INTRODUCTION TO PREDICTIVE MAINTENANCE FOR ENGINEERS – VIBRATION MONITORING & THERMOGRAPHY

13th October 2014

Jacobs Ltd, Park Square office, Birdhall Lane, Stockport, Cheshire SK3 0XN 18:00hrs for 18:30hrs start

Organised by the Process Industries Division, North West Centre & North Western Young Members Panel

Presented by:

Saira Dar- 3i Condition Monitoring Consultancy Andy Mellor - Pragmatic Maintenance & Reliability Ltd

3i CMC are an independent condition monitoring consultancy specialising in the use of thermography as a predictive maintenance tool. Rotating equipment has historically been analysed by other techniques such as vibration analysis but more recently industries have been introducing thermography as a trending tool. Thermography is an extremely versatile technique, which gives the user the ability to apply it to almost anything.

"How do you balance a 787 tonne machine that takes several days to reach thermal equilibrium?" Flywheel-generator-converters (FGC's) are an essential part of the power supplies for the Joint European Torus experimental fusion reactor at the Culham Centre for Fusion Energy. When one of Culham's two FGC's showed high vibration levels, the UK Atomic Energy Authority engaged Cheshire-based Pragmatic Maintenance and Reliability to carry out in-situ balancing. Andy Mellor, Pragmatic's MD will describe how the challenges were overcome and how balancing was successfully achieved. Pragmatic Maintenance and Reliability are specialists in Condition Monitoring, industrial reliability improvement and in solving dynamic problems with rotating machinery. **Background**

The IMechE Process Industries Division and the Young Members Panels in the North West have launched a new series of events for engineers of all ages and experience where you can find out a bit more about more about technologies that we as engineers come into contact with.

Whether you are a graduate who wants to see a component or piece of equipment in practice or are an experienced engineer who wants a refresher, or you have a burning question that you haven't been able to get an answer too hopefully this series of events will be of use to you!

Complimentary refreshments will be served from 18:00hrs, lectures will start at 18:30hrs **To book a place, please contact:** Paul Brown on Email: paul.brown@lyondellbasell.com See <u>www.imeche.org</u> for further details of this and many more events.

Event sponsor: Jacobs Engineering Ltd http://www.jacobs.com

