



THE AWARDS
Times Higher Education
**OUTSTANDING EMPLOYER
ENGAGEMENT INITIATIVE**

THE AWARDS
Times Higher Education
UNIVERSITY OF THE YEAR

 **Teesside
University**
Inspiring success

Science 2 Business Hub – an industry led partnership

Upstream Exploration and Production

Innovative opportunities for the oil and gas sector

Dr Stephen Oyston



one
NORTH EAST



Global Opportunities

- Petroleum technology is key to providing both energy and materials for the modern world.
- World energy needs demand cost-effective recovery of remaining oil and gas reserves . Increasingly, these resources are harder to access and recover.
- This need drives new technology development and generates global opportunities for the most innovative UK companies and institutions.
- Teesside is a major European centre for the chemical and petroleum processing sector.



Linchem Case Study

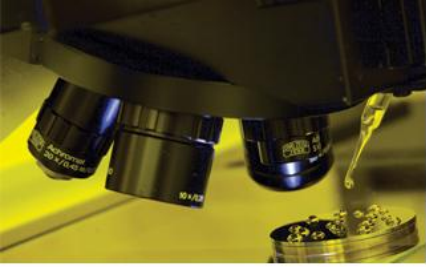
- Linchem, experts in speciality chemicals since 2000, have concluded a major project with the University.
- The University provided a lateral approach to problem solving and key analytical and lab resources, resulting in increased speed to market;

"Teesside University has provided excellent support via an experimental programme which demonstrated the chemical feasibility of Linchem's novel process for the synthesis of oilfield chemicals"

Malcolm Franklin, Linchem Joint MD

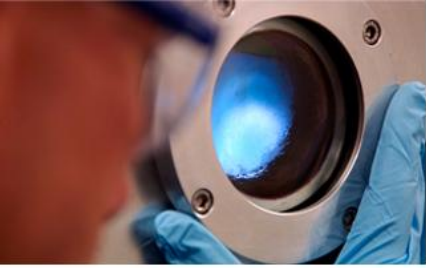
"It's difficult to conceive a more efficient and cost-effective route for oligomers for applications in the oilfield sector. Following on from this successful project work, which was completed ahead of schedule. Plans are already in place to establish commercial viability with a major international company in the oilfield sector, if patents are granted"

Terence Cox, Technical Manager at Linchem



Knowledge Transfer

- Teesside University has been given a ‘Grade A – Outstanding’ by the Technology Strategy Board for its Knowledge Transfer Partnership (KTP) with Newcastle-based Wellstream International- a leading manufacturer of oil and gas pipelines .
- Two KTP Associates, supported by academic supervisors Drs Abbas and Dhafr worked alongside Wellstream staff to improve management of technology across the whole organisation and help select the right hardware, software and training.



PgDip/MSc Petroleum Technology



- School of Science and Engineering at Teesside University aims to develop the problem solvers, innovators and leaders of the future.
- The PgDip/MSc Petroleum Technology course is designed to provide a specialism in the petroleum industry.
- The course develops understanding of:
 - The nature of petroleum constituents
 - Chemistry of conversion processes
 - Engineering issues in the refinery process
 - Computer modelling applied to real processing economics/processes
- It is characterised by the industrial support:
 - Visits and lectures by petroleum specialists
 - Industry-based dissertation projects.
 - Delivery through Industrialists, practitioners and academics



COLU Courses

Engineering HNC

- COLU currently offers HNC courses by distance learning in :
- Petroleum Engineering
- Process Engineering
- Chemical Engineering
- Instrumentation and Control Engineering
- Mechanical Engineering
- Electrical and Electronic Engineering



Thanks

- Thanks for listening
- Introduction of Dr Hussain H Ahmed- Meeting the needs of SMEs in the North East