List of selected important publications of Dr. Vikas Mahto

International Journals

- 1.Rohit Sharma, Vikas Mahto, Hari Vuthaluru, "Synthesis of PMMA/modified graphene oxide nanocomposite pour point depressant and its effect on the flow properties of Indian waxy crude oil", Published in the Fuel, [I.F. 4.908 Index in : SCI,SCIE] Vol. 235, Jan 2019, pp 1245-1259.
- 2. Praveen Kumar Jha, Vikas Mahto, Vinod Kumar Saxena, "Study the effect of polymers on the stability and rheological properties of oil-in-water pickering emulsion muds", Published in the Korea Australia Rheology Journal, [I.F. 0.954 Index in : SCIE,SCOPUS] Vol. 30, No. 2, Jun 2018, pp 127-136.
- 3. Barasha Deka, Rohit Sharma, Arnab Mandal, Vikas Mahto, "Synthesis and evaluation of oleic acid based polymeric additive as pour point depressant to improve flow properties of Indian waxy crude oil", Published in the Journal of Petroleum Science and Engineering, [I.F. 2.38 Index in : SCI,SCIE] Vol. 170, Jun 2018, pp 105-111.
- 4. Rituraj Singh, Vikas Mahto, Hari vuthaluru, "Development of a novel fly ash-polyacrylamide nanocomposite gel system for improved recovery of oil from heterogeneous reservoir", Published in the Journal of Petroleum Science and Engineering, [I.F. 2.38 Index in : SCI,SCIE] Vol. 165, Jun 2018, pp 325-331.
- 5. Tinku Saikia, Vikas Mahto, "Evaluation of Soya Lecithin as Eco-friendly Biosurfactant Clathrate Hydrate Antiagglomerant Additive", Published in the Journal of Surfactant and Detergents, [I.F. 1.450 Index in : SCIE] Feb 2018.
- 6. Tinku Saikia, Vikas Mahto, "Temperature Augmented Visual Method for Initial Screening of Hydrate Inhibitors", Published in the Oil & Gas Science and Technology, [I.F. 1.417 Index in : SCI,SCIE] Vol. 73, No. 1, Jan 2018, pp 1-8.
- 7. Shailesh Kumar, Vikas Mahto, "Use of a Novel Surfactant To Prepare Oil-in-Water Emulsion of an Indian Heavy Crude Oil for Pipeline Transportation", Published in the Energy & Fuels, [Index in : SCI,SCIE] Vol. 31, Aug 2017, pp 12010?12020.
- 8. Tinku Saikia, Vikas Mahto, "Quantum Dots: A New Approach in Thermodynamic Inhibitor for the Drilling of Gas Hydrate Bearing Formation", Published in the Journal of Industrial Engineering and Chemistry, [I.F. 4.179 Index in : SCIE] Vol. 52, Mar 2017, pp 89-98.
- 9. Tinku Saikia, Vikas Mahto, "Experimental investigations of clathrate hydrate inhibition in water based drilling fluid using green inhibitor", Published in the Journal of Petroleum Science and Engineering, [Index in : SCI,SCIE] Vol. 147, Nov 2016, pp 647-653.

- 10. Tinku Saikia, Vikas Mahto, "Evaluation of 1-Decyl-3-Methylimidazolium Tetrafluoroborate as clathrate hydrate crystal inhibitor in drilling fluid", Published in the Journal of Natural Gas Science and Engineering, [I.F. 2.803 Index in : SCIE] Vol. 36, Nov 2016, pp 906-915.
- 11. Rajat Jain, Vikas Mahto, "Formulation of a water based drilling fluid system with synthesized graft copolymer for troublesome shale formations", Published in the Journal of Natural Gas Science and Engineering, [I.F. 2.803 Index in : SCIE] Vol. 38, Feb 2017, pp 171-181.
- 12. Rituraj Singh, Vikas Mahto, "Synthesis, Characterization and Evaluation of Polyacrylamide Grafted Starch/Clay Nanocomposite Hydrogel System for Enhanced Oil Recovery", Published in the Petroleum Science, [I.F. 1.624 Index in : SCIE] Vol. 14, No. 4, Sep 2017, pp 765–779.
- 13. Shailesh Kumar, Vikas Mahto, "Emulsification of Indian heavy crude oil using a novel surfactant for pipeline transportation", Published in the Petroleum Science, [I.F. 1.624 Index in : SCIE] Vol. 14, No. 2, May 2017, pp 372–382.
- 14. Saket Kumar, Rajat Jain, Pulkit Chaudhary, Vikas Mahto, "Development of Inhibitive Water Based Drilling Fluid System with Synthesized Graft Copolymer for Reactive Indian Shale Formation", Published in the Society of Petroleum Engineers, [Index in : SCOPUS] Apr 2017.
- 15. Shailesh Kumar, Vikas Mahto, "Emulsification of Indian heavy crude oil in water for its efficient transportation through offshore pipelines", Published in the Chemical Engineering Research and Design, [I.F. 2.795 Index in : SCI,SCIE] Vol. 115, Nov 2016, pp 34-43.
- 16. Shivanjali Sharma, Vikas Mahto, V P Sharma, Amit Saxena, "An emperical correlation for estimating the viscosity of non-Newtonian waxy crude oils", Published in the Petroleum Science and Technology, [I.F. 0.981 Index in : SCIE] Vol. 34, No. 6, Apr 2016, pp 523-530.
- 17. Bhola Kumar Paswan, Rajat Jain, Sunil Kumar Sharma, Vikas Mahto, V P Sharma, "Development of Jatropha oil-in-water emulsion drilling mud system", Published in the Journal of Petroleum Science and Engineering, [I.F. 2.382 Index in : SCI,SCIE] Vol. 144, Aug 2016, pp 10-18.
- 18. Rajat Jain, Triveni Kumar Mahto, Vikas Mahto, "Rheological investigations of water based drilling fluid system developed using synthesized nanocomposite", Published in the Korea-Australia Rheology Journal, [I.F. 0.954 Index in : SCIE] Vol. 28, No. 1, Feb 2016, pp 55–65.
- 19. Rituraj Singh, Vikas Mahto, "Preparation, characterization and coreflood investigation of polyacrylamide/clay nanocomposite hydrogel system for enhanced oil recovery", Published in the Journal of Macromolecular Science, Part B, [I.F. 1.005 Index in : SCIE] Vol. 55, No. 11, Sep 2016, pp 1051-1067.
- 20. Triveni Kumar Mahto, Rajat Jain, Soumen Chandra, Dhrubojyoti Roy, Vikas Mahto, Sumanta Kumar Sahu, "Single step synthesis of sulfonic group bearing graphene oxide: A promising carbo-nano material for biodiesel production", Published in the Journal of Environmental Chemical Engineering, [I.F. 3.42] Vol. 4, No. 3, Sep 2016, pp 2933-2940.

- 21. Rituraj Singh, Vikas Mahto, "Study of the polymer concentration and polymer/crosslinker ratio effect on gelation time of a novel grafted polymer gel for water shutoff using a central composite design method", Published in the Polymers for Advanced Technologies, [I.F. 2.137 Index in : SCI,SCIE] Vol. 27, Aug 2015, pp 204-212.
- 22. Rajat Jain, Bhola Kumar Paswan, Triveni Kumar Mahto, Vikas Mahto, "Study the effect of synthesized graft copolymer on the inhibitive water based drilling fluid system", Published in the Egyptian Journal of Petroleum, [Index in : SCOPUS] Vol. 26, No. 4, Dec 2017, pp 875-883.
- 23. Rituraj Singh, Vikas Mahto, "Study of the Gelation and Rheological Behavior of Carboxymethyl Cellulose-Polyacrylamide Graft Copolymer Hydrogel", Published in the Journal of Dispersion Science and Technology, [I.F. 1.454 Index in : SCI,SCIE] Vol. 36, No. 6, Jun 2014, pp 877-884.
- 24. Rajat Jain, Vikas Mahto, "Evaluation of polyacrylamide/clay composite as a potential drilling fluid additive in inhibitive water based drilling fluid system", Published in the Journal of Petroleum Science and Engineering, [I.F. 2.382 Index in : SCI,SCIE] Vol. 133, Sep 2015, pp 612-621.
- 25. Vikas Mahto, "Kinetic study of wax deposition in flow lines due to Indian Waxy Crude Oil", Published in the International Journal of Oil, Gas and Coal Technology, [I.F. 0.582 Index in : SCIE] Vol. 10, No. 3, Jun 2015, pp 293-305.
- 26. Rajat Jain, Vikas Mahto, "Evaluation of polyacrylamide-grafted-polyethylene glycol/silica nanocomposite as potential additive in water based drilling mud for reactive shale formation", Published in the Journal of Natural Gas Science and Engineering, [I.F. 2.803 Index in: SCIE] Vol. 26, Sep 2015, pp 526-537.
- 27. Praveen Kumar Jha, Vikas Mahto, Vinod Kumar Saxena, "Study the effects of carboxymethyl cellulose and tragacanth gum on the properties of emulsion based drilling fluids", Published in the Canadian Journal of Chemical Engineering, [I.F. 1.265 Index in : SCI,SCIE] Vol. 93, No. 9, Jun 2015, pp 1577-1587.
- 28. Upendra Singh Yadav, Vikas Mahto, "Insitu Gelation Study of Organically Crosslinked Polymer Gel System for Profile Modification Jobs", Published in the Arabian Journal for Science and Engineering, [I.F. 1.092 Index in : SCIE] Vol. 39, No. 6, Jun 2014, pp 5229–5235.
- 29. Praveen Kumar Jha, Vikas Mahto, Vinod Kumar Saxena, "Emulsion Based Drilling Fluids: An Overview", Published in the International Journal of Chemical Tech Research, [Index in : SCOPUS] Vol. 6, No. 4, Jul 2014, pp 2306-2315.
- 30. Rajat Jain, Vikas Mahto, Triveni Kumar Mahto, "Study of the Effect of Xanthan Gum Based Graft Copolymer on Water Based Drilling Fluid", Published in the Journal of Macromolecular Science Part A, [I.F. 1.057 Index in : SCI,SCIE] Vol. 51, No. 12, Nov 2014, pp 976-982.
- 31. Praveen Kumar Jha, Vikas Mahto, Vinod Kumar Saxena, "Study the effects of xanthan gum and aluminium stearate on the properties of oil-in-water emulsion drilling fluids", Published in the Arabian Journal of Science and Engineering, [I.F. 1.092 Index in : SCIE] Vol. 41, No. 1, Jan 2016, pp 143–153.

- 32. A K Maurya, Vikas Mahto, V P Sharma, Sukumar Laik, "Study the potential of amino resin to control excessive water production in the Indian oilfields", Published in the Petroleum Science and Technology, [I.F. 0.981 Index in : SCIE] Vol. 32, No. 12, Apr 2014, pp 1443-1447.
- 33. Shivanjali Sharma, Vikas Mahto, V P Sharma, "Effect of Flow Improvers on Rheological and Microscopic Properties of Indian Waxy Crude Oil", Published in the Industrial and Engineering Chemistry Research, [I.F. 3.141 Index in : SCI,SCIE] Vol. 53, No. 12, Mar 2014, pp 4525–4533.
- 34. Vikas Mahto, D Verma, A Kumar, V P Sharma, "Wax Deposition in Flow Lines under Dynamic Conditions", Published in the Petroleum Science and Technology, [I.F. 0.981 Index in : SCIE] Vol. 32, No. 16, Jun 2014, pp 1996-2003.
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- 36. Vikas Mahto, P Srikanth, B Vamsi Krishna, "Development of non-damaging and inhibitive water based oil well drilling fluids", Published in the Petroleum Science and Technology, [I.F. 0.981 Index in : SCIE] Vol. 31, No. 7, Feb 2013, pp 721-726.
- 37. Vikas Mahto, "The Prevention of pipe sticking problems caused by water based drilling", Published in the Petroleum Science and Technology, [I.F. 0.981 Index in : SCIE] Vol. 31, No. 21, Sep 2013, pp 2237-2243.
- 38. Vikas Mahto, V P Sharma, "Characterization of Indian Bentonite Clay Samples for Water Based Drilling Fluids", Published in the Petroleum Science and Technology, [I.F. 0.981 Index in : SCIE] Vol. 26, No. 15, Oct 2008, pp 1859-1868.
- 39. A R Khan, Vikas Mahto, F A Fazal, Sukumar Laik, "Studies of wax deposition onset in case of Indian crude oil", Published in the Petroleum Science and Technology, [I.F. 0.981 Index in : SCIE] Vol. 26, No. 14, Aug 2008, pp 1706-1715.
- 40. V P Sharma, Vikas Mahto, "Studies on less expansive environmentally safe polymers for development of water based drilling fluids", Published in the SPE, One Petro, [Index in : SCOPUS] Aug 2006, pp 1-4.
- 41. Vikas Mahto, V P Sharma, "Tragacanth Gum: An effective oil well drilling Fluid additive", Published in the Energy Sources, [I.F. 0.555 Index in : SCI] Vol. 27, No. 3, Oct 2009, pp 299-308.
- 42. Vikas Mahto, V P Sharma, "Rheological study of a water based oil well drilling fluid", Published in the Journal of Petroleum science and engineering, [I.F. 2.38 Index in : SCI,SCIE] Vol. 45, No. 1-2, Nov 2004, pp 123-128.

- 43. V P Sharma, Vikas Mahto, "An overview of the recent developments on safety issues & environmental consideration in deep water drilling fluid Technology", Published in the Oil Asia Journal, Vol. 19, Sep 2003, pp 51-52.
- 44. Praveen Jha, Vikas Mahto, Vinod Kumar Saxena, "Study the rheological and filtration properties of oil-in-water emulsion for its application in oil and gas well drilling", Published in the Journal of Petroleum Engineering and Technology, Vol. 3, No. 3, Sep 2018, pp 25-30.
- 45. Shivanjali Sharma, Vikas Mahto, V P Sharma, "Emerging Technologies to Control Wax Deposition in the Oilfields: An overview", Published in the Journal of Petroleum Engineering and Technology, Vol. 3, No. 2, May 2013, pp 28-35.
- 46. Vikas Mahto, Rajat Jain, "SHALE GAS IN INDIA: STATUS AND CHALLENGES", Published in the JOURNAL OF PETROLEUM ENGINEERING & TECHNOLOGY, Vol. 4, No. 1, Jan 2014, pp 23-32.
- 47. Rahim Sheikh, Vikas Mahto, "Development of partially hydrolyzed polyacrylamide based gel system for its application in profile modification jobs", Published in the AMET Maritime Journal, No. 2, Jun 2014, pp 25-32.
- 48. Upendra Singh Yadav, Vikas Mahto, "Rheological Study of Partially hydrolyzed polyacrylamide-hexamine-pyrocatechol gel system", Published in the International Journal of Industrial Chemistry, Vol. 4, No. 8, Feb 2013, pp 1-6.
- 49. Upendra Singh Yadav, Vikas Mahto, "Modelling of partially hydrolyzed polyacrylamide- hexamine-hydroquinone gel system used for profile modification jobs in the oilfield", Published in the Journal of Petroleum Engineering, Nov 2012, pp 1-11.
- 50. U P Sharma, Vikas Mahto, V P Sharma, "Advances in Selection Criteria of Wells for Gel Placement", Published in the Drilling and Exploration World, Mar 2009, pp 37-40.

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- 1. A Senthil Kumar, Vikas Mahto, V P Sharma, "Behaviour of organic polymers on the rheological properties of Indian bentonite water based drilling fluid system and its effect on formation damage", Published in the Indian Journal of Chemical Technology, [I.F. 0.348 Index in : SCIE] Vol. 10, No. 5, Sep 2003, pp 525-530.
- 2. Rajat Jain, Tinku Saikia, Vikas Mahto, "Developement of inhibitive water based drilling fluid system for shale formation", Published in the Recent Trends in Fluid Mechanics, Vol. 1, No. 2, Jan 2014, pp 12-14.
- 3. Rajat Jain, Navin Kumar, Vikas Mahto, "effect of Fly Ash on the Rheological and Filtration Properties of Palm Oil-in-Water Emulsion Based Drilling Fluid", Published in the Recent Trends in Fluid Mechanics, Vol. 2, No. 1, Aug 2014, pp 33-37.

National Conferences

- 1. Shivanjali Sharma, Vikas Mahto, V P Sharma, "Production, Transportation and Handling of Waxy Crude Using Chemical Methods", Published in the National Seminar on Chemistry in our lives, held at Bilaspur, Chattisgarh, during 01 Feb 2013 to 02 Feb 2013.
- 2. Vikas Mahto, Hamid Siddique, A K Pathak, "Application of High Power Laser in Oil and Gas Well Drilling: An Overview", Published in the National Conference on Advances in Lasers and Spectroscopy, held at ISM Dhanbad, during 01 Nov 2012 to 03 Nov 2012.
- 3. Vikas Mahto, P K Kashyap, P Shrikanth, B V Krishna, "Study the effect of carbon nano particle on the water based drilling fluid systems", Published in the National Conference cum Workshop on Geological and Technological Facets of CBM, Shale Gas, Energy Resources and CO2 Sequestration , held at Indian School of Mines Dhanbad, during 19 Nov 2010 to 20 Nov 2010.
- 4. Vikas Mahto, P K Kashyap, U S Yadav, A K Pathak, "Emerging Developments on Polycrystalline Diamond Compacts Bits for Hard and Highly Heterogeneous Reservoir", Published in the National Seminar on Drills and Drilling: An Update, held at Indian School of Mines Dhanbad, during 23 Sep 2010 to 24 Sep 2010.
- 5. Vikas Mahto, V P Sharma, "Study the combined effect of partially hydrolyzed polyacrylamide and tragacanth gum on the properties of water based drilling fluids", Published in the National Seminar on Drills and Drilling: An Update, held at Indian School of Mines Dhanbad, during 23 Sep 2010 to 24 Sep 2010.
- 6. Vikas Mahto, "Study the rheological properties of Indian Waxy Crude Oil", Published in the National conference on Recent Advances in Chemical Engineering, held at G.I.E.T. Gunupur, Orissa, during 30 Jan 2010 to 31 Jan 2010.
- 7. U S Yadav, Vikas Mahto, "Study the effect of gelation time on Polyacrylamide based gel systems with organic crosslinkers", Published in the National conference on Recent Advances in Chemical Engineering, held at G.I.E.T. Gunupur, Orissa, during 30 Jan 2010 to 31 Jan 2010.
- 8. Vikas Mahto, S Sharma, V P Sharma, Sukumar Laik, "Studies on polyarylamide-Resorcinol –formaldehyde system for profile modification jobs", Published in the Production Technology Conference-PRODCON-2009, held at IOGPT, Panvel, Navi Mumbai, during 26 Jun 2009 to 27 Jun 2009.
- 9. Vikas Mahto, "Environmental management in oil well drilling operations: An overview", Published in the National Conference on Frontiers in Chemical Engineering, held at IIT Guwahati, during 12 Dec 2007 to 14 Dec 2007.
- 10. Vikas Mahto, "Commercial production of natural gas hydrates: Options and Challenges", Published in the National Seminar on Gas Hydrates-A potential source of Energy to be, held at NGRI, Hyderabad, during 05 Feb 2007 to 06 Feb 2007.
- 11. Vikas Mahto, "Recent advances in waste minimization techniques at oil well drill site: An overview", Published in the National seminar on Catalysing Vision 2020: Challenges of Indian Chemical engineers, held at NIT, Rourkela, during 06 Jan 2007 to 07 Jan 2007.

- 12. Vikas Mahto, S P Singh, "Simulation of biodegradation of phenolic compounds in a fluidized bed bioreactor", Published in the National conference on Reactor Design, Simulation & Operation, held at H.I.T. Haldia, during 24 Mar 2006 to 25 Mar 2006.
- 13. Vikas Mahto, S P Singh, "Solid waste management in Petroleum Refining Industries", Published in the Waste management in chemical and allied industries: A vision 2020(WMCI-2005), held at N.I.T. Rourkela, during 01 Oct 2005 to 02 Oct 2005, pp 138-142.
- 14. Vikas Mahto, Sukumar Laik, "Environmental aspects of coal bed methane production technology", Published in the First Indian Mineral Congress, held at I.S.M. Dhanbad, during 28 Feb 2005 to 01 Mar 2005, pp 106-111.
- 15. Sukumar Laik, Vikas Mahto, "Emerging developments on Coal bed methane production technology: An overview", Published in the First Indian Mineral Congress, held at I.S.M. Dhanbad, during 28 Feb 2005 to 01 Mar 2005.
- 16. S P Singh, Vikas Mahto, "Direct prediction of expanded bed height as a function of reduced Reynolds number in a Gas solid Fluidization", Published in the Ist National conference of research scholars and young scientists in chemical engineering, held at I.I.T. Kharagpur, during 25 Sep 2004 to 27 Sep 2004.
- 17. V P Sharma, Vikas Mahto, J D Nath, "An overview of the recent technological development for removal of hydrocarbons from oil contaminated soils and ground water", Published in the conference on Environment Management & Emerging Trends in Petroleum Sector, held at Goa, India, during 25 Feb 2004 to 27 Feb 2004.
- 18. Vikas Mahto, Dheeraj Kumar, "Emerging Developments of Drilling Technologies for underground coal gasification process wells: An Overview", Published in the National Conference on Underground Coal Mining, held at Indian School of Mines, Dhanbad, during 09 Nov 2006 to 10 Nov 2006, pp 379-383.
- 19. Vikas Mahto, "Commercial production of natural gas hydrates: Options and Challenges", Published in the National Seminar on Gas Hydrates-A potential source of Energy to be, held at Hyderabad, during 05 Feb 2007 to 07 Feb 2007.

International Conferences

- 1. Rohit Sharma, Vikas Mahto, Barasha Deka, "Synthesis, characterization and evaluation of a nanocomposite based novel pour point depressant for improving the flow properties of waxy crude oil", XVII International Seminar on Mineral Processing Technology (MPT 2018), held at IIT (ISM), Dhanbad during 10 Oct 2018 to 12 Oct 2018.
- 2. Barasha Deka, Vikas Mahto, "Development and application of a synthesized polymeric additive for improving flowability of crude oil through pipeline", XVII International Seminar on Mineral Processing Technology (MPT 2018), held at IIT (ISM), Dhanbad during 10 Oct 2018 to 12 Oct 2018

- 3. Shailesh Kumar, Barasha Deka, Vikas Mahto, "Application of a novel surfactant and ultrasonic waves for emulsification of an Indian heavy crude oil in water for pipeline transportation", XVII International Seminar on Mineral Processing Technology (MPT 2018), held at IIT (ISM), Dhanbad during 10 Oct 2018 to 12 Oct 2018.
- 4. Bhola Kumar Paswan, Vikas Mahto, "Evaluation of indigenous vegetable oil for drilling of shale gas reservoir", Young Scientists' Conference, India International Science Festival, held at Lucknow during 5 Oct 2018 to 6 Oct 2018.
- 5. Barasha Deka, Vikas Mahto, Rohit Sharma, "Study of effect of pour point depressant on waxy crude oil for improving flow ability", Published in the International Conference on Challenges and Prospects of Petroleum Production and Processing Industries, held at IIT (ISM), Dhanbad, during 12 Jan 2017 to 14 Jan 2017.
- 6. Rohit Sharma, Vikas Mahto, Barasha Deka, "Formation of Crude Oil-in-Water Emulsion to improve the Flow Ability of Heavy and Waxy Indian Crude", Published in the International Conference on Challenges and Prospects of Petroleum Production and Processing Industries, held at IIT (ISM), Dhanbad, during 12 Jan 2017 to 14 Jan 2017.
- 7. Shailesh Kumar, Vikas Mahto, "Application of Anionic Surfactants for Emulsification of an Indian Heavy Crude Oil in Water for Transportation through Offshore Pipelines", Published in the International Conference on Challenges and Prospects of Petroleum Production and Processing Industries, held at IIT (ISM), Dhanbad, during 12 Jan 2017 to 14 Jan 2017.
- 8. Tinku Saikia, Vikas Mahto, "Experimental Investigation and Comparison of Sodium Polyacrylate and Potassium Chloride in Low Temperature Drilling Fluid", Published in the International Conference on Challenges and Prospects of Petroleum Production and Processing Industries, held at IIT (ISM), Dhanbad, during 12 Jan 2017 to 14 Jan 2017.
- 9. Rituraj Singh, Rajat Jain, Vikas Mahto, "Study the effect of polymer and crosslinker concentration on gelation time of polyacrylamide/clay nanocomposite hydrogel system using central composite design method", Published in the International Conference on Challenges and Prospects of Petroleum Production and Processing Industries, held at IIT (ISM), Dhanbad, during 12 Jan 2017 to 14 Jan 2017.
- 10. Rajat Jain, Vikas Mahto, Upendra Singh Yadav, A K Tyagi, "Recent developments in Water Based Drilling Fluids: A Review", Published in the International Conference on Challenges and Prospects of Petroleum Production and Processing Industries, held at IIT (ISM), Dhanbad, during 12 Jan 2017 to 14 Jan 2017.
- 11. Saket Kumar, Rajat Jain, Pulkit Chaudhary, Vikas Mahto, "Development of Inhibitive Water Based Drilling Fluid System with Synthesized Graft Copolymer for Reactive Indian Shale Formation", Published in the SPE Oil and Gas India Conference and Exhibition, , held at Mumbai, India, during 04 Apr 2017 to 06 Apr 2017.

- 12. Arnab Mandal, Chandan Sahu, Vikas Mahto, Subodh Purohit, M C Nihalani, "Studies on flow assurance challenges faced by Indian waxy crude oil", Published in the International Conference on Petroleum Science & Technology, held at IIT, Madras, during 18 Dec 2016 to 19 Dec 2016.
- 13. Sukumar Laik, V P Sharma, Vikas Mahto, "Emerging developments on flare gas recovery technologies: An overview", Published in the Recent Trends in Design, Development, Testing & Certification of Exequipment for Explosive Environment, held at Science City Kolkata, during 07 Nov 2014 to 09 Nov 2014.
- 14. Rajat Jain, Upendra Singh Yadav, Saket Kumar, Vikas Mahto, "Development of an oil-in-water emulsion mud system for troublesome shale formations using soybean oil", Published in the NexGen Technologies for Mining and Fuel Industries, held at New Delhi, during 15 Feb 2017 to 17 Feb 2017, pp 1351-1358.
- 15. Praveen Kumar Jha, Vikas Mahto, Vinod Kumar Saxena, "Experimental studies on long term stability of o/w emulsion based drilling fluids using oscillatory rheological measurement techniques", Published in the Third International Conference on Petroleum Science and Technology, held at IIT, Madras, during 03 Nov 2014 to 05 Nov 2014.
- 16. Vikas Mahto, Navin Kumar, Rajat Jain, Rituraj Singh, "Study the effect of nano particles on oil-in-water emulsion mud", Published in the International Conference On Structural and Physical Properties of Solids, held at Indian School of Mines, Dhanbad, during 18 Nov 2013 to 20 Nov 2013.
- 17. Praveen Kumar Jha, Vikas Mahto, Vinod Kumar Saxena, "Development of emulsion based drilling fluid system for depleted fractured reservoirs", Published in the International Conference on Future Challenges in Earth Sciences for Energy and Mineral Resources, held at Indian School of Mines, Dhanbad, during 14 Nov 2013 to 16 Nov 2013.
- 18. Shivanjali Sharma, Vikas Mahto, V P Sharma, "Study of wax inhibition in virgin and treated crude oils using polar microscopy", Published in the International Conference on Future Challenges in Earth Sciences for Energy and Mineral Resources, held at Indian School of Mines, Dhanbad, during 14 Nov 2013 to 16 Nov 2013.
- 19. Rajat Jain, Vikas Mahto, "Development of water based drilling fluid system using synthesized polyacrylamide grafted xanthan gum / silica nanocomposite for reactive Indian shale formation", Published in the 6th World Petrocoal Congress, held at New Delhi, during 15 Feb 2016 to 17 Feb 2016.
- 20. Rituraj Singh, Vikas Mahto, "Novel eco-friendly organic cross-linked polymer nanocomposite gel system for water shut-off in low temperature reservoirs", Published in the 6th World Petrocoal Congress, held at New Delhi, during 15 Feb 2016 to 17 Feb 2016.
- 21. Rajat Jain, Vikas Mahto, "Development of nondamaging drilling fluid system for shale gas reservoirs", Published in the International Conference on Future Challenges in Earth Sciences for Energy and Mineral Resources, held at Indian School of Mines, Dhanbad, during 14 Nov 2013 to 16 Nov 2013.

- 22. Shivanjali Sharma, Vikas Mahto, V P Sharma, "Study the effect of flow improvers on Indian waxy crude oils", Published in the Second International Conference on Drilling Technology and First National Symposium on Petroleum Science and Engineering, held at I.I.T. Madras, during 06 Dec 2012 to 08 Dec 2012.
- 23. Vikas Mahto, Upendra Singh Yadav, Ajay Kumar, V P Sharma, "Effect of Time and Temperature on the Rheological Behavior of Partially Hydrolyzed Polyacrylamide-Hexamine-Pyrocatechol Gel System", Published in the 19th Annual India Oil & Gas Review Summit & International Exhibition, held at Mumbai, India, during 06 Sep 2012 to 07 Sep 2012.
- 24. Vikas Mahto, V P Sharma, "Study the effect of additives on the differential pipe sticking caused by water based drilling fluid", Published in the International conference on Oil, Gas and Petrochemical Issues, held at Phuket, Thailand, during 11 Aug 2012 to 12 Aug 2012.
- 25. Vikas Mahto, U S Yadav, P K Kashyap, "Study the kinetics of the gelation behaviour of crosslinked polymer gel system for profile modification jobs", Published in the 18th Annual India Oil & Gas Review Summit & International Exhibition, held at Mumbai, during 08 Sep 2011 to 09 Sep 2011.
- 26. U S Yadav, Vikas Mahto, "Study the Onset of Gelation Behavior of Polymer Gel Solution Used for Profile Modification Jobs in the Oilfields", Published in the International Conference on New Paradigms of Exploration and Sustainable Mineral Development: Vision 2050, held at ISM, Dhanbad, during 10 Nov 2011 to 12 Nov 2011.
- 27. Vikas Mahto, Ajay Kumar, A K Pathak, "Commercial production of Shale Gas: Options and Challenges", Published in the International Conference on New Paradigms of Exploration and Sustainable Mineral Development: Vision 2050, held at ISM, Dhanbad, during 10 Nov 2011 to 12 Nov 2011.
- 28. Vikas Mahto, A K Pathak, V P Sharma, "Study the effect of polymers on rheological properties and filtration properties of water based drilling fluids", Published in the First International Conference on Drilling Technology, held at I.I.T. Madras, during 18 Nov 2010 to 21 Nov 2010.
- 29. Vikas Mahto, Dharmendra Verma, Harveer Singh, "Kinetic Study of wax deposition in the flow lines due to Indian Crude Oil", Published in the First International Conference on Drilling Technology, held at I.I.T. Madras, during 18 Nov 2010 to 21 Nov 2010.
- 30. Vikas Mahto, A K Maurya, "Studies on Resin based gel system to control excessive water production in the oilfields", Published in the APA International Conference on Polymer Science and Engineering: Emerging Dimensions, held at University Institute of Chemical Engineering and Technology, Chandigarh, during 26 Nov 2010 to 27 Nov 2010.
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- 32. Vikas Mahto, U S Yadav, P K Kashyap, S K Sharma, "Simulation of Polymer Gel Systems for profile modification jobs in the oilfields", Published in the APA International Conference on Polymer Science and

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- 2. V P Sharma, Vikas Mahto, Shivanjali Sharma, hold the patent for "Effectiveness of sorbiton mono oleate as pour point depressant on on India waxy crude oils" with Patent No. : 15/2016 and Date of Pub. : 01 Apr 2016