

Thames Valley Specialised Section Electronics, Control Computing & Communications

## Induction Motors and Oil Wells

## David Graham Stoyerman Controls Ltd Thursday 27<sup>th</sup> November 2008 at 19:30 Palmer Building, The University of Reading

Light refreshments available from 19:00-19:30

Less than 100 miles from Reading is Britain's largest onshore oil field where several world firsts have been achieved to recover oil far from the wellhead, using 800kW induction motors driving downhole pumps only 100mm in diameter powered from the surface 8km away. This talk will discuss this by

- $\circ\,$  covering a brief history of the development of rotary drilling rigs
- considering the problems controlling a motor on a long cable and how the waveform produced by the variable speed drive at the top is radically different when it reaches the motor.
- o discussing some of the issues of making a hole with a drill pipe that is only 120mm diameter
- o outlining some of the exciting problems to be solved as the industry goes into new frontiers to find oil : drilling depths to 10km, water depths to 3600m, horizontal drilling to 15km, subsea wellheads and subsea compressor stations, etc.

If you want to know more, come along. All are welcome and no ticket is required. Simply turn up on the night. For more details please contact Dr Richard Mitchell at rjmitchell@theiet.org, or 0118 378 6790

**Directions** Enter the University at the main entrance from the A327 Shinfield Road. Follow the road until until it bends right, when you turn left and almost immediately right. Go straight on when the road goes to the left and park near the Palmer Building. See also <u>http://www.reading.ac.uk/maps/whiteknights-struct.htm</u>