



**List of Publications of
Prof. (Dr.) Tarkeshwar Kumar
Director, Indian School of Mines, Dhanbad**

More than hundred publications including papers published in international/national journals and papers presented/published in the proceedings of international/national seminars/conferences/workshops are given in the list below.

(*Indicates International Publications)

1. Kumar, T. : *“Some Rheological Properties of Emulsions of Refinery Cuts with Water,”* The New Sketch, Dhanbad (May, 24, 1982).
2. Kumar, T.: *“Importance of Crude Oil Emulsion for the Petroleum Industry,”* Souvenir, National Seminar on Problems of Production - Onshore and Offshore held at Indian School of Mines, Dhanbad (Oct, 21-23, 1984).
3. Kumar, T. and Srini-Vasan, S.: *“Effect of Temperature on the Rheological Properties of Oilfield Emulsions,”* Proceedings, the National Seminar on Problems of Petroleum Production: Onshore & Offshore, held at Indian School of Mines, Dhanbad (Oct, 21-23, 1984).
4. Kumar, T.: *“Flow Properties of New Fracturing Fluid and Fluid-Proppant System for Use in Well Stimulation Programme,”* Energy Journal, URJA (May, 1985).
- *5. Kumar, T. and Srini-Vasan, S.: *“A New Model for Analysis of the Rheological Properties of Crude Oil-Water Emulsion Systems,”* Paper SPE 15201, Microfiche Volume of Society of Petroleum Engineers International, USA, (1985).
- *6. Kumar, T.: *“Principles of Simulation Applied to Oilfield Venture Analysis with System Approach,”* Paper SPE 14488, Journal of Petroleum Technology, USA (Oct, 1986).
- *7. Kumar, T. and Todd, A.C.: *“A New Approach for Mathematical Modeling of Formation Damage Due to Invasion of Solid Suspension,”* Paper SPE 18203, Proceeding of the 1988 SPE Annual Technical Conference and Exhibition held in Houston, Texas, USA (Oct, 2-5, 1988).
8. Kumar, T.: *“Formation Damage during Well Stimulation,”* Energy Journal, URJA (Nov, 1989).
9. Kumar, T. and Jha, M.K.: *“Artificial Island to Develop Shallow Offshore Oilfields,”* Proceedings, National Seminar on Strategies in Petroleum Production & Utilization held at Indian School of Mines, Dhanbad (Jan, 13-14, 1990).
10. Kumar, T.: *“Systems Approach of Problem Solving with reference to Petroleum Industry,”* Proceedings, National Seminar on Strategies in Petroleum Production & Utilization held at Indian School of Mines, Dhanbad (Jan, 13-14, 1990).
11. Kumar, T.: *“Role of Formation Damage Evaluation in Predicting Well Injectivity,”* Energy Journal URJA (May, 1990).

- *12. Todd, A.C., Kumar, T. and Mohammadi, S: *“The Value and Analysis of Core-Based Water Quality Experiments as Related to Water Injection Schemes,”* SPE Formation Evaluation Journal, USA (June, 1990).
13. Kumar, T. and Jha, M. K.: *“Petroleum Engineering Education in India,”* Mineral and Mining World, (Nov-Dec, 1990)
14. Kumar, T.: *“Crude Oil Emulsions: Their Role in Petroleum Industry,”* Energy journal, URJA, New Delhi (Feb,1991).
15. Kumar, T. Jha, M.K. and Mani, J.S. : *“Feasibility Study on Developing an Artificial Island off East Coast of India,”* Proceedings, the Fourth Indian Conference on Ocean Engineering, ENCOE-91, National Institute of Oceanography, Goa (Sept, 4-6,1991).
16. Kumar, T.: *“Capillary Network Modeling of Porous Media,”* Chem. Eng. Division, Journal of the Institution of Engineers (India) Vol. 22 Pt. CH - 3, (Feb, 1992).
17. Kumar, T.: *“Formation Damage Resulting from Particle Invasion,”* URJA Oil & Gas International, New Delhi, (Feb, 1992).
18. Singh, Padam, Vidyasagar, K and Kumar, T.: *“Establishing the operating parameters of a Gas/Dual Fuel Engine and their cost comparison with a diesel engine,”* URJA Oil & Gas International, New Delhi (July-Aug, 1992).
19. Kumar, T. and Jha, M.K.: *“Selection of Artificial Island for Shallow Oilfields,”* Ocean Technology Perspectives, Publications & Information Directorate, CSIR, New Delhi, pp 200-214 (1994).
20. Kumar, T. and Todd, A.C.: *“Application of Probability Methods in Network Modeling of Formation Damage Predictions,”* SPE NIS 93033, Proceedings, SPENIS National Seminar on Technology Trends in Oil Industry, Dehradun, UP (Jan, 7-8, 1994).
21. Siddiqi, A.M., Kumar, T. and Doshi, C.S.: *“Development of Marginal Oil & Gas Fields by Linear Programming Models - a Techno-Commercial Approach,”* SPENIS 93053, Proceedings, SPENIS National Seminar on Technology Trends in Oil Industry, Dehradun, UP (Jan, 7-8, 1994).
22. Kumar, T., Banerjee, R. and Choudhuri, B.: *“Problems of Non-Uniqueness in Well Test Interpretation,”* SPE-NIS 93050, Proceedings, SPE NIS National Seminar on Technology Trends in Oil Industry, Dehradun, UP (Jan, 7-8, 1994).
- *23. Sharma, V.P., Singh, Inderjit and Kumar, T.: *“A Case Study of Environment Management Problems of Indian Oilfields,”* SPE 27145 Proceedings, the second International Conference on Health, Safety and Environment in Oil and Gas Exploration and Production at Jakarta, Indonesia (Jan, 25-27, 1994).
- *24. Pathak, A.K. and Kumar, T.: *“Development of a Computer Software for Three Dimensional Monitoring of Directional Wells,”* Proceedings, PETROTECH-95, the first International Petroleum Conference and Exhibition, New Delhi (Jan, 9-12, 1995).
- *25. Jha, K.N., Narasimhan, J.L. and Kumar, T.: *“Reservoir Engineering Aspects of Horizontal Well Technology,”* Proceedings, PETROTECH- 95, the first International Petroleum Conference and Exhibition, New Delhi (Jan, 9-12, 1995).
- *26. Pathak, A.K. and Kumar, T.: *“Slant Hole Drilling: A Better Drilling Technique for Larger Horizontal Targets,”* Proceedings, PETROTECH - 95, the first International Petroleum Conference and Exhibition, New Delhi (Jan, 9-12, 1995).
- *27. Pathak, A.K. and Kumar, T.: *“Study of Indigenous Crude Oil Emulsions and Their Stability,”* Proceedings, PETROTECH-95 the first International Petroleum Conference and Exhibition, New Delhi (Jan, 9-12, 1995).

- *28. Siddiqi, A.M. and Kumar, T.: “*Use of Mathematical Modeling for Optimum Development of Marginal Oil and Gas Fields*,” Proceedings, PETROTECH - 95, the first International Petroleum Conference and Exhibition, New Delhi (Jan, 9-12, 1995).
- *29. Kumar, T. and Choudhary, P.K.: “*Recent Advances in Treatment and Inhibition of Oilfield Scale*,” Proceedings, PETROTECH - 95, the first International Petroleum Conference and Exhibition, New Delhi (Jan, 9-12, 1995).
30. Karmakar, G.P. and Kumar, T.: “*Conservation of Petroleum during Production*,” Proceeding, Seminar on Oil Conservation organized jointly by ISM and PCRA, at ISM, Dhanbad (Dec, 8, 1995).
- *31. Sharma, V.P., Singh, Inderjit and Kumar, T.: “*Environmental Safety and Health Impact of Drilling & Production Operations in Bombay Offshore*,” proceedings of the first World Mining Environment Congress, New Delhi (Dec, 11-14, 1995).
- *32. Pathak, A.K. and Kumar, T.: “*Slant-Hole Drilling - A Better Technique for Larger Horizontal Displacement*,” Drilling and Exploration World Journal (1996).
- *33. Kumar, T.: “*Evaluating the Impact of Formation Damage on Oil and Gas Production*,” Drilling and Exploration World Journal, Vol. 05 No. 04 (1996).
34. Pathak, A.K., Kumar, T., Ahmad, I. & Mishra, S.N.: “*Characterization of Surface Active Compounds in Indigenous Crude Oil Fractions*,” paper No. TU- Chem. (07)/96, Abstract Proceedings, the National Conference on Colloid and Emulsions of Natural and Synthetic Systems, Tripura University, Agartala, awarded certificate of merit & Cash prize, (Feb, 2-4, 1996).
35. Pathak, A.K. and Kumar, T. “*Study of Interfacial Activity of Indigenous Crude Oils and Their Fractions*,” Proceedings, National Conference on Colloids and Emulsions of Natural and Synthetic Systems, Tripura University, Agartala (Feb, 2-4,1996), pp81-96.
- *36. Kumar, T. and Maji, A.K.: “*Status of Horizontal Well Technology in India*,” Drilling and Exploration World Journal, Vol. 06, No. 01 (Dec, 1996).
- *37. Murali Mohan, B.G., Jha K.K. and Kumar, T.: “*A Spread-Sheet Program to Study the Sensitivity of Horizontal Well Performance in an Active Water Drive Reservoir*,” Proceedings, PETROTECH - 97, the second International Oil & Gas Conference and Exhibition, New Delhi (Jan, 9-12, 1997).
- *38. Pathak, A.K., Kumar, T. and Mishra, S.N.: “*Study of Pressure Area Isotherm of Indigenous Crude Oil Fraction*,” Proceedings, PETROTECH - 97, the second International Oil & Gas Conference and Exhibition, New Delhi (Jan, 9-12, 1997).
- *39. Pathak, A.K. and Kumar, T.: “*Performance Prediction of Slanted Profile Wells: A System Approach for Comparative Studies*,” Proceedings, PETROTECH - 97, the second International Oil & Gas Conference & Exhibition, New Delhi (Jan, 9-12, 1997).
- *40. Kumar, T., Ahmad, I. and Pathak, A.K.: “*Effect of Polyvalent Metal Ions on Wettability of Silica/Oil/Brine System*,” Proceedings, PETROTECH - 97, the second International Oil and Gas Conference and Exhibition, New Delhi (Jan, 9-12, 1997).
41. Vishwanatham, S., Kumar, T. and Rawat, N.S.: “*Use of Imidazole and its Derivatives in Corrosion Protection of Phosphor Bronze in Synthetic Acid Mine Water*,” J. Electrochemical Society of India, Vol. 46, No. I, (Jan, 1997).
42. Kumar, T., Banerjee, R. and Choudhuri, B.: “*Modern Well Testing - A Tool for Reservoir Description and Well Optimization*,” J. of the Institution of Engineers (I) Chem. Eng. Division (March, 1997).
43. Kumar, T.: “*Role of Formation Damage in Oil Production and Well Injectivity*,” Proceedings, IORS 1997, the Fourth Annual India Oil & Gas Review Symposium, Mumbai (Aug, 18-19, 1997).

- *44. Shah, P.K., Narasimhan, J.L. and Kumar, T.: “*Water Injection Response in the L-III Reservoir of Bombay High North*,” PETROMIN Journal, Singapore (Aug, 1997).
45. Kumar, T. and Choudhuri, B.: “*Practicalities of Detection of Boundaries From Pressure Transient Tests*,” *Proceedings*, the National Seminar on Technological Advances and Challenges in Oil & Gas Industry, Indian School of Mines, Dhanbad (Jan, 9-10, 1998).
46. Kumar, T., Sharma, V.P. and Choudhary, P.K.: “*A Case Study of Produced Water Contaminants and its Effects on Environment with Special Emphasis on Minimizing Scale Formation*,” *Proceedings*, the National Seminar on Technological Advances and Challenges in Oil & Gas Industry, Indian School of Mines, Dhanbad (Jan, 9-10, 1998).
47. Sarkar, B., Gupta, A., Rai, R., Choudhary, N. and Kumar, T.: “*Review of Correlations of Gas Flow Through Gas Lift Valve Under Dynamic Flow Conditions*,” *Proceedings*, the National Seminar on Technological Advances and Challenges in Oil & Gas Industry, Indian School of Mines, Dhanbad (Jan, 9-10, 1998).
48. Prasad, V.K., Bhatnagar, S.B.L. and Kumar, T.: “*Hydraulic Fracturing in Kalol Field: A Case Study*,” *Proceedings*, the National Seminar on Technological Advances & Challenges in Oil & Gas Industry, Indian School of Mines, Dhanbad (Jan, 9 -10, 1998).
- *49. Kumar, T. Vishwanatham, S., Emranuzzaman and Talukdar, B.N.: “*Nitrogen Containing Organic Compounds as Corrosion Inhibitors of Mild Steel Corrosion in Oilfield Acids*,” *paper SPE 39534*, *Proceedings*, SPE India Oil & Gas Conference and Exhibition, New Delhi (April, 7-9, 1998).
- *50. Karmakar, G.P., Kumar, T. and Singh, R.P.: “*Polysaccharide Based Water Soluble Graft Copolymers: Synthesis, Characterization and Their Applications in Oil Industries*,” *Proceedings*, PETROTECH - 99, the third International Oil & Gas Conference and Exhibition, New Delhi (Jan, 9 - 12, 1999).
- *51. Kumar, T. and Choudhary, P.K.: “*Problems and Remedies of Scale Formation in Oil Production System and Water Injection System*,” *Proceedings*, PETROTECH - 99, the third International Oil & Gas Conference and Exhibition, New Delhi, (Jan, 9 - 12, 1999).
52. Jha, M.K. and Kumar, T.: “*Wave Refraction Study Around Artificial Island in East Coast of India Suitable for Oilfield Development*,” Presented in Annual Paper Meeting of IE (I) Chemical Engineering Division at Tamil Nadu State Centre of the IE (I), Chennai (March, 26 - 27, 1999).
- *53. T. Kumar: “*Development of Marginal Oil and Gas Fields in India and Future Prospects*,” *Drilling and Exploration World Journal*, Vol. 10, No. 01 (Nov, 2000).
- *54. Kumar, T., Vishwanatham, S. and Emranuzzaman: “*Corrosion Protection of N80 Steel in 15% HCl by Alcoholic Extract of Plant Leaf and an Organic Compound*,” *Proceedings*, PETROTECH-2001, the fourth International Oil and Gas Conference and Exhibition, New Delhi (Jan 9-12, 2001).
- *55. Pathak, A. K. and Kumar, T.: “*Slanted Well Profiles: A Better Means for Extended Reach Drilling*,” *Proceedings*, PETROTECH-2001, fourth International Oil and Gas Conference and Exhibition, New Delhi (Jan 9-12, 2001).
56. Kumar, T., Vishwanatham, S. and Emranuzzaman: “*Plant Based Corrosion Inhibitor for Protection of N80 Steel in HCl*,” *Proceedings*, IORS 2001, the eighth Annual India Oil and Gas Review Symposium, Mumbai (Sept 10-11, 2001).
- *57. Vishwanatham, S., Emranuzzaman and Kumar, T.: “*FTIR Study of Corrosion Inhibition Films on N80 Steel Surface Exposed to 15% HCl*,” *Proceedings*, National Seminar on Instrumental Techniques in Chemical Analysis, Indian School of Mines, Dhanbad (Sept 15-16, 2001).

58. Pathak, A. K. and Kumar, T.: “*Environmental Impact Assessment (EIA) – An Overview*,” Proceedings, Seminar on Connect with the World Wide Web of Life on World Environment Day – 2001, CMRI, Dhanbad (June 5, 2001).
- *59. Kumar, T., Prasad, V.K. and Bhatnagar, S.B.L.: “*Computer Simulation of Hydrofracturing Job Design in Kalol IX and X Horizon*,” Drilling and Exploration World Journal (July-Sept, 2001).
- *60. Kumar, T., Prasad, V.K. and Bhatnagar, S.B.L.: “*Laboratory Investigation for Hydrofracturing of IX & X Horizons of Kalol Oil Field*,” Drill, & Expl. World J., (Feb, 2002).
61. Vishwanatham, S., Kumar, T. and Emranuzzaman: “*Ortho and Para Substituted Phenol as Corrosion Inhibitors For N80 Steel in Hydrochloric Acid*,” Bulletin of Electrochemistry, 18(8), (Aug, 2002).
62. Pathak, A.K. and Kumar, T.: “*Studies on Interfacial Activities of Heavier Crude Distillates and After-Distillation Residue*,” Proc, IORS-2002, the ninth Annual India Oil & Gas Review Symposium, Mumbai (Sept 9-10, 2002).
- *63. Pathak, A.K. and Kumar, T.: “*Environmental Impact Assessment in Petroleum Sector: An Overview*,” Oil Asia Journal (International) (April-Sept, 2002).
- *64. Pathak, A.K. and Kumar, T.: “*Three Dimensional Modeling For Placing Horizontal Well Profiles in This Seam Reservoirs*,” Proc, PETROTECH-2003, the fifth International Petroleum Conference and Exhibition, New Delhi (Jan 9-12, 2003).
- *65. Pathak, A.K. and Kumar, T.: “*Techno economic Evaluation of Slanted Well Drilling Technology and its Applications in Oil & Gas Field Development*,” Proc, PETROTECH-2003, the fifth International Petroleum Conference and Exhibition, New Delhi (Jan 9-12, 2003).
- *66. Pathak, A.K. and Kumar, T.: “*Studies on Interfacial Absorption Phenomena in Heavier Distillates and After-Distillation Residue of Bombay High Crude*,” Proc., PETROTECH-2003, the fifth International Petroleum Conference and Exhibition, New Delhi (Jan 9-12, 2003).
67. Kumar, T.: “*Integrated Reservoir Management with reference to Water Flood Surveillance and Operation in Large Oilfields*,” paper presented in the National Seminar on Petroleum Reservoir Management, Dibrugarh University, Dibrugarh, (May 12, 2004).
- *68. Emranuzzaman, Kumar, T., Vishwanatham, S. and Udayabhanu, G.: “*Synergistic Effect of Formaldehyde and Alcoholic Extract of Plant Leaves for Protection of N80 Steel in 15% HCL*,” Corrosion Engineering, Science and Technology (CEST) Journal, London (Dec, 2004).
69. Pathak, A. K. and Kumar, T.: “*Tiryak-Margiya Koop-Disha Nirdeshit Bedhan Kshetra Mein Ek Naya Ayam*,” Proceedings, National Seminar (Sangosthi) in Hindi on Tel Ksheta Ki Chunautiyan Evam Naye Ayam, organized by ONGC, Chennai Egmore (April 1-2, 2005)
70. Pathak, A. K. and Kumar, T.: “*A Comparative Approach for Slanted Well Profiles and Conventional Well Profiles, for Extended Reach Drilling*,” MGMI National Seminar on ‘Mineral and Energy Resources of Eastern and North Eastern India’, held in Kolkata, (Sept. 8-9, 2005).
71. Kumar, T. and Jaisawal, A.: “*Design of oilfield production and surface processing systems and studies on related factors*,” The Drilling & Exploration World, (Oct, 2005).
- *72. Kumar, T. and Choudhary, P.K.: “*Investigation on the Effect of Various Types of Organic Inhibitors on Inhibition of Oilfield Scales*,” Proc., the Second Kuwait International Petroleum Conference & Exhibition, held in Kuwait City, State of Kuwait, (Dec. 10-12, 2005).
- *73. Kumar, T.: “*Role of energy conservation and technological impact on the energy security of India*,” Journal of Indian School of Mines, An International Journal, Vol. 1, No. 1, (March, 2006).

74. Kumar T. : *“Oil Conservation Measures in Petroleum Industry”*, Proc., National Conference on Indian Mining Industry : Latest Development and Challenges (in Hindi) held at CMRI, Dhanbad, (May 09, 2006).
75. Kumar, T.: *“Energy Security: Role of Hydrocarbon Sector”*, Proc., the National Conference on India’s Energy Security: Coal and Alternative Energy Resources held at Kolkata, (June 16-17, 2006).
- *76. Kumar, T. and Choudhary, P.K.: *“Developments in prediction of scaling tendencies and a new approach in empirical modeling of strontium sulfate solubility”*, Journal of Indian School of Mines, An International Journal, Vol. II, No. 2 (Sept, 2006).
77. Kumar, T.: *“Actualizing sustainable mining, Sustainability Tomorrow”*, National Seminar, CII-ITC Centre of Excellence for Sustainable Development, New Delhi (Sept, 2006).
78. Kumar, T., Kumar Vibhas, and Singh Gurdeep, : *“Historical, Geographical, Environmental and Social Aspects of Dhanbad”*, MINENVIS, A Journal of Centre of Mining Environment, Deptt. of Environmental Science & Engineering, ISM University, Dhanbad, No. 51, (Dec, 2006).
79. Kumar, T.: *“Role of Oil & Gas in the Energy Security of India”*, The Golden Jubilee Commemorative Volume of Central Mechanical Engineering Research Institute (CMERI), Durgapur (April 11, 2007).
80. Kumar, T., Kumar, Vibhas and Singh, Gurdeep, : *“Melting of Ice : A Consequence of Climate Change”*, MINENVIS, A Journal of Centre of Mining Environment, Deptt. of Env. Sc. & Engg., ISM University, Dhanbad, Number 53, (June, 2007).
81. Kumar, T., Gupta, P. S., and Vishnu Priye, : *“Convergence of Technology and Rapid Growth of Jharkhand”*, paper presented at National Workshop on Convergence of Technology and Rapid Growth, organized by The Institution of Engineers (India), Dhanbad Chapter on the occasion of Engineers Day, at BIT, Sindri, (Sept, 15, 2007).
82. Karmakar, G.P. and Kumar, T.: *“International Crude Oil Market and their Impact on Indian Oil Industries”*, paper presented at the National Seminar on Energy and Environment – New Age Management Education Dimension, organized by Department of Management Studies, ISM University, (Nov 2-3, 2007).
83. Kumar, T.: *“Higher Technical Education in the Mining, Mineral, Petroleum and Energy Sectors of India”*, University News Special Issue on National Knowledge Commission, Vol. 45, No. 48, (Nov. 26-Dec 2, 2007).
84. Kumar, T., and Singh, U. K.: *“The Role of Mining Academic Institutions in Meeting Techno-Managerial Manpower”*, Proc., 2nd Coal Summit, organized by Indian Energy Forum and The Mining, Geological & Metallurgical Institute of India, New Delhi, (Dec 10-11, 2007).
- *85. Kumar, T.: *“Prospects of Coal Bed Methane in India”*, Proc., 2nd Asian Mining Congress, Kolkata, organized by The Mining, Geological & Metallurgical Institute of India, Kolkata, (Jan 16-20, 2008).
86. Kumar, T., and Pathak, A. K. : *“Blowout and Fire Disasters in Oil & Gas Fields : Case Studies”*, Proc., National Seminar in Disaster in Mines organized by Institution of Engineers (India) and Department of Mining, ISM University, Dhanbad, (March 10-11, 2008).
87. Kumar, T., and Suresh, N. : *“Production of Coal Bed Methane in India – Its prospects and important environmental issues”*, Proc., 2008 National Workshop on CBM – Coal Mine Methane, organized by Total CBM Solution India Limited, New Delhi (March 13-14, 2008).
88. Kumar, T., Vishwanatham, S., and Emranuzzaman, : *“Study of Mixed Organic Compounds for Corrosion Control of N80 Steel During Acidization in Oil Wells”*, Indian Journal of Chemical Technology, 15, 2008, pp 221-227.

- *89. Kumar, T., : “*Energy Security by Using Renewable Energy Sources*”, Proc., International Conference on Earth, Energy and Engineering (UN Day celebration), organized by RDCIS, SAIL, Ranchi, (Oct 24, 2008).
- *90. Kumar, T., : “*Making Available Adequate Mining Professionals for Meeting Growth Challenges*”, Proc., Global Mining Summit, Organised by CII, Kolkata, (Nov 6-7, 2008).
91. Kumar, T., : “*Quality and Relevance in Higher Technical Education with Reference to Mineral Industries*” Univesity News Special Issue on Quality and Relevance of Higher Education, Vol. 46, No. 46, (Nov 17-19, 2008).
- *92. Kumar, T., : “*Environmental Management & Conservation in Petroleum Sector*”, Proc. International Conference on Mineral Industry in the New Economy : Challenges & Opportunities, MINE-2009, organized by ISM Alumni Association, Kolkata Chapter, Kolkata, (Jan 15-16, 2009).
- *93. Kumar, T., Vishwanatham, S. and Kundu, Shiv Shanker, : “*Oilfield scaling during water flooding in Mumbai high and its inhibition*”, Proc. International Conference on Mineral Industry in the New Economy : Challenges & Opportunities, MINE-2009, organized by ISM Alumni Association, Kolkata Chapter, Kolkata, (Jan 15-16, 2009).
94. Kumar, T., and Singh, U. K. : “*Application of Information Technology in Mining*”, Proc. National Seminar in ‘Mining in India : The Expanding Horizon’, Mumbai, (Jan 17, 2009).
95. Kumar, T., : “*Energy Security of India Through Optimum Development of Fossil Fuels and Alternative Energy Resources*”, Journal of Indian Geological Congress, vol. 1, No. 2, (Nov, 2009).
- *96. Kumar, T., : “*Sustainable Development in Mining Industry : An Indian Perspective*”, Proc., 21st International Mining Congress & Exhibition of Turkey, Kemer-Antalya, Turkey (May 6-8, 2009).
97. Kumar, T., “*Environmental Problems Inherited by BCCL Due to Unscientific Mining During Pre-Nationalization Period*”, presented in seminar on “*Coking Coal Resources Facing Crisis due to Unscientific Mining during Pre-nationalization period and occurrence of fire*” BCCL, Dhanbad, (Nov 1, 2009).
- *98. Kumar, T., “*Problems and prospects of oil and gas sector in India and its future development,*” presented in 3rd Asian Mining Congress (Conference & Exhibition), Kolkata (Jan 22-25, 2010).
- *99. Kumar, T., and Ojha, K., “*Challenges and prospects of CBM resource assessment and its role in clean energy security to India*”, presented in 3rd Asian Mining Congress (Conf. & Exhibition), Kolkata (Jan 22-25, 2010).
- *100. Kumar, T., Vishwanatham, S., and Kundu, S. S., “*A laboratory study on pteroyl-L-glutamic acid as a scale prevention inhibitor of calcium carbonate in aqueous solution of synthetic produced water*”, Journal of Petroleum Science and Engineering, 71 (2010) p. 1-7, published by Elsevier B.V.
101. Kumar, T., “*Status and Future Challenges of Clean Water for Dhanbad District – A Discussion*”, Keynote Address at the Workshop on Status and Future Challenges of Clean Water for Dhanbad and its Surrounding Areas, organized by The Institution of Engineers (India), Dhanbad Local Centre to observe World Water Day-2010, (April 24, 2010).
102. Kumar, T., “*Issues and challenges of higher technical education – ISM’s experience*”, Proc., East Zone Vice Chancellor’s Conference – 2010 on Higher Education : New Challenges and Emerging Roles, org. by Mahatma Gandhi Kashi Vidyapith, Varanasi (July 23-24, 2010).
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- *104. Kumar, T., “*Challenges in Enhanced Oil Recovery by Chemical Flooding*”, Keynote Address at the BITs 1st Annual International Congress & Exposition of Oilfield Chemicals 2010, Beijing, China (Nov 14-18, 2010).
- *105. Kumar, T., “*Developments in Drilling Technology*”, Keynote Address at the International Conference on Drilling Technology (ICDT), organized by IIT, Madras, (Nov 18-20, 2010).

- *106. Kumar, T., Guria Chandan, and Pathak, P., "*Treated Fly Ash : A Drilling Fluid*" at the International Conference on Drilling Technology (ICDT), organized by IIT, Madras, (Nov 18-20, 2010).
- *107. Kumar, T., "*Energy Security of India – Fossil Fuels & Alternative Energy Resources*", Keynote Address at the 1st. World PetroCoal Congress-2011 (Int. Conf. & Exhibition), organized by RAGA Integrated Technology Management Services, New Delhi, (Feb 9-12, 2011).
- *108. Kumar, T., "*Role of Higher Technical Institutions in the Mining, Mineral and Petroleum Sectors*", Keynote Address at the National Seminar on Excellence in Energy and Mineral Sectors – An Indian Perspective, 11-12 February, 2011, Kolkata.
- *109. Kumar, T., Mandal, Ajay, Bera Achinta, and Ojha Keka, "*Interfacial Tension and Phase Behavior of Surfactant-Brine-Oil System*", Colloids and Surfaces A: Physicochemical and Engineering Aspects (in press).