

**BIODATA OF PROFESSOR K K DAS
PRINCIPAL, UNIVERSITY INSTITUTE OF TECHNOLOGY**

1. Name in full : : KAJAL KANTI DAS
2. Date of Birth : : December 31st, 1946
3. Nationality : : Indian
4. Residence (Kolkata) : : 3, Nandan Palli, Barisha, Kolkata - 700 008
Tel: 033 24941327/09339721632
E-mail: kk_das1327@dataone.in
kajalkanti_das@yahoo.co.in
5. Whether belonging to SC/ST : : No
6. Educational Qualification : :

Name of the University or equivalent Institution	Degree and Academic Distinction obtained	Year	Course of Study
I. I. T. - Kharagpur	M. Tech (High Grades)	1970	Chemical Engineering (Petroleum Refinery Engg. & Petrochem)
Jadavpur University, Calcutta - 700 032	B.Ch.E (1 st Class)	1968	Chemical Engineering
West Bengal Board of Secondary Education	H. S. (1 st Division)	1963	Science Group

7. Employment Record (in chronological order starting with present post, list in reverse):

Name and Address of employer	Designation of Post held	Period of Service	Nature of Work
University Institute of Technology, The University of Burdwan, Burdwan 713 104	Principal	January 2007 to date	Providing academic, administrative and comprehensive leadership to the institute under the direct supervision of the Vice Chancellor
Murshidabad College of Engineering & Technology Berhampore 742102 Dist.: Murshidabad W.Bengal	Principal	August 2006 to Dec. 2006	Providing leadership in teaching, administration and academic development.
Pollution Analyzer Consultant 10, Sourin Roy Road, Behala, Kolkata - 700 034	Director	1997 to 2006	Consultancy services in environmental engineering, environmental management of industrial projects, EIA, EA studies.
The Director, N. E. E. R. I.	Scientist Gr.IV (3)	1976 to 1997	Design, engineering project development, feasibility studies,

Nehru Marg, Nagpur - 440 020			consultancy, R & D in the field of environmental engineering, environmental impact assessment, air quality monitoring etc.
The A.P.V. Engineering Co. Ltd. Kolkata - 700 028	Senior Engineer	1972 to 1976	Design, engineering, sales and consultancy services for fabrication of plant & equipment of special nature such as heat exchangers, evaporators, distillation and stripping columns etc.

8. Information related to knowledge and experience about environmental protection :

The candidate successfully studied the existing and future environmental issues emanating from developmental objectives and policies in various industries in India and abroad and suggested management plans with focus on environmentally sound technology to ensure discernible positive movement towards the overall aspirational goal of sustainable development. Further, the candidate has an unique combination of experiences in plant operation, equipment design, R & D and consultancy services, Environmental management in present day context warrants a dynamic policy framework in which the time lag between problem awareness, technological solution and remedial action is minimised.

The following is a partial list of important consulting and R & D projects completed in recent years :

- 8.1 Impact of ocean going vessels and related port activities on the environment of the riverine harbour at Calcutta and Haldia sponsored by the Calcutta Port Trust (CPT) was assessed by a multi-disciplinary team lead by the incumbent. Mitigation measures against adverse impacts provided to CPT were accepted for implementation.
- 8.2 Assessment and inventorising the wastewater outfalls on both banks of Hooghly estuary between Kalyani and Birlapur (100 km) to provide water quality and hydrological data in respect of these point sources have been completed. Based on the studies a management plan has been worked out by CMDA.
- 8.3 Studies on recycle and reuse of community wastewater for aquaculture in sewage fed fish ponds of CPT were completed. Based on the studies a management plan was recommended which the Mudiali Fisherman's Co-operative Society Limited, who runs the fishery as a self help enterprise, implemented subsequently

- 8.4 Under national water technology mission project on rural water supply and related water management, water quality assessment, technology transfer in respect of iron removal and providing training in these aspects were undertaken. Site specific data for Rohtas in Bihar, Bankura in West Bengal and West Khasi district of Meghalaya were carried out.
- 8.5 Bio-technological routes for treatment of rubber chemical wastewater at laboratory scale activated sludge plant was studied to obtain design parameters based on which treatment plant was designed and built by the sponsor (ICI).
- 8.6 A project on “Air Quality Studies and Protection of Monument, Victoria Memorial Hall, Calcutta” was carried out first time in India. Mechanism of alteration due to physico-chemical, bacteriological and biological precursors was investigated based on which a management plan has been drawn up for implementation by the V.M. Hall Trust. The work was covered and reported by national press.
- 8.7 Training camps on iron removal at Agartala and Tangla, Assam were organised.
- 8.8 A compact low cost effluent treatment plant was designed and commissioned for treatment of process house wastewater discharged from M/s. Reliance Jute Industries Limited, Kankinara. Effluent from Jute bleaching and dyeing sections is treated by physico-chemical method followed by extended aeration activated sludge process.
- 8.9 An innovative low cost package effluent treatment plant based on batch activated sludge process with air lift pump device for sludge recycle and wasting has been developed and successfully commissioned to the satisfaction of the pollution control authorities for Albert David Limited. This unique design is ideally suited for use of the small scale unit.
- 8.10 A low cost flue gas cleaning plant has been designed for treating the sulphuric acid and TiO_2 fumes laden calciner off gases by two stage venturi scrubbing system. The waste pigment and acid get recycled to the process.
- 8.11 An innovative low cost gas cleaning plant to treat the violent acid laden steam discharges from TiO_2 digester was designed and installed. The recovered acid is recycled.
- 8.12 A comprehensive treatment plant was designed, executed and commissioned for a passenger car manufacturer (Hindustan Motors Limited). About 300 KL/hr. of industrial effluent is treated for removal of

floating and emulsified oil discharged from their various units. The plant was installed at a cost of about 1,00,00,000/-.

- 8.13 An industrial effluent treatment plant was designed, erected, commissioned for a duplicating machine manufacturer (Gestetner India Limited) at Calcutta. The plant mainly treats their electroplating wastewater containing toxic substances namely cyanide, hexavalent chromium and nickel to meet the tolerance limits for discharge to inland surface water as prescribed by West Bengal Pollution Control Board.
- 8.14 A low cost effluent treatment plant was designed, executed and commissioned for a soft drink plant (Thums Up) at Dankuni based on aerated lagoon followed by polishing cum fish pond to provide a final effluent meeting the tolerance limits prescribed by West Bengal Pollution Control Board. The company received the statutory consent from the board on the basis of the performance of the Effluent Treatment Plant.
- 8.15 A package type activated sludge plant was designed and installed for treating the canteen effluent of GEC Alsthom Limited, AEI Works, Calcutta. The activated sludge plant works on screw jet aerator manufactured under license from NEERI/CSIR.

Additional Training in India and/or abroad

- a) Advanced course on computerised water resources management, Jadavpur University, 1991 (duration three months)
- b) Advanced Training in pollution abatement at IVL Research Institute, Stockholm, Sweden, 1980 (duration three months)
- c) Successfully completed ISO 14001 Lead Auditor's course Provided by BSI.

Special Assignments (International Organisations, Overseas and special national assignments)

- a) Awarded a fellowship by F.A.O. of United Nations tenable at the Swedish Water & Air Pollution Research Institute, Stockholm, Sweden on "Evaluation of effluents and new pollution abatement technology in the pulp and paper industry"
- b) The Hon'ble Governor of West Bengal vide Resolution No.ENV/1422/IP-41/91:pt/1(8) dtd. 27.11.91 appointed the candidate as a member of a

technical committee to inquire into the incidence of gas leakage from the factory of M/s. Vidula Chemicals & Manufacturing Industries Limited

- c) Served on the panel for inspection of the pollution control measures implemented at Rourkela Steel Plant in July, 1993 under orders of the Hon'ble Supreme Court to the Director, NEERI, Nagpur.
 - d) Visiting faculty for M.Phil (Env. Science) classes at Jadavpur University, Calcutta.
 - e) Visiting faculty for M.Tech (Bio-technology) classes at Jadavpur University, Calcutta.
 - f) Visiting faculty for M.E. (PH) classes at All India Institute of Hygiene and Public Health, Calcutta.
 - g) Examiner for M.E. (PH) thesis for Jadavpur University, Calcutta.
 - h) Faculty at Summer school organised by IChE at IIT, Kharagpur in June 1990.
 - i) Resource person for course on Management & Planning of Environment Organised by Administrative Training Institute, Govt. of West Bengal, Calcutta, 1 to 12 March, 1991.
 - j) Faculty for GPD sponsored training course for sewage treatment plant operators organised by NEERI, Nagpur, November 1990.
 - k) Resource person for seminar/workshops organized by Calcutta Productivity Council, Indian Institute of Social Welfare & Business Management, Calcutta.
9. Field of Special Interest : : ➤ Design, engineering consultancy services, commissioning and de-bottlenecking of industrial effluent treatment plant.
- Environmental auditing, EIA/EMP and Environmental Quality Monitoring Studies.
- Hazardous Wastes Management
10. Publication, if any : : See enclosed Annexure I
11. Any other relevant information : :
- 11.1 Membership of Professional Bodies : : ➤ Fellow, Institute of Engineers (India)
- Member, American Institute of Chemical Engineers (USA)

- Member, Indian Institute of Chemical Engineers
- Member, Indian Association for Environmental Management
- Fellow, Institution of Public Health Engineers (India)
- Member, National Safety Council

11.2 Honours & Awards

- : :
1. Awarded a fellowship by FAO of United Nations for training at IVL, Stockholm, Sweden.
 2. Biographical profile of the candidate has been included in the 6th edition of the Marquis Who's Who in Science and Engineering, New Providence, N.J., U.S.A.
 3. Convener of the Chemical Engineering Divisional Committee of Institution of Engineers (I) West Bengal State Centre 2001-2002

List of Technical Publication & Reports

Technical Papers

1. K.K. , Saha, S. K., Dasmahaptra, G.P., and Pal, T. K. (1999) Wastewater Treatment of a Pharmaceutical Manufacturing Unit by Batch Package Activated Sludge Plant; A Case Study, Indian Association for Environmental Management Annual Conference on Environmental Management in the Next Millennium: Technology – Human Resource Linkages, December 17 – 18,1999
2. Das, K.K., Swarnakar, N.G., Bal, A.S. Treatment and Resource Recovery from the Colony Domestic Sewage – a Case Study – National Seminar on Environment in Retrospect since Independence, Institution of Engineers (India), Calcutta, November 26-27, 1999.
3. Das, K.K. and Pande, S.P. (1994) Environmental Aspects of Mining Industry in India Chemical Weekly, January 11, P.12 –139.
4. Deb, S.C., Das, K.K. and Santra, S.C. (1993) Studies on the Productivity of Sewage Fed. Pond Ecosystem. J. Of Env. Biol.Vol.3 (1 & 2), P.27 – 47.
5. Deb, S.C., Das, K.K. and Chattopadhyay N. (1993) Macro Zoo Benthos Status of Jheels of Calcutta Port Area. Ind. J. of Env. Poll. Vol. 13 (4), P.267 – 271.
6. Deb, S.C., Das, K.K. and Santra, S.C. (1991) Studies on the Productivity of Sewage Fed Pond Ecosystem. Paper presented in the 12th Annual Session of Academy of Eng. Biol., Rewa, December 23-25.
7. Das, K.K., Biswas, A.K., Ganguly, A.K., Molla, S.H., Chattopadhyay, N., Sanyal, P.B., and Deb S.C. Recycle & Reuse of Industrial Effluents for Aquaculture-A Case Study Presented in the National Seminar on Waste Utilisation and Management Organised by Indian Institute of Chemical Engineers, Calcutta Regional Centre, Calcutta, September 22 – 23, 1990

8. Das, K.K. Joint Industrial Waste Treatment with Resource Recovery-A Case Study, Presented in the National Seminar on Safety and Pollution Control in Vegetable Oil and Allied Industries Organised by Oil Technologists Association of India (Eastern Zone), Calcutta, November, 11, 1990
9. Deb, S.C., Das, K.K., & Ganguly, A.K. Physico Chemical and Biological Quality of Damodar River Water During Accidental Oil Spillage Presented in Workshop on Water Quality Management of Damodar River System, Calcutta, November, 9-10, 1990
10. Das, K.K. Mhaisalkar, V.A., & Paramasivam, R. Environmental Impacts Assessment of Calcutta Port – A Case Study, Presented in the Indo-Dutch Workshop at Madras, November 5, 1990.
11. Das, K.K. Environmental Management of the Liquid Effluents from Pharmaceutical Industries. Presented at the workshop on Process Engineering Organised by Process Engineering Design & Development Institute, Calcutta, December 8, 1989.
12. Das, K.K. Resource Recovery & Waste Recycle, Presented in the Seminar on Pollution & Productivity, Organised by Calcutta Productivity Council, Calcutta, September 7, 1989.
13. Handa, B.K., & Das, K.K. A Methodology for Impact Assessment of GAP on Public Health, Presented in the National Workshop on Management of Assets Created under Ganga Action Plan Organised by Institution of Engineers (India), West Bengal State Centre, Calcutta, December, 8-9, 1989.
14. Das, K.K. Environmental Impact of Man's Developmental Activities, Presented in the Seminar on Environmental Monitoring

- and Control System Organised by Indo-German Association, Max Mueller Bhavan, Calcutta, November 11, 1989.
15. Das, K.K. Environmental Status of Calcutta, Presented in the Seminar on Recent Trends in High Temperature Superconductivity and Environmental Pollution Organised by the University Science Instrumentation Centre, Jadavpur University, Calcutta, October 7, 1988.
 16. Das, K.K. Atmospheric Emission from Kraft process of Wood Pulping. Ind. J. Env. Health, October 1988.
 17. Das, K.K., Ghosh, A., & Raman, V. Environmental Management of Liquid Effluents from Titanium Dioxide Pigment Plant, Ind. J. Env. Health, January, 1987, 16-25.
 18. Patkie, S.A., Das, K.K. & Deshpande, C.V. Activated Carbon Treatment of Pulp mill Waste water, J. IPHE (India), Vol.2, 1986
 19. Das, K.K. ET. AL (Members Air Pollution Divn. of Nagpur, Bombay & Calcutta of NEERI) Status of Air Pollution Problems and Emissions in Bombay and Calcutta. NEERI Silver Jubilee Commemoration Volume, 1985.
 20. Basu, A.K. & Das, K.K. Some Thoughts on Core Environmental Pollution Problems in Rural Bengal. Presented at workshop Organised by NISTADS (CSIR), 1983 at Bankura, West Bengal
 21. Das, K.K. River Flow Data Analysis with Reference to Water Pollution Control, IAWPC Technical Annual 1982
 22. Das, K.K. Atmospheric Emission Control and Resource Recovery in Kraft Pulp Mills – Presented at 34th Annual Session of the IChE, 1981.

23. Subrahmanyam, P.V.R.,
Raman, V., Das, K.K., ET AL Unit Process in Waste Water Treatment –
A Course Manual, NEERI Publication,
1980.
24. Das, K.K., Subrahmanyam
P.V.R. Role of Distillery Plant Manufacturers in
Treatment of Spent Wash. Presented in
Seminar on Industrial Wastes held in
Calcutta Jointly by CMDA & NEERI,
December, 1977
25. Das, K.K. Evaporation – The Physical Method for
complete Treatment of Distillery Wastes.
Presented in the 30th Annual Session of
IChE, 1977.
26. Das, K.K. & Goswami, G.G. ‘Tubular Heat Exchanger’ Proc. of
Technical Conf. of APV., Calcutta , 1974
27. Das K.K. ‘Preventive Maintenance’ CHEM.ENG.
Ass. Annual, IIT, Kharagpur, 1970.

Reports

1. Process Package for Environmental Management of Jupiter Alloys Private Limited, Sahaganj, Hooghly, July, 2005.
2. Process Package for Environmental Management of Kitchen Appliances India Limited, Taratalla Road, Kolkata, July, 2005.
3. Design, engineering, consultancy for Effluent Treatment Plant of the paint shop of Chittaranjan Locomotive Works, Chittaranjan, Indian Railways, Sept, 2004.
4. HAZOP study, Safety Report, On-Site Emergency Plan, Risk / Consequence Analysis for the Proposed 70 TPD Air Separation Plant of Ellenbarrie Industrial Gases Limited, Kolkata, May, 2004.
5. Ambient Air Quality Monitoring Studies at Asansol-Raniganj-Burdwan Region, March 2003
6. Rapid Environmental Impact Assessment for light cast foundry expansion project of M/s. Hindustan Engineering & Industries Limited, Bamunari Plant, Hooghly, West Bengal June, 2001.
7. HAZOP study of the manufacturing facilities of the Calcutta Chemical Company Limited, Kolkata, March, 2003.
8. Ambient Air Quality Monitoring at the factory site of Electrosteel Castings Limited, March, 2003.
9. Environmental Monitoring and Annual Environmental Audit Statement preparation for Bakreswar Thermal Power Station of the West Bengal Power Development Corporation Limited, 2002-2003.
10. Ambient Air quality Monitoring outside the Plant Boundary of National Thermal Power Corporation Limited, Farakka Super Thermal Power Station, West Bengal, 2002-2003.
11. Environmental Monitoring of Hindustan Construction Company Limited at Kalyam Stone Quarry required for pollution control for construction of new carriageway / widening and strengthening of existing carriageway for NH6 (WB-II), Road Project (Kolaghat – Kharagpur) in West Bengal, 2002-2003.
12. Risk analysis on building materials for asbestos at Alstom Power Boilers Limited, Durgapur, October, 2002.
13. Design, Engineering, Consultancy, supervision for erection and commissioning of Effluent Treatment Plant for the marine product division of M/s. IFB Agro Industries Limited, Kolkata – 2003.

14. Design, engineering, supply, erection and commissioning of effluent treatment plant for M/s. Phoenix Yule Limited, Kalyani, West Bengal, 2001
15. Design, engineering, consultancy, supervision of erection and commission of Effluent Treatment Plant for M/s. Orient Fans, Faridabad, 2001.
16. Design, engineering, consultancy, supervision of erection and commissioning of effluent treatment plant for M/s. Jyoti Enterprise, West Bengal, 2002
17. Design, engineering, supply, erection and commissioning of paint sludge incinerator for Orient Fans, Faridabad, 2003.
18. Ambient Air Quality Monitoring Studies at Burdwan-Durgapur-Asansol Region, May 2001
19. Ambient Air Quality Monitoring Studies at Howrah – Hooghly Region, May 2001
20. Rapid Environmental Impact Assessment for the proposed project of Capacity Augmentation of Pig Iron Plant of Tata Metaliks Limited, February 2001
21. Rapid EIA Studies for Bhaskar Shrachi Alloys Limited, Durgapur 2000
22. Rapid EIA Studies for Edcons (Mks) Castings Pvt. Ltd., Hooghly, West Bengal, 2000
23. Air Quality Monitoring studies around Netaji Subhas International Airport, Dum Dum 1999
24. Process Package for the Effluent Treatment Plant for the Electric Meter Manufacturing Unit of VXL Landis Gyr Limited, 1999
25. Accident Consequence Analysis for the manufacturing, storage and handling of CS₂ at Kesoram Rayon Limited, Hooghly, 1998
26. Process Package for Effluent Treatment Plant for the galvanising unit of M/s. Robinson International, Falta Export Processing Zone, 1998
27. Report on the HAZOP study of LPG storage system at Hindustan Motors Limited, November, 1998
28. Process Package for Hazardous Waste Management for the Automobile Division of Hindustan Motors Limited, January, 1998
29. On-site Emergency plan for Kusum Products Limited, Rishra, Hooghly, January 1997.

30. Rapid Estimation of Point Sources Discharging into River Hooghly within CMD Area, 1993.
31. Treatment and Biogas Recovery from Sewage at Regional Research Laboratory, Bhubaneswar, 1993.
32. Water Quality Assessment of Utlā Nadi and Damodar River in the upstream of Panchet Dam, 1993.
33. Wastewater Management System for Talcher Super Thermal Power Station Township, 1992.
34. Preservation of Victoria Memorial Hall from Calcutta Air Environment Deterioration, 1992.
35. Water Quality Studies of the Jheel in CPT Area, 1990.
36. Rapid Environmental Impact Assessment of Stone Quarry Operations at Rangāt Bay, Middle Andaman, 1990.
37. Rapid Environmental Impact Assessment of Paradeep Phosphate Limited, 1990.
38. Rapid Environmental Impact Assessment of Cachar Paper Project (Assam), 1989.
39. Rapid Environmental Impact Assessment of Nagaon Paper Project (Assam), 1989.
40. Impact Assessment of Ganga Action Plan on Public Health, 1989.
41. Environmental Impact Assessment of Calcutta Port, 1989.
42. Characterisation, Treatability and Revamping of Rubber Chemicals Plant Waste for M/s. IEL Ltd., Rishra, West Bengal, 1989.
43. Environmental Impact Assessment of Dankuni Coal Complex, Dankuni, West Bengal, 1988.
44. Air Quality Status in Ten Cities : India (1982 – 85), 1988.
45. Report on the Water Quality Assessment of the Rohtas District of Bihar under Technology Mission Project, 1988.
46. Report on the National Training Camp on Iron Removal from Ground Water held at Agartala, 1987.
47. Report on the Water Quality Assessment of Bankura District under Technology Mission Project, 1987.

48. Report on the Water Quality Assessment of Waste Khasi District of Meghalaya, 1987.
49. Air Quality in Selected Cities in India for 1980 – 81, 1985.
50. Treatment and Disposal of Effluent from the Fertilizer Factory of M/s. Southern Petrochemical Industries Corporation Limited, Tuticorin, 1981.
51. Characterisation of Waste Water from the Fertilizer Complex of Fact., Udyogmandal, 1980.
52. Report on Characterisation and Performance evaluation of Fertilizer waste water treatment facilities of M/s. Mangalore Chemical and Fertilizers Limited, Mangalore, 1980.
53. Treatment and Disposal of waste water from Titagarh Paper Mills, 1980.
54. Treatment and Disposal of effluents from the Factory of M/s. Madura Coats Limited, Koratti, Kerala, 1980.
55. Treatment and Disposal of Waste Water from the Titanium Di-oxide Pigments Plant of the Kerala Minerals and Metals Ltd., Quilon, 1980.
56. Treatment and Disposal of effluents from the Fertilizer Factory of FACT, Cochin Division, March, 1980.
57. Characterisation and Treatment of Waste Water from Typical Khandassari Sugar Industries in Karnataka, February, 1980.
58. Characterisation and Treatability of waste water from Rubber Chemicals Plant of M/s. Alkali and Chemical Corporation of India Limited, Rishra.
59. Treatment and Disposal of waste water from M/s.Gujarat Steel Tubes Limited, Ahmedabad, August, 1979.
60. Treatment and Disposal of waste water from M/s. Aditya Mills, Kishangarh, May, 1979.
61. Treatment and Disposal of waste water from M/s. Hindustan Fertilizer Corporation Ltd., Barauni, April, 1979.
62. Treatment and Disposal of waste water from M/s. West Godavari Co-operative Sugars Limited, Bhimadole, March, 1979.

63. Characterisation and Treatment of waste water from M/s. Padinjarekara Agencies Ltd., Kottayam, March, 1979.
64. Characterisation and Treatment of waste water from M/s. Reliance Textile Industries Ltd., Baroda, Ahmedabad, February, 1979.
65. Treatment and Disposal of waste water from M/s. Ellora Papers Mills Ltd., Tumsar, January, 1979.
66. Treatment and Disposal of waste water from M/s. Oudh Sugar Mills Limited, Hargaon, U.P., January, 1979.
67. Treatment and Disposal of Sewage Effluent from the Residential Colony of M/s. Hindustan Insecticides Ltd., Rasayani, August, 1978.
68. Treatment and Disposal of waste water from M/s. Synthetic and Chemicals Ltd., Bareilly, July, 1978.
69. Colour Removal from Pulp Mill Wastes by Activated Carbon – A NEERI Internal Report, 1977.
70. Studies on the Double Effect Glue Evaporator for the Western India Match Co.Ltd., Ambarnath, A Report Prepared on behalf of the APV Engineering Co. Ltd., Calcutta, 1975.