NEWSLETTER

AUTUMN 2015



OUR FOCUS

www.isipt.org

This Newsletter coincides with the ISIPT 2015 Symposium, our latest meeting of researchers and users of Industrial Process Tomography (IPT). For new members, IPT technology is founded upon the key concept that to monitor or control any industrial process we require appropriate information on its internal state. In many critical processes, typically those featuring inhomogeneous distributions or multiple components, simple one-dimensional sensing is inadequate. However, as presentations at the Symposium will illustrate, IPT technology provides a massive insight into such complex processes in many industry sectors.

We have perhaps now reached a pivotal point in the *lifecycle* of IPT. Our *first generation* science and technology has been transferred successfully to commercial products and embedded as 'multi-dimensional' sensing in a range of applications. We now have a wide range of IPT methods, based upon several sensing energy forms, and designed to address a wide range of process containments and materials. But as we will see in Dresden, based upon this successful first generation foundation, new questions and challenges continue to emerge as we embark upon the *second generation* of IPT.

WE NEED YOUR HELP - INDUSTRIAL APPLICATIONS

The ISIPT was formed from a UK consortium: the *Virtual Centre for Industrial Process Tomography* (VCIPT) jointly at the University of Leeds, and the University of Manchester Institute of Science and Technology with several major and SME companies. The VCIPT core aim was to develop IPT tools and systems specifically to meet industry needs. Our ISIPT website provides information on our events and access to publications but industry colleagues often ask about application exemplars. To reaffirm our <u>industrial</u> focus we plan to add a NEW *Applications* tab to the ISIPT website. If you are linked with an industrial application please consider submitting an IPT **Industry Case Study** for this new section. Confidentiality issues can arise of course, but often these can be addressed by editing sensitive details. Sharing solutions is beneficial for all in stimulating new applications. A **Case Study** can be brief: an outline of the type of process in general terms; the IPT equipment/method in use; the general information and benefits it delivers to the application, plus one or two illustrative images. It's important to note that we are interested in actual applications in industry (not in experimental equipment in the research lab'). We will create a web draft from your submission and refer this to you for final approval. Please submit your case study (or any questions) to: industry@isipt.org.

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WE NEED YOUR HELP - DEVELOPING OUR GLOBAL COMMUNITY

The aims of the ISIPT are: "to support the development of the science, engineering, technology application and practice of industrial process tomography by providing a focus for the dissemination of basic advances, networking opportunities for practitioners and a platform to promote the subject and promulgate international standards". A major role has been to continue the VCIPT initiated "World Congress in IPT" (WC) meetings series (held with generous support of local colleagues): WC1 Buxton UK 1999; WC2 Hannover Germany 2001; WC3 Banff Canada 2003, WC4 Aizu Japan 2005, and WC5 Bergen Norway 2007. At the Aizu WC attendees agreed to form the ISIPT to support a global community to coordinate future meetings from WC7. Volunteers hold executive officer roles to advance these plans (the ISIPT website provides details). With further generous local support several ISIPT events have been staged: WC6 Beijing China 2010 and WC7 Krakow Poland 2013; plus further Symposium and Workshop, leading to Dresden in 2015. Our next WCIPT events are WC8 Foz de Iguassu Brazil 2016, followed by Bath, UK. At our Krakow plenary meeting attendees agreed by an overwhelming majority to further develop the ISIPT global community through 3 specific actions; all of which have been completed.

- Build a simple membership database (to facilitate election of new Executive Officers from WC8). Our ISIPT website now provides basic information on all registered Members (to other Members). Membership is free. Members can choose to allow any other member to make indirect contact (an email is sent for each enquiry). Membership details are secure, no information is passed to any organisation, and data cannot be accessed by automated web systems.
- 2. **Provide free post-WC access to all previous papers to ISIPT members**. All previous WC papers can be accessed individually from contents list by any registered member. (To deter illegal publication an individual download is required for each paper).
- 3. Extend awareness of IPT by inviting and facilitating global information organisations to index the full WC series of conference papers. To facilitate this ISIPT adopted a set of *Values* covering aims, equality and actions on plagiarism. Both Elsevier *Scopus* and *Engineering Information* (EI) now index all the WC series, including all previous WC proceedings from WC1. We have also requested *Web of Science* to reconsider their initial decision (that IPT was "adequately represented in other journals").

The ISIPT can only effectively deliver its aims if it extends its coverage to everyone who has an interest, as a researcher, developer, a user or simply for people interested in how science and technology is applied. Please pass on information about ISIPT to your colleagues and contacts to grow our community.

We are all affected by 'succession planning'; please help the ISIPT to continuously renew our community by encouraging junior colleagues to become members - so that they can benefit and 'stand on our shoulders'.

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Brian Hoyle, on behalf of the ISIPT Executive Group