

**Publications of Prof. T. Kumar**  
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(\*Indicates International Publications)

**1982**

1. **Kumar T.:** *"Some Rheological Properties of Emulsions of Refinery Cuts with Water,"* **The New Sketch**, Dhanbad (May 24, 1982).

**1984**

2. **Kumar T.:** *"Importance of Crude Oil Emulsion for the Petroleum Industry,"* Paper, **National Seminar** on Problems of Production: Onshore & Offshore, held at Indian School of Mines, Dhanbad (21-23 October 1984).
3. **Kumar T.** and Srinivasa S.: *"Effect of Temperature on the Rheological Properties of Oilfield Emulsions,"* Paper, **National Seminar** on Problems of Petroleum Production: Onshore & Offshore, held at Indian School of Mines, Dhanbad (Oct. 21-23, 1984).

**1985**

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 Srinivasa S.: *"A New Model for Analysis of the Rheological Properties of Crude Oil-Water Emulsion Systems,"* **Paper SPE 15201-MS, SPE Microfiche Volume of Society of Petroleum Engineers International, USA**, (1985).

**1986**

- \*6. **Kumar T.:** *"Principles of Simulation Applied to Oilfield Venture Analysis with System Approach,"* **Paper SPE 14488, Journal of Petroleum Technology, USA** (October, 1986).

**1988**

- \*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-MS, SPE Annual Technical Conference** and Exhibition held in Houston, Texas, **USA** (Oct. 2-5, 1988).

**1989**

8. **Kumar T.:** *"Formation Damage during Well Stimulation,"* **Energy Journal, URJA** (Nov.1989).

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9. **Kumar T.** and Jha M. K.: *"Artificial Island to Develop Shallow Offshore Oilfields,"* **Paper, National Seminar** on Strategies in Petroleum Production & Utilization held at Indian School of Mines, Dhanbad (Jan. 13-14, 1990).
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\*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 Journal**, (Nov.-Dec. 1990).

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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*,” **Paper, 4th Indian Conference** on Ocean Engineering, ENCOE-91, National Institute of Oceanography, Goa (Sept 4-6, 1991).

\*16. **Kumar T.:** “*Formation Damage Resulting from Particle Invasion*,” **Paper SPE23561-MS**, **Society of Petroleum Engineers**, USA (24 June 1991).

## 1992

17. **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).

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).

## 1994

19. Kumar T. and Jha M. K.: “*Selection of Artificial Island for Shallow Oilfields*,” **Chapter in a Book: Ocean Technology Perspectives**, Publications & Information Directorate, CSIR, New Delhi (1994), PP200-214.

20. **Kumar T.** and Todd A. C.: “*Application of Probability Methods in Network Modeling of Formation Damage Predictions*,” SPE NIS 93033, **SPENIS National Seminar** on Technology Trends in Oil Industry, Dehradun, UP (Jan 7-8, 1994).

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\*23. Sharma V. P., Singh Inderjit and **Kumar T.:** “*A Case Study of Environment Management Problems of Indian Oilfields*,” **Paper SPE 27145-MS 2<sup>nd</sup> International Conference** on Health, Safety and Environment in Oil and Gas Exploration and Production at **Jakarta, Indonesia** (Jan. 25-27, 1994).

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\*24. Pathak A. K. and **Kumar T.:** “*Development of a Computer Software for Three Dimensional Monitoring of Directional Wells*,” **Paper, PETROTECH-95**, **1st 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," Paper, PETROTECH-95, 1st 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," Paper, PETROTECH-95, 1st 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," Paper, PETROTECH-95, 1st International Petroleum Conference and Exhibition, New Delhi (Jan. 9-12, 1995).*
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- \*29. **Kumar T.** and Choudhary P. K.: *"Recent Advances in Treatment and Inhibition of Oilfield Scale," Paper, PETROTECH-95, 1st International Petroleum Conference and Exhibition, New Delhi (Jan. 9-12, 1995).*
- 30. Karmakar G.P. and **Kumar T.:** *"Conservation of Petroleum during Production," Paper, National 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," Paper, 1st World Mining Environment Congress, New Delhi (Dec.11-14, 1995).*

#### 1996

- 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. and Mishra, S. N.: *"Characterization of Surface Active Compounds in Indigenous Crude Oil Fractions," paper No. TU- Chem. (07)/96, Paper, National Conference on Colloid and Emulsions of Natural and Synthetic Systems, Tripura University, Agartala, awarded certificate of merit & Cash prize, (Feb. 2-4, 1996).*
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- \*39. Pathak A. K. and **Kumar T.**: “*Performance Prediction of Slanted Profile Wells: A System Approach for Comparative Studies*,” **Paper, PETROTECH-97, 2nd International Oil and 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*,” **Paper, PETROTECH-97, 2nd 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*,” **Paper, IORS 1997, the Fourth Annual India Oil & Gas Review Symposium**, Mumbai (August 18-19, 1997).
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- 45. **Kumar T.** and Choudhuri B.: “*Practicalities of Detection of Boundaries from Pressure Transient Tests*,” **Paper, 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*,” **Paper, 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*,” **Paper, 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*,” **Paper, 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-MS, SPE India International Oil & Gas Conference and Exhibition**, New Delhi (April, 7-9, 1998).

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- \*51. **Kumar T.** and Choudhary P. K.: “*Problems and Remedies of Scale Formation in Oil Production System and Water Injection System*,” **Paper, PETROTECH-99, 3rd International Oil and Gas Conference and Exhibition**, New Delhi, (Jan. 9 - 12, 1999).

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- \*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,” **Paper, PETROTECH-2001, 4th 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,” **Paper, PETROTECH-2001, 4th International Oil and Gas Conference** and Exhibition, New Delhi (Jan. 9-12, 2001).
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- \*65. Pathak A. K. and **Kumar T.:** “Techno economic Evaluation of Slanted Well Drilling Technology and its Applications in Oil & Gas Field Development,” **Paper, PETROTECH-2003, 5th International Oil and Gas Conference** and Exhibition, New Delhi (Jan. 9-12, 2003).

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- \*72. **Kumar T.** and Choudhary, P. K.: "*Investigation on the Effect of Various Types of Organic Inhibitors on Inhibition of Oilfield Scales*", **Paper, 2nd Kuwait International Petroleum Conference & Exhibition**, held in Kuwait City, State of Kuwait, (Dec. 10-12, 2005).

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78. **Kumar T.**, Kumar Vibhas, and Singh G.: "*Historical, Geographical, Environmental and Social Aspects of Dhanbad*", **Paper, MINENVIS, A Journal of Centre of Mining Environment**, Dept of Environmental Science & Engineering, ISM University, Dhanbad, No. 51, (December 2006).

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- 96. **Kumar T.:** “*Energy Security of India through Optimum Development of Fossil Fuels and Alternative Energy Resources*,” **Journal, Indian Geological Congress**, vol. 1, No. 2, November 2009.
- 97. **Kumar T.:** “*Environmental Problems Inherited by BCCL Due to Unscientific Mining During Pre-Nationalization Period*”, **National Seminar** on “Coking Coal Resources Facing Crisis due to Unscientific Mining during Pre-nationalization period and occurrence of fire” BCCL, Dhanbad (1 Nov. 2009).
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- \*112. Bera Achinta, Ojha K., Mandal A. and Kumar T.: “*Phase Behavior and Physicochemical Properties of (Sodium Dodecyl Sulfate + Brine + Propan-1-ol + Heptane) Microemulsions,*” **J of Chemical and Engineering Data, (ACS 2.5, Q2)**, Vol. **57**, p1000-1006, (Feb 2012).
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