PUBLICATIONS

ARTICLES/CHAPTERS PUBLISHED IN THE BOOKS

- Nair V.C., **Gupta P.**, Sangwai J.S. Gas Hydrates as a Potential Energy Resource for Energy Sustainability. In: De S., Bandyopadhyay S., Assadi M., Mukherjee D. (Eds.) Sustainable Energy Technology and Policies. Green Energy and Technology. Springer, Singapore. 2018, 1, 265-287 (link to book)
- Nair V.C., Jadhawar P., **Gupta P.**, Chapter 3 - Rheological characterization of nanofluids, Editor(s): Tushar Sharma, Krishna Raghav Chaturvedi, Japan J. Trivedi, Nanotechnology for CO2 Utilization in Oilfield Applications, Gulf Professional Publishing, Published: June 1, 2022, Pages 37-57, ISBN 9780323905404, https://doi.org/10.1016/B978-0-323-90540-4.00007-7. (Link)
- **Gupta P.,** Bhajan Lal b, Nair V.C., Chapter 14 - Solid CO2 storage by hydrate-based geo sequestration, Editor(s): Tushar Sharma, Krishna Raghav Chaturvedi, Japan J. Trivedi, Nanotechnology for CO2 Utilization in Oilfield Applications, Gulf Professional Publishing, June 1, 2022, Pages 251-273, ISBN 9780323905404, https://doi.org/10.1016/B978-0-323-90540-4.00009-0 (Link)

PATENT

- Nair V.C., **Gupta P.**, Sangwai J.S. System and Method for Recovering Energy or Minerals from a Reservoir. Application number: 201941016768, Filed on 26 April 2019.

PEER-REVIEWED JOURNALS (SCI/SCIE/SCOPUS INDEXED)

- Dadi, N.R., Maurya, N.K. and **Gupta, P.**, 2024. Advancing foam EOR: A comprehensive Examination of key parameters and mechanisms from surfactants to nanoparticles. Journal of Molecular Liquids, p.126177. (https://doi.org/10.1016/j.molliq.2024.126177)

- **Gupta, P.***, Krishna, S. and Maurya, N.K., 2024. Thermodynamic, Rheological, and Electrical Properties of Hydrate Inhibitors: Implications for Natural Gas Production and Flow Assurance. Energy & Fuels, 38(16), pp.15284-15294. (link to paper)

- Patel, S., Wilson, I., Sreenivasan, H., Naveen, P., **Gupta, P.** and Krishna, S., 2024. Proppant transportation and placement in fractures by water and liquid nitrogen: a numerical simulation. Computational Particle Mechanics, 11(2), pp.721-743. (link to paper)
- Wilson, I., Saini, S., Sreenivasan, H., Sahu, C., Krishna, S. and **Gupta, P*.**, 2023. Review and perspectives of energy-efficient methane production from natural gas hydrate reservoirs using carbon dioxide exchange technology. Energy & Fuels, 37(14), pp.9841-9872. (link to paper)

- **Gupta, P**., Mondal S., Sangwai, J.S., Gardas R.L., Investigation on the Effect of Ionic Liquids and Quaternary Ammonium Salts on the Kinetics of Methane Hydrate; Industrial & Engineering Chemistry Research, 2023 **(Link to paper)**

- Mousumi Nandi, Neha Vyas, Rakesh Kumar Vij, **Pawan Gupta*.** A review on the natural gas ecosystem in India: Energy scenario, market, pricing assessment with the developed part of the world and the way forward. ***Journal of Natural gas Science and Engineering****) 2022* (Link)

- **Gupta, P**., Nair, V.C. and Sangwai, J.S., 2021. Polymer-Assisted chemical inhibitor flooding: a novel approach for energy recovery from hydrate-bearing sediments. Industrial & Engineering Chemistry Research, 60(22), pp.8043-8055. (Link)

- Perumalsamy. J, **Gupta, P.**, Jitendra S., Performance Evaluation of Esters and Graphene Nanoparticles as an Additive on the Rheological and Lubrication Properties of Water-Based Drilling Mud. ***Journal of Petroleum Science and Engineering*****.** 204, September 2021, 108680 (Link)

- William, M., **Gupta, P.**, Sangwai, J. Interaction of Lubricants on the Rheological and Filtration Loss Properties of Water-based Drilling Fluids. ***Petroleum Science and Technology***. Pages 235-248, 2021 (Link)

- Swaminathan P., **Gupta, P.**, Jadhawar, P., Nagarajan, R., Sangwai, J. Investigations on the thermal and electrical conductivity of polyethylene glycol-based CuO and ZnO nanofluids. ***Indian Chemical Engineer.*** 2019. (link to paper)

- **Gupta, P.**, Sangwai, J.S. Performance Evaluation of Oilfields Polymers (Polyacrylamide, Xanthan Gum, and Guar Gum) as Low-Dosage Kinetic Hydrate Inhibitors (LDHI). ***Energy & Fuels***. 2019, 337, 6335-6349 (link to paper)

- **Gupta, P.,** Nair, V.C., Sangwai, J.S. Phase Equilibrium of Methane Hydrate in the Presence of Aqueous Solutions of Polyacrylamide, Xanthan Gum, and Guar Gum ***Journal of Chemical and Engineering Data***. 2019 64, 1650–1661 (American Chemical Society publications, Impact factor: 2.323) (link to paper)

- Nair, V. C., **Gupta, P**., Sangwai, J. S. Natural Gas Production from a Marine Clayey Hydrate Reservoir Formed in Seawater using Depressurization at Constant Pressure, Depressurization by Constant Rate Gas Release, Thermal Stimulation and their Implications for Real Field Applications. ***Energy and Fuels.*** 2019, 33, 3108–3122 (link to paper)

- Nair, V. C., Mech, D., **Gupta, P**., Sangwai, J. S. Polymer Flooding in an Artificial Hydrate Bearing Sediments for Methane Gas Recovery. ***Energy and Fuels.*** 2018, 32, 6657–6668 (American Chemical Society publications, Impact factor: 3.091). (link to paper)

- **Gupta, P.,** Nair, V.C., Sangwai, J.S. Phase equilibrium of methane hydrate in the presence of aqueous solutions of quaternary ammonium salts. ***Journal of Chemical and Engineering Data***. **2018**, 63, 2410–2419. (American Chemical Society publications, Impact factor: 2.323) (link to paper)

- **Gupta P.,** Sakthivel, S., Sangwai, J.S. Effect of aromatic/aliphatic based ionic liquids on the phase behavior of methane hydrates: Experiments and modeling. ***Journal of Chemical Thermodynamics***. 2018, 117, 9-20. (Elsevier, Impact factor: 2.726) (link to paper)

- Avula, V.R., **Gupta, P**., Gardas, R.L., Sangwai, J.S. Thermodynamic modeling of phase equilibrium of carbon dioxide clathrate hydrate in aqueous solutions of promoters and inhibitors suitable for gas separation. ***Asia-Pacific Journal of Chemical Engineering***. 2017 12, 709-722. (Wiley online library, Impact factor: 0.84) (link to paper)

- Mech D., **Gupta P.**, Sangwai J.S., Kinetics of methane hydrate formation in an aqueous solution of thermodynamic promoters (THF and TBAB) with and without kinetic promoter (SDS). ***Journal of Natural Gas Science and Engineering***. 2016, 35, 1519-1534. (Elsevier, Impact factor: 2.718) (link to paper)