencies.
- Specialized in Air Pollution Monitoring & Analysis (AAQ Monitoring, Stack Emission Monitoring, Particle Size Distribution analysis and Noise Monitoring) and Water & Wastewater monitoring and analysis.
- Actively involved in various training programmes undertaken by NPC:
- Actively involved and handled many Laboratory and Field Monitoring Techniques sessions in NPC training programmes in Environmental discipline.
- Prepared a course module for Air Pollution Monitoring and Techniques.
- Involved and conducted the study of EIA, ECO city, Municipal Solid Waste Management and Hazardous Waste Management.
- Experienced in Principle, Operation and Maintenance of Air Pollution Control Equipments like ESP, FGD, Wet Scrubbers, Bag Filters, Centrifugal Fans and Fume Extraction and Ventilation Systems.
- Developed method for Sampling and Analysis of VOC, PAH, PCB, Pesticides, Nicotine in Air samples.
- Developed methods for analysis of Acrylamide in water.
- Treatability studies in both dose optimization and Physio-Chemical treatment

SUMMARY OF RELEVANT WORK EXPERIENCE

Environmental Analyst NATIONAL PRODUCTIVITY COUNCIL, CHENNAI (JUNE, 1998 – JAN 2007) & SGS India Pvt Ltd., Chennai from 2007 onwards

- *Environmental Laboratory - Water / Waste water / Solid / Hazardous waste analysis:*
 - The Environmental Laboratory in NPC in collaboration with GTZ, Germany, is fully equipped with microprocessor based analytical instruments.
 - Developed a lot methods of sampling and analysis in water and wastewater, soil and sludges (Hazardous & solid waste)
 - Conducted various Waste minimisation study at different sectors
- *Consultancy projects & Monitoring:*
 - *Air Pollution Monitoring & Analysis*

- *Stack Emission Monitoring*
- *Ambient air and Work Environment Quality Monitoring*
- *Noise Level Monitoring*
- *Particle Size Distribution Analysis etc.,*

• Waste Water Treatment

Performance Evaluation and Upgradation studies of Effluent Treatment Plant Monitoring and Analysis	SOME OF OUR CLIENTS SERVED
	Mohan Breweries Ltd., Bangalore
	GMR Power Corporation Ltd., Chennai
	Tuticorin Alkalies and Chemicals Ltd., Tuticorin
	National Thermal Power Corporation, Rihand
	Ashok Leyland Ltd., Chennai
	Aavin Dairy, Chennai
	M.A.Khizar Hussain & Sons, Mallack Tannery
	KCDC., Bangalore
	Rabia Leathers Ltd., Chennai
	M A Khizar Hussain & Sons., Ranipet
	Amararaja Batteries Ltd., Tirupathi

• Air Pollution Monitoring & Control

Air Pollution Monitoring / Design of Control Systems and Performance Evaluation of Air Pollution Control Equipments	SOME OF OUR CLIENTS SERVED
	○ GMR Power Corporation, (Stack Emission Monitoring)
	○ Ashok Leyland Ltd., (Stack Emission, Ambient Air Quality & Noise Monitoring and analysis)
	○ Sakthi Foundry (Stack Emission and AAQ monitoring)
	○ NTPC, Korba (Draft and Flow system study)
	○ NTPC, Rihand (ESP Efficiency Study)
	○ NTPC, Vijayawada (ESP Efficiency Study)
	○ BHEL, Tiruchy (Fume Extraction & Ventilation System)
	○ KCP, Chennai (AAQ and Stack Emission Monitoring)
	○ Namakkal Municipality (EIA Study)
	○ CETP & ETP Association, Karur (EIA study)
	○ Energy Audit Study for all the municipalities all over Tamil Nadu
	○ Cashew Nut processing Industries (Tamil Nadu, Andhra Pradesh, Kerala) (Stack Emission, AAQ monitoring and Waste water samples analysis)
	○ ACE Glass containers, Pondy (Stack Emission Monitoring)
	○ Saint Gobain Glass India Ltd., (Stack Emission Monitoring, ESP & FGD Efficiency Study)
	○ Vijayawada Thermal power Station (Particle Size Distribution analysis)
	○ TERI project at Bangalore Brick Kilns (Particle Size Distribution analysis)

	○ ST – CMS Electric Co., Ltd, (Air Quality Survey) ○ MK Electric India Ltd., (AAQ and Stack Emission Monitoring) ○ Vizag Steel Plant (Stack Emission Monitoring and Particle Size Distribution Analysis) ○ M A Khizar Hussain & Sons (AAQ, Stack Emission and Noise Monitoring) ○ Covansys India Ltd., (Work Environment Monitoring)
--	--

• EIA & Audit Study

Environmental Audit and Rapid EIA study for Plant Expansion	CLIENTS SERVED
	Namakal Municipality, Namakkal
	HBL, Visakhapatnam
	Karur CETP's and ETP's Association, Karur

• Industrial Hazardous Waste & Municipal Solid Waste Management

	Clients
Development of Solid Waste Management System	❑ Karur CETPs and ETPs Federation (2004-05)
EIA study for Site Assessment and Selection for Landfill for Disposal of Industrial Hazardous Waste / Municipal Solid Waste	❑ Karur CETPs and ETPs Federation (2004-05)

• Environment Management

Consultancy & Training for Implementing Management Systems for ISO Certification	ISO – 14001	CLIENTS SERVED
		GMR Power Corporation Pvt. Limited, Chennai
		MK Electric India Limited, Chennai
		ST-CMS Energy Pvt Ltd, Vridhachalam
		3 Dairies of Aavin (Tamilnadu Milk Producer's Cooperative Federation)

• Other Environment Management Projects

	Client
Study and Preparation of Comprehensive Industry Document (COINDS) for Cashew nut Processing Sector in India	Central Pollution Control Board, New Delhi

Study and Preparation of Comprehensive Industry Document (COINDS) for glass sector	Central Pollution Control Board, New Delhi
Study and Preparation of Comprehensive Industry Document (COINDS) for Breweries	Central Pollution Control Board, New Delhi

- Training

NATIONAL LEVEL INTER-COMPANY TRAINING PROGRAMMES COORDINATED (FACULTY)

Participants: **Imparted training to more than 500 Senior and medium level executives of various public and private organizations, entrepreneurs of SMEs, CPCB and State PCB officials.**

- ❑ How to make best use of Effluent Treatment Plant
- ❑ Environmental Audit and Cleaner Production Audit
- ❑ Municipal Solid Waste Management
- ❑ EMS / ISO –14000 Implementation & Internal Auditing
- ❑ Air Pollution Monitoring & Control
- ❑ Noise Monitoring and Control
- ❑ Stack Emission Monitoring and Dispersion Modelling
- ❑ Hazardous Waste Incineration – Tail Gas Treatment & Management
- ❑ Errors and Approximation in Air Pollution Monitoring and Analysis

- Professional Training Undergone

- Advanced training programme on “**Air Pollution Control Technologies**” sponsored by CPCB, New Delhi
- Advanced training programme on “**Source Sampling Techniques**” sponsored by SEPNET, New Delhi
- Advanced Training programme on “**Pollution Monitoring, Assessment and Control**” sponsored by CPCB, New Delhi
- Advanced training programme on “**Municipal Solid Waste Management in Urban Areas**”, sponsored by CPCB, New Delhi
- Advanced training programme on “**Clean Technology and Pollution Prevention in Air Pollution Control**” sponsored by CPCB, New Delhi
- Advanced training programme on “**Latest Air Pollution Control Technologies & Its Performance Evaluation**” sponsored by CPCB, New Delhi