



Brief CV of
Prof. Tarkeshwar Kumar
Department of Petroleum Engineering
Indian Institute of Technology
(Indian School of Mines), Dhanbad-826004
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Email (O): tkumarpe@iitism.ac.in
Personal: tkumar2002@yahoo.com

Prof. T. Kumar has obtained BTech in 1977 and MTech in 1984 both in Petroleum Engineering from ISM Dhanbad and PhD in 1988 from Heriot-Watt University Edinburgh UK, also in Petroleum Engineering. Earlier he served Assam Oil Company Digboi for four years before joining ISM Dhanbad as a faculty member in 1981. He has been Professor in the Department of Petroleum Engineering of ISM Dhanbad since 22nd January 1992. Earlier during 2005 to 2015, he served for more than ten years as Director of the institutes which included ISM Dhanbad, NIFFT Ranchi and NIT Durgapur.

Prof. Kumar is reviewer of a few National and International journals. He has conducted a number of training courses for executives of petroleum industry. He has also completed several research projects funded by AICTE, CSIR, UGC etc. and supervised many MTech and PhD scholars. He has to his credit over a hundred National and International publications, a book on EOR, a book on Management of Higher Technical Institution and a collection of Hindi poems, Pyar Ka Rishta – Ham Safar ke Liye (प्यार का रिश्ता - हम सफर के लिये), two edited books: India Mineral Conclave (2009) and Challenges and Prospects of Petroleum Production and Processing Industries (2017). His areas of research interest are Petroleum Reservoir and Production Engineering, Enhanced Oil Recovery, Petroleum Economics, Flow Assurance problems like Oilfield Scale, corrosion, Formation Damage, Coal Bed Methane, etc.

His work and achievement are highlighted in “**New Global Indian**” magazine under the heading ‘Fuelling Education, Igniting Inspiration’, in “**Chemical Business**” journal under the heading ‘Personality of the Month’ and in ISTE News Letter under the heading ‘Profile of an Engineering Teacher’. **ETV Bihar/Jharkhand** also telecasted a program on his Life & Achievement.

Prof. Kumar was earlier recipient of National Scholarship Award, Dr. Dhar prize for the best science student in ISM and Commonwealth Scholarship Award in UK. He was conferred with National Mineral Award-2008 by the Ministry of Mines, Govt. of India for outstanding contributions in the area of oil and gas.

His contributions to the advancement of engineering education and research are commendable.

**DETAILED RESUME
OF
Prof. (Dr.) Tarkeshwar Kumar**

1. Full Name: Prof. Tarkeshwar Kumar

2. Date of Birth: 18th January 1956

3. Address:

Dept. of Petroleum Engineering,
Indian Institute of Technology (ISM)
Dhanbad- 826004, Jharkhand, INDIA
Mobile: 9732025025, 8051088444
Email (O): tkumarpe@iitism.ac.in
Personal: tkumar2002@yahoo.com

4. Educational Qualification:

Sl No.	Degree	Board/Univ	Year of Passing	Division/Class (% of Marks)	Remarks
1	Higher Secondary from Netarhat Residential School, Netarhat, Dist- Latehar, Via-Ranchi, Jharkhand	Bihar School Examination Board, Patna	1972	1 st Division (79.5%)	8 th rank in the H. S. Board Examination
2.	Bachelor of Technology (Petroleum Engineering)	Indian School of Mines, Dhanbad (Deemed University)	1977	1 st Class (76.5%)	Dr. Dhar Prize for the Best Science student in the first year and second rank in the Final year
3.	Master of Technology (Petroleum Engineering)	- do -	1984	1 st class	By research
	Title of Thesis: “STUDY OF THE EFFECT OF TEMPERATURE ON THE RHEOLOGICAL PROPERTIES OF OILFIELD EMULSIONS”				
4.	PhD (Petroleum Engineering)	Heriot-Watt University, Edinburgh, UK	1988	Under the Commonwealth Academic Staff Scholarship Scheme, UK	
	Title of Thesis: “MODELING OF FORMATION DAMAGE DUE TO PARTICLE INVASION IN RELATION TO WATER INJECTION SCHEMES”				

5. Industrial and Teaching Experience:

Sl. No.	Name of the Company/ Institute	Designation	From	To	Pay-Scale
1.	Assam Oil Company Ltd. Digboi, (Subsidiary of Burmah Oil Co., UK)	Petroleum Engineer Trainee	08.08.1977	07.08.1978	Rs.750/-
2.	- do -	Assistant Engineer (Petroleum)	08.08.1978	31.12.1979	Rs.850-1550/- (Rs. 950/- basic + DA etc.
3.	- do -	Transport Controller	01.01.1980	06.06.1981	Rs.1050-1800/- (Rs. 1200/-basic + CCA+DA etc)
4.	Indian School of Mines, Dhanbad	Lecturer (Petroleum Engg.)	22.06.1981	16.01.1984	Rs.700-1600/- (Rs.1350/- basic + CCA+DA etc.)

5.	- do -	Assistant Professor (Petroleum Engg)	17.01.1984	22.01.1992	Rs.3700-5700/- (Rs.4575/- basic + CCA+DA etc.)
6.	- do -	Professor (Petroleum Engg)	23.01.1992 18.08.2009 (HAG)	Continuing	Rs.1,82,200-2,24,100/- (Rs.2,24,100/- basic + DA etc.)
7.	- do -	Head of the Department (Petroleum Engg)	24.01.1992	23.01.1998	-
8.	- do -	Dean (Student Affairs/ Students Welfare)	01.07.2001	08.12.2003	-
9.	- do -	Dean (Academic & Research)	09.12.2003	11.08.2005	-

5a. Administrative Experience (on Deputation):

1.	Indian School of Mines, Dhanbad	Director (Head of the Institute)	09.08.2005	03.07.2011	Rs. 75000/- (fixed) + Sp. Pay +DA etc.
2.	National Institute of Foundry & Forge Technology, Ranchi	Director (Head of the Institute)	11.04.2008	11.07.2011	Additional Assignment
3.	National Institute of Technology, Durgapur	Director (Head of the Institute)	11.07.2011	03.12.2015	Rs. 75000/- (fixed) + Sp. Pay +DA etc.
Professor of Petroleum Engineering (Since 1992, HAG since 2009), Department of Petroleum Engineering, IIT(ISM) Dhanbad 826004 INDIA, Member of Executive Council, Jharkhand Univ of Technology (2019-21) and AICTE Margdarshak Team (since 2020), National Mineral Awardee-2008, {Formerly, Director, IIT (ISM) & NIT Durgapur; Dir. (Addl. Ch.) NIFFT Ranchi; Mentor Director GKCIET Malda, NIT Arunachal Pradesh; Part-time Non-Official Director, NTPL & UCIL}					

6. Research Experience:

Sl. No.	Institution/Organization	Duration	Remarks
1.	Indian School of Mines, Dhanbad	1982-1984	Research work in connection with M.Tech degree by research
2.	Heriot-Watt University, UK	1985-1988	Research work in connection with PhD research
3. 4.	Indian School of Mines, Dhanbad National Institute of Technology Durgapur	1989-2011 & 2011-2015	Research work in connection with development of shallow offshore fields, formation damage-network modeling of porous media, Oil field scale control, Development of Corrosion Inhibitor, Enhanced Oil Recovery etc.

7. Books published: (a) **Books/Proceedings:** (i) Edited book from proceedings of seminar titled “India Mineral Conclave” (Edited), 2009 (ii) Coauthored book titled “Applications of Microemulsions in Enhanced Oil Recovery” (Lambert Academic Publishing) (Authors: Achinta Bera, Ajay Mandal and Tarkeshwar Kumar) available on Amazon.com, 2014, (iii) Authored book titled: “Management and Governance in Higher Technical Institution – Reflections and Experiences,” Partridge Publishing, December 2016 (iv) a collection of Hindi poems, Pyar Ka Rishta – Ham Safar ke Liye (प्यार का रिश्ता - हम सफर के लिये), (v) an edited book from proceedings of international conference on Challenges and Prospects of Petroleum Production and Processing Industries (2017).

8. Short Courses:

- Attended several short courses of one to two weeks' duration organized by Indian as well as foreign experts in the field of Management and Petroleum Engineering. This includes basic management, preventive maintenance, water shut-off and stimulation of oil and gas wells, enhanced oil recovery and well testing.
- Coordinated several short courses for oil industry executives ranging from one week to 12 weeks and delivered lectures in them.

9. Visits abroad:

- a) 3 years at Heriot-Watt University, Edinburgh for completing PhD under Commonwealth Academic Staff Scholarship Scheme, UK (1985-88)
- b) 2 weeks to USA to present a paper SPE 17148 titled "The Value and Analysis of Core-Based Water Quality Experiments as Related to Water Injection Schemes" in the SPE Formation Damage Control Symposium during February 8-9, 1988 held in Bakersfield, California, USA and visited various laboratories connected with Petroleum Engineering research work at Core Lab. Inc. Bakersfield (California); Science Application Inc. Las Vegas (New Mexico); Sandia National Lab, Albuquerque (New Mexico); Phillips66 Production Research Lab, Bartlesville (Oklahoma); Amoco Production Research Lab., Tulsa (Oklahoma); Centre for Formation Damage Control studies, Department of Petroleum Engineering, University of Texas at Austin (Texas); and Centre for Earth Science and Engineering (Rock Mechanics Research), Department of Petroleum Engineering, University of Texas at Austin, Texas.
- c) One week to USA to present a paper SPE 18203 titled "A New Approach for Mathematical Modeling of Formation Damage Due to Invasion of Solid Suspension" in the SPE Annual Conference & Exhibition during October 2-5, 1988 held in Houston, Texas USA.
- d) One week to Kuwait to present a technical paper titled "Investigation on the Effect of Various Types of Organic Inhibitors on Inhibition of Oilfield Scales" in the Second Kuwait International Petroleum Conference & Exhibition during Dec. 10-12, 2005 held in Kuwait City, Kuwait.
- e) Four days to Kemer-Antalya, Turkey for attending 21st International Mining Congress & Exhibition of Turkey and delivering Keynote Address titled "Sustainable Development in Mining Industry : An Indian Perspective" during May 6-8, 2009.
- f) Five days to Beijing, China for attending BITS 1st Annual International Congress & Exposition of Oilfield Chemicals and delivered Keynote address titled "Challenges in Enhanced oil Recovery by Chemical Flooding" during Nov. 15-17, 2010.
- g) Four days to Paris, France for presenting paper titled "Physicochemical Properties of Micro emulsions and its use in Enhanced Oil Recovery" in ICCEE 2012: International Conference on Chemical and Environmental Engineering, Paris, France April 25-27, 2012.
- h) Six days to Muscat, Oman for interaction and collaboration with Caledonian College of Engineering including talk to students and faculty as well as attending SPE conference on EOR during 31 March to 6 April 2014 followed by two days visit to Dubai, UAE during 7-9 April 2014.

10. Fellowship/Membership of Reputed Professional Institute/Organization:

- (i) Life Fellow, The Institution of Engineers (India), **FIE**
- (ii) Life Member, Mining Geological & Metallurgical Institute of India, **MMGI**
- (iii) Life Member, Indian Society for Technical Education, **ISTE**
- (iv) Life Member, Indian Institute of Public Administration, **IIPA**
- (v) Life Member, Indian Geological Congress, **IGC**
- (vi) Life Member, Society of Petroleum Geophysicists, **SPG**
- (vii) Member, Society of Petroleum Engineers International (USA), **SPE**

11. List of Grant-in-Aid/R&D/PhD/MTech Projects under the Guidance of Prof. T. KUMAR

- (i) Modeling of Artificial Island to Develop Shallow Oilfields (**PhD research scholar M. K. Jha**). UGC-ISM Project No. 1/139, 1991
- (ii) Substitution of Diesel by Natural Gas in Internal Combustion Engines (MTech external research scholar K. Vidyasagar) 1993
- (iii) Application of Pressure Derivative Analysis to Study the Effect of Boundaries on Late Time Transient (MTech external research scholar - B. Choudhuri) 1993
- (iv) Optimum Development of Marginal Oil and Gas Fields Using Mathematical Programming Models. (MTech external research scholar – A. M. Siddiqi) 1994
- (v) Coordinated a grant-in-aid project from Oil Industry Development Board (OIDB) to the Department worth Rs.185 lakhs.
- (vi) Performance Prediction of Horizontal Wells Under Depletion and Active Water Drive Conditions in Heterogeneous Carbonate Reservoirs in Bombay Offshore Area (MTech external research scholar - K. N. Jha) 1995
- (vii) Development of an Expert System on Horizontal Well Technology (**MTech part time research scholar - Dr. A. K. Pathak**) 1995
- (viii) Performance of a Reservoir Developed with Horizontal Well and its Comparison with Vertical Counterparts. (MTech external research scholar - A. K. Maji) 1997.
- (ix) Effective Reservoir Management under Technological and Logistical Constraints for Marginal Offshore Oil & Gas Fields, (MTech external research scholar - K. K. Jha) 1997.
- (x) Study of Characterization of Reservoir Rocks and Their Influence in EOR Processes. (MTech dissertation scholar - M. Muthumanikam) 1997.
- (xi) Study of Gas Flow Behaviour through Gas Lift Valve under Dynamic Flow Conditions (MTech external research scholar - B. Sarkar) 1998.
- (xii) Polysaccharide Based Graft Copolymers for Enhanced Oil Recovery Operations (**MTech dissertation scholar - Dr. G.P. Karmakar**) 1998.

- (xiii) Optimization Studies of Water Injection Profiling in a Multi-layered Carbonate Reservoir Offshore, Bombay (MTech external research scholar - Pankaj K. Shah) 1998.
- (xiv) Characterization of Naturally Occurring Surface Active Agents in Indigenous Crude Oils and Their Effect on Fluid Flow Through Porous Media (UGC Sponsored research project, PI- Dr. A. K. Pathak, Co-Investigator-Prof. T. Kumar, JRF-S. N. Mishra) 1998.
- (xv) Enhanced Oil Recovery Using Grafted Polysaccharides (*AICTE sponsored project, PI- Dr. G. P. Karmakar, Co-Investigator- Prof. T. Kumar*) 1998.
- (xvi) Corrosion Protection of N80 Steel Casing during the Acidization of an Oil Well (MTech dissertation scholar – K. Srinivas Rao) 2000.
- (xvii) Design of Hydrofracturing Treatment for Enhancing Well Productivity in Siltstone/ Sandstone Pay Zones Underlain with Coalbed (MTech external research scholar - V. K. Prasad) 2000.
- (xviii) Study of Corrosion Inhibitors for Structural Steel in Oil Wells - a CSIR Sponsored Project (*PhD research scholar - Emranuzzaman*) 1998-02.
- (xix) Corrosion Protection of N-80 Steel in Acid Environment with Crude Oil by Some Commercial Inhibitors (*MTech dissertation scholar – S. P. Karmakar*) 2001-02.
- (xx) Problem of Scale in Oilfields of India - an ISM - UGC Sponsored Project (*PhD Research Scholar - P.K. Choudhary*) 1995-03.
- (xxi) Simulation of Production Profile of CBM Wells (*MTech dissertation scholar – Anuj Bajpai*) 2003-04.
- (xxii) Study of Insitu Combustion EOR Method with Computer Modelling for Indian Oilfield Conditions (*MTech dissertation scholar – Rajasekharan S.*) 2003-04.
- (xxiii) Design of Oilfield Production and Surface Processing Systems and Studies on Related Factors (*MTech dissertation scholar – Amit Jaisawal*) 2004-05.
- (xxiv) Studies on Inhibition of Calcium Carbonate Scale Formation in Oil Wells, *ISM Project (ISM PhD Scholar - Shiv Shankar Kundu)*, 2005-09.
- (xxv) Improved Recovery of Oil by Surfactant Induced Wettability Alteration and Interfacial Tension Reduction, *UGC sponsored Project (ISM PhD Scholar - Achinta Bera)*, 2009-13.
- (xxvi) Role of Coal Composition and maturity on the Sorption Behaviour of Indian Coal for Gas Storage Estimation (*NITD CSIR- CIMFR PhD Scholar - Sujoy Chatteraj*), 2014-20.
- (xxvii) Experimental Investigation on Transesterification of Non-Edible Oils Employing Heterogeneous Carbon Based Chemical and Biocatalyst in Batch and Packed Bed Reactors (*NITD PhD Scholar - Sumit H. Dhawane*), 2015-19.
- (xxviii) Studies on Lubricants used in various Industrial applications (*NITD PhD scholar- Sushanta Kumar Roy*), 2015-.
- (xxix) Studies on Treatment of Oilfield Scales and its Remediation Using Novel Chemicals (*IIT(ISM) PhD Scholar - Sanjeev Kumar*), 2015-18
- (xxx) Simultaneous Physicochemical Separation, Treatment and Reuse of Industrial wastes to save the Natural Resources (*NITD PhD Scholar - Uttarini Pathak*), 2015-20.
- (xxxi) Role of Proppant Properties and Closure Stress on Fracture Conductivity in Hydraulic Fracturing (*IIT(ISM) PhD Scholar - B. N. Vaidya*), 2018-

12. Honours/achievements/membership of Committees/Councils outside:

- Member of Executive Council, Jharkhand University of Technology (2019-21).
- Member, AICTE Margdarshak (mentor) Team (since 2020).
- Director, ISM Dhanbad (2005-11) and Director, NIT Durgapur (2011-2015).
- Director (Addl. Charge) of NIFT Ranchi (2008-2011);
- Mentor Director GKCIET Malda (2011-2015) and NIT Arunachal Pradesh (2011-12).
- Part-time Non-Official Director, NTPL Tuticorin/Chennai, TN (2011-14).
- Part-time Non-Official Director UCIL Jadugora Jharkhand (2011-14)
- Convener and the Editor of the book from proceedings of international conference on Challenges and Prospects of Petroleum Production and Processing Industries (2017).
- Member of the Organizing Committee of Global Summit on Petroliferous Basins-2015 on the theme “Basin Exploration, Evaluation, Research, Modeling and Development,” Philadelphia, USA (December 07-09, 2015).
- Member, Advisory Committee, Int. Conf. on “Petroleum Engineering and Science 2014” at IIT Madras, 3-5 Dec 2014.
- Member West Bengal State Steering Committee of NPUI, MHRD, GOI from 2013.
- Member, Governing Council, Association of Indian Universities, 2012-14.
- Member, Equivalence Committee, Staff Welfare and Coordination Committee, Association of Indian Universities 2012-14.
- Member, National Advisory Committee, Indian Chemical Engineering Congress, CHEMCON-2012 jointly by NIT Jalandhar & Doaba Regional Centre, IICE 27-30 Dec 2012.
- Member, Advisory Committee, 2nd International Conf. on “Drilling Technology 2012 (ICDT-2012)” & 1st National Symposium on “Petroleum Sci. & Engg. 2012 (NSPSE-2012)” 6-8 Dec 2012, IIT Madras.
- Recipient of the prestigious [National Mineral Award-2008](#) in recognition of his significant contribution in the field of Oil and Gas, awarded by Ministry of Mines, Govt. of India on February 27, 2010.

- Editor, “India Mineral Conclave”, organized by Indian School of Mines Alumni Association in association with Directorate General of Mines Safety and Central Institute of Mining and Fuel Research, during 5-6 February, 2010.
- Nominee of Visitor (President of India) in IIT, Kharagpur, Dec. 2006-12 & 2012-continue
- Nominee of Visitor (President of India) in IIT, Bhubneshwar, July 2010-12.
- Member, Central Geological Programming Board and member of Sub-Committee V: Energy, Minerals and Resources (Coal, Lignite & Geothermal), Min. of Mines, GOI, 2009-11.
- Member, Advisory Board of Indian Bureau of Mines, Govt. of India 2009-11.
- Member, Jharkhand State Geological Programme Council, 2005-11.
- Member, Jharkhand State Mineral Advisory Committee, 2005-11.
- Member, Academic Council, Banaras Hindu University, 2009-12.
- Member, Academic Council, U of Petroleum & Energy Studies (UPES), Dehradun, 2006-09.
- Member, General Body, Bihar Council of Science and Technology, 2007-11.
- Member, Board of Governors of BIT, Sindri, Nov. 2006-09.
- Member, Governing Body, Inst. of Env Management & Studies, Jamshedpur 2005-11.
- Council Member, Mining, Geol. & Metallurgical Inst. of India 1994-96, 2000-2003, 2009-15.
- Co-chaired Session II on “Centre-State Cooperation in Regulation of Mineral Resources” at Workshop on Centre-State Cooperation on Combating Naxalism and Natural Resources, Environment, Land and Agriculture organized by Commission on Centre-State Relations, New Delhi held at Bhubaneswar on 20-21 January, 2009.
- Member, National Advisory Committee for the National Workshop on “Ensuring Quality Technical Education in Eleventh Five Year Plan”, BIT, Mesra, Ranchi (March 25-26, 2008).
- Member, Advisory Committee for the National Conf. on Problems, Practices & Prospects in Power Distribution System, organized by Dept of Electrical Energy, Punjab Engineering College, Deemed University, Chandigarh (Dec 2007-Jan 2008).
- Member, National Advisory Committee for the National Conference on Fluid Power, BIT, Mesra (10-12 December, 2007).
- Member, Advisory Committee, National Seminar on Natural & Industrial Disasters Mitigation & Management, IEI Dhanbad Local Centre & DGMS, Oct 27-28, 2007.
- Member, Div. Railway Consumer Consultative Committee, EC Railway, Dhanbad, 2006-08.
- Chairman, Organizing Committee, All India Seminar & Exhibition on Advances in Computer & Information Technology (ACIT-2006), by IEI Dhanbad Local Centre, 11-12 March, 2006.
- Member, Monitoring Committee, TIFAC-CORE (Technology Information Forecasting & Assessment Council - Centre of Relevance & Excellence), Dibrugarh University on “Clastic Petroleum Reservoir Engineering” under DST, Min. of Sc. & Tech, Govt. of India, 2001-09.
- Ambassador, of Heriot-Watt University Watt club (U.K.) since 1998.
- Member, Program Committee, SPE India Oil & Gas Conf. & Exhibition 7-9 April, 1998.

13. Member of Expert/Selection Committee/Examiner/ Reviewer/Technical Editor outside:

- Member, JPSC Selection Committee for various positions, 2020
- Member, Selection Committee for Faculty, IIT Madras 2014, 2019.
- PhD examiner IIT Madras 2016, 2018 and PhD examiner Dibrugarh University 2015, 2016, 2020
- Member, Selection Committee for Faculty, RGIPT, Rae Bareilly 2015.
- Chairman, AICTE Expert Committee and member UGC review committee for Oriental University, Indore 2015
- Chairman, AIU Equivalence committee for MBA equivalence to PGDM for several management institutes in Ghaziabad, Delhi, Pune and Bangalore 2014-2015
- Member, Selection Committee for Registrar, NIT Calicut 2013.
- Member, Selection Committee for Registrar, NIT Nagpur 2013.
- Member, Selection Committee for Registrar and other officers of NIT Silcher 2013.
- Technical Editor, Canadian Journal of Petroleum Technology since 2009, 2017.
- Technical Editor, SPE Reservoir Evaluation and Engineering Journal, USA since 2007, 2016, 2017
- UPSC Selection Committee member for Civil Services Personality Test Board, 2010 & 2012.
- UPSC Selection Committee member for Joint Advisor (Pet)/Planning Commission during 1997-98 Member
- Member, AICTE Expert Committee for MIT Pune June 1996.
- Member, AICTE Expert Committee for Polytechnic at Barauni & Purnea, Bihar, 1997.
- Member, Panel of Assessors, MGMI, during 1993-95, 1997-99, 2003-05, 2010-12.
- Reviewer, IE Chem. Engineering Journal since 1997. Reviewer, Journal of Science & Industry Research, CSIR since 1996.
- PhD examiner, IIT Mumbai 1996 and NITIE, Mumbai 1998, NIT Jalandhar 2012,
- Listed in the Financial Times (FT) Oil and Gas 1999 year book and selected for inclusion in FT who’s who in world Oil and Gas 2000, London (U.K.). Bibliographic entry the INDOCEAN database by NICMAS – National Information Centre for Marine Sciences of NIO, GOA, 1998. Included in Rifacimento International ASIA/PACIFIC who’s who New Delhi, 1999. Included in Marquis who’s who in the world, N.J. USA, 2000.

14. Delivered addresses/special lectures as Chief Guest/Guest of Honour/Keynote Speaker.

- i. Delivered special lecture on “*Oil Conservation Measures in Petroleum Industry*” at the National Conference on Indian Mining Industry: Latest Development and Challenges (in Hindi) held at CMRI, Dhanbad on 09 May, 2006 as Guest of Honour.
- ii. Delivered special lecture on “*Role of Oil & Gas in the Energy Security of India*” at Central Mechanical Engineering Research Institute (CMERI), Durgapur as Guest of Honour as part of Golden Jubilee Celebration of the CSIR on 11 April, 2007 and paper published in the Golden Jubilee commemorative volume of the Institute.
- iii. Delivered special lecture on “*Role of Fossil Fuel on the Energy Security of India*” as Chief Guest in CIMFR, Dhanbad Campus and Digwadih Campus on the occasion of Golden Jubilee celebration of CSIR on October 26, 2007.
- iv. Delivered special lecture on “*Health & Safety of Miners – Outlook for India*” as Chief Guest in the Workshop on Health & Safety in Asian Mines organized by DGMS, Dhanbad, January 21-22, 2008.
- v. Delivered address as Guest of Honour on ‘*Micro & Small Scale Industries*’ in All India Seminar on Status, Constraints and Prospects of Small Scale Industries in Jharkhand, organized by The Institution of Engineers (India), Dhanbad Local Chapter during January 28-29, 2008.
- vi. Delivered Convocation Address as Chief Guest on ‘*Challenges and Issues Concerning Environmental Management and Technological Solutions*’ at the Institute of Environment Management and Studies, Jamshedpur, 5th May, 2008.
- vii. Delivered 2nd Prof. Prem Bahadur Verma Memorial Lecture on ‘*Energy Security of India through Optimum Development of Fossil Fuels and Alternative Energy Resources*’ during Sixteenth Biennial Convention of Indian Geological Congress held at National Geophysical Research Institute, Hyderabad, on 4th February, 2009.
- viii. Delivered Keynote Address on ‘*Sustainable Development in Mining Industry : An Indian Perspective*’ at the 21st International Mining Congress & Exhibition of Turkey held at Kemer-Antalya, Turkey during May 6-8, 2009.
- ix. Delivered Keynote Address on ‘*Challenges in Enhanced oil Recovery Due to Chemical Flooding*’ at the 1st BITS International conference on Oilfield chemicals held at Beijing, China during Nov. 15-17, 2010.
- x. Delivered Keynote Address on ‘*Developments in Drilling Technology,*’ at the 1st International Conference on Drilling Technology (ICDT) held at IIT Madras, Chennai, (18-20 Nov., 2010).
- xi. Delivered Keynote Address on ‘*Energy Security of India – Fossil Fuels & Alternative Energy Resources*’, Keynote paper at the 1st. World PetroCoal Congress-2011 (Int. Conf. & Exhibition), organized by RAGA Integrated Technology Management Services, New Delhi (Feb 9-12, 2011).
- xii. Delivered plenary lecture on “*Energy Security of India - Role of Fossil and Renewable Energy,*” during Indian Chemical Engineering Congress, CHEMCON-2012 jointly by NIT Jalandhar & Doaba Regional Centre, IICE 27-30 Dec 2012.
- xiii. Delivered an invited Keynote on Integrated Management at JNTU Kakinada on 15.3.2013
- xiv. Delivered a plenary talk on “*Enhanced Oil Recovery - A Future Solution for Mitigating the Oil Crisis,*” in the ESMOC-2013 an International conference on Energy System Modelling and Optimization, held at NIT Durgapur (9-11 Dec 2013).
- xv. Delivered an invited talk On Role of Nanotechnology for Enhancement of Oil Production at Caledonian College of Engineering, Muskat, Oman on 2 April 2014.
- xvi. Delivered Keynote address on Problems and prospects of oil and gas in the MGMI Conference held in Kolkata on 15 Feb. 2014.
- xvii. Delivered Keynote address in R&D Conclave 2014 on ‘Challenges for Energy Industries’ at the Indian Institute of Technology Madras, Chennai, India on 4th November 2014 organized within the Third International Conference on “Petroleum Science and Technology 2014 (ICPST – 2014) during 3-5 Nov.2014.
- xviii. Delivered invited talk on “*Energy Security of India: Challenges of Sustainable Development with Fossil Fuels, Renewable and Unconventional Sources of Energy*” in the National conference organized by Indian Council of Chemists at ISM Dhanbad on 16 Dec. 2014.
- xix. Delivered a special lecture on 5 days Short Term Program entitled ‘Emerging Trends of Waste Management and Valorization (ETWMV-2016)’ organized by NIT Durgapur during July 8-12, 2016.
- xx. Delivered a special lecture on “*Training SC/ST Community in Selected Rural Areas of Durgapur on Organic Agriculture and Bio fertilizer production*” organized by NIT Durgapur on 5TH May 2017.
- xxi. Delivered expert lecture on Energy Security of India and Role of Exploration and Exploitation of Petroleum,” organized by ABVIET Shimla under TEQIP-III on 19 August 2019.
- xxii. Delivered the Keynote talk “*Frontiers in Oil and Gas Production Research*” in the National Conference on Upstream Petroleum Engineering (NCUPE 2019) at IIT Guwahati during 02-03 November, 2019.
- xxiii. Delivered invited talk on “*Current Scenario in the Research and Development for Oil and Gas Production from Conventional and Unconventional Sources,*” in the National conference organized under TEQIP-III by Dibrugarh University institute of Technology, 14-15 July 2020.

15. Publications.

More than hundred and fifty publications including papers published in international/national journals and papers presented/published in the proceedings of international/national seminars/conferences/workshops (See the list of publications).