

Teesside University, UK

1. Enhanced Oil Recovery using Nanotechnology – Experimental Investigation
2. UK Shale Characterisation – Application in Hydraulic Fracturing.
3. Optimizing the Hydraulic Fracturing Performance while Minimizing its Environmental Impacts
4. Remediation of Groundwater Resources using Nanotechnology - Experimental and Modelling Investigation
5. Heat transfer from a bluff bodies in cross-flow of single and multi-component multiphase flows
6. Genetic modification of *Pseudomonas putida* (XylM, xylS and xylR) genes for effective Bioremediation of oil spill.
7. Single and multiphase Flow induced vibration of aerofoil and cylinder in cross flow
8. The Role of Visualisation and Augmented Reality in Increasing Energy Efficiency in the Built Environment
9. Study of multiphase flow in inclined pipes
10. Technologies regulatory frameworks and business models for the near future deployment of energy storage systems in electricity networks.
11. The Influence of Biochar on Bacterial-Protozoal Interactions
12. Elimination of volatile organic compounds by catalytic oxidation at low temperature
13. Computational fluid dynamics for microreactors used in catalytic oxidation of propane
14. Investigation of Steady and Transient Heat Transfer from a Pipe Covered with Two Layers of Phase Change Materials and Conventional Insulation

15. Whole Life Cycle Information Flow Approach enabled by Building Information Modelling (BIM) Protocols and Technologies
16. Semantic Tools for Carbon Reduction in Urban Planning (SEMANCO)
17. Developing a hybrid desalination plant with Hydrate Based Desalination (HBD) and Multi Stage Flash (MSH)
18. Cavity Enhanced MicroArray as an Ultra-sensitive Tool to aid Sepsis Diagnosis
19. Performance improvement in modelling gas-condensate reservoirs
20. High-Value, high-temperature materials for Electrical Machines (HiVEM)
21. Control and Optimisation for Demand Response Systems
22. Sensor Design and development: Two-phase gas-solid flow measurement
23. The optimization and development of gas condensate field
24. Polymer-supported catalysts for hydrogen production
25. Energy Efficient Power Electronic Applications for Traction and Renewables.
26. Improving Efficiency of Electric Vehicle (EV) Drive Systems.
27. The Development of Phosphine/Phosphine Oxide Redox-Based Organocatalyst
28. Artificial Intelligence in gaming and simulation.
29. Machine learning for biomedical predictions.
30. Evolutionary Algorithms for Solving Multiple Independent Optimization Problems.
31. Computational biology for personalised medicine.
32. Deep learning on mobile devices.