# **NEWSLETTER**

# **DECEMBER 2016**



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# **FUTURE EVENTS - DIARY DATES**

See Future Development Plans section below for details of NEW arrangements for ISIPT events.

Focussed Symposium Series - our small scale meetings that explore a specific topic or concept





FSIPT-17-1 - Sandpit Workshop - Real-time state/performance from IPT for process control.

Participate in an active workshop to define and address challenges in direct use of IPT data in on-line, realtime control of complex industrial processes; and participate in follow-on collaboration.

Venue: Imperial College, London, UK, Date: 19-20 April 2017

Who should attend: Researchers and industrialists having a major interest in creating new opportunities to exploit rich IPT data to enhance information available to process control systems to optimise their performance. To obtain a balanced group, members expressing interest (to <a href="mailto:events@isipt.org">events@isipt.org</a>) will be asked to provide their specific interest and expertise. We expect a maximum of about 30 attendees.

**Aims**: to identify major challenges in the application of IPT to process control, to explore approaches to promising methods and solutions; and to stimulate collaboration in following research and applications.

See: www.isipt.org/events/fsipt-17-1 for further details.

#### World Congress Series - our biennial global community meetings





# WCIPT9 - the 9th International World Congress in Industrial Process Tomography

Attend our major global congress that aims to allow all researchers and industrial users in IPT to review significant progress in papers, see industrial demonstrations, share views and agree collaboration.

Venue: University of Bath, Bath, UK. Date: 2-6 September 2018

**Who should attend**: All researchers in the wide range of disciplines embraced by IPT together with all Industrialists in the many application sectors addressed by IPT.

See: www.isipt.org/events/wcipt9 for preliminary details (Call for Papers to be published in 2017)

#### **PROPOSE AN EVENT**

The ISIPT invites all members to consider proposing an event. See the guidelines noted below for details of the brief information needed. Please submit proposals to: events@isipt.org.

#### **Focussed Symposium Series**

<u>Outline proposals are invited for FS series events</u> on a relevant **specific topic or concept**, for example (but not limited to) the examples of Theme 1 below. There are <u>no limits to the number of FS events supported</u>. The format should suit the aims: a topic may be debated using a 'round-table' approach, or in a task-group format. Small-scale meetings are encouraged that are simple and inexpensive to mount. Active participation is encouraged with an interdisciplinary set of attendees, not normally exceeding about 30.

# **World Congress Series**

Outline proposals are invited for the September 2020 WCIPT10 event. ISIPT policy is that WC Events are sited around the globe. Our 2020 event should take us to an area that we will then not have visited at all, or for some time. Our next 2018 event is in the UK, Europe; previous events have visited: Brazil, S. America (2016); Poland, Europe (2013); China, Asia (2010), Norway, Europe (2007), Japan, Asia (2005), Canada, N.America (2003), Germany, Europe (2001), UK, Europe (1999).

#### **Guidelines and General Requirements for Events**

Detailed Guidelines from proposing an outline, to detailed organisation are available on the ISIPT website: <a href="https://www.isipt/events/guidelines">www.isipt/events/guidelines</a>. Key points are that ISIPT events are intended to attract any member from any

country. To reduce delegate costs and travel time - event venues should ideally be located within a short distance from a major international airport (up to 2-3 hours by surface public transport). Venues should offer a range of nearby accommodation, from basic low cost rooms to business class hotels. Application for travel visas to the Country of the venue should be also straightforward in general. Availability of visas or facilities must not impose limitations that conflict with the stated Values of the ISIPT.

# **WCIPT8 - BRAZIL**

Our World Congress at Iguassu Falls in late September was a memorable meeting. Delegates enjoyed reports of interesting novel IPT developments and applications; excellent organisation and a sub-tropical, purpose-designed conference venue. The WCIPT8 logo (also shown at the bottom of the delegate photo below) has offered us an intriguing schematic impression of the Falls for several months; a bonus for delegates is that now we all have actual photos (e.g. below) of one Nature's most impressive *processes* to remind us of an excellent and highly enjoyable event. We are grateful to our host Professor Hamada and her magnificent team. Collected papers for WCIPT8 will be available on the ISIPT Members site soon.





### **JOURNAL SPECIAL EDITIONS**

WCIPT8 authors may be invited to submit a paper to one of two Special Edition Journals: *Flow Measurement and Instrumentation* (<a href="http://www.journals.elsevier.com/flow-measurement-and-instrumentation">http://www.journals.elsevier.com/flow-measurement-and-instrumentation</a>) and *Measurement Science and Technology* (<a href="http://iopscience.iop.org/journal/0957-0233">http://iopscience.iop.org/journal/0957-0233</a>). The WCIPT8 Paper must be considerably extended and comply with format and length requirements.

*IEE Sensors Journal* (<a href="http://ieeexplore.ieee.org/xpl/aboutJournal.jsp?punumber=7361">http://ieeexplore.ieee.org/xpl/aboutJournal.jsp?punumber=7361</a>) announces a Special Interest edition on the theme: **Process Imaging in the Area of Sensor Technology** for publication in 2017, **OPEN TO ALL AUTHORS**. Please contact editorial representative <a href="mailto:tanchao@tju.edu.cn">tanchao@tju.edu.cn</a> for further information.

# **FUTURE DEVELOPMENT PLANS**

The new Executive Committee (ExComm) formally began work at the WCIPT8 Plenary Assembly. In advance preparation for their work its members reviewed future development options. A planned consultation of members offering a wide range of choices was designed (Survey-1) and distributed by email to all members to gain views on 3 themes. The response was small; 25 members (~6%) of our membership of ~400 responded. However, as the first survey presented to members, the results offer interesting data and clearly should be taken into account in defining policy actions. The Plenary Assembly at WCIPT8 provided a further opportunity to obtain member's views. Minutes of the WCIPT8 Plenary Assembly on 27 September, and

Minutes of the following ExComm meeting on 28 September are available for members on the Governance section of website. Survey results are summarised below for the 3 key themes with proposals for action.

#### Theme 1 - Defining and Refining our Contribution

Members were invited to assign points for each of 10 research avenue topics, as tabulated in ranked order below. All 10 varied topics gained significant Survey support from 214 (for 'Real-time state/performance information from IPT for process control') to 119 (for 'Clamp-on Systems'). The Plenary debate raised other suggestions to increase industrial relevance.

Real-time state/performance information from IPT for process control	1 (214)
Integration of IPT Data with Conventional Instrumentation Data	2 (201)
Joint Estimation of Spatial Distribution and Material Identification	3 (172)
Novel Applications for Common Sensing Modes	4 (159)
Non-circular geometries	5 (142)
Very large geometries	5 (142)
Low-cost Radiation Based Systems	5 (142)
Extend Temporal Precision and/or Scale Precision	5 (142)
Joint Estimation of Pressure and Temperature Distribution	6 (125)
Clamp-on Systems	7 (119)

All topics are recommended for consideration (with others) for Focussed -Symposium Series Events.

#### Theme 2 - Refreshing and Focusing our Events and their Value

Our World Congress (WC) is intended to be our key ISIPT event at which our whole community can meet to review significant progress and share ideas for future directions. It is also the event at which full papers are presented, published on the ISIPT website, and can be developed in extended form for Special Issue journals. Yet WC attendance has been falling as our intermediate 'regional' have developed in global reach. In essence we currently have a large scale, wide-ranging meeting in most years creating unintended 'internal competition'. Members were also undecided in Survey-1 and the Plenary meeting on a 2 or 3 year cycle for the WC. ExComm identified a priority to resolve this situation through the following arrangements.

A 2-year cycle WC is viable as our sole event that addresses a <u>wide range</u> of work as full papers. This has the added advantage that doctoral students can attend and publish work in (at least) one convenient WC meeting. Also there can be an <u>unlimited</u> number of intermediate events in our NEW FOCUSSED SYMPOSIUM (FS) SERIES. These events explore a <u>narrow field</u> in detail appropriate to the aim of the specific event; and will not require formal conference papers. A summary presentation of each FS event will be requested at the following WC for information. A wide range of formats may be used to suit particular objectives, for example the two Workshop exemplars in Survey-1 (which both attracted considerable support).

Theme 3 - Expanding our Reach and Appeal (mainly through website resources)

Members were invited to give points for each of 10 support and information topics - ranked results are:-

IPT and its core techniques	1 (188)
Collaboration between Members/Institutions/Companies	2 (185)
industrial member interests	3 (184)

Publications in major IPT techniques	4 (167)
ISIPT Awards for Excellence in WC conference paper	5 (165)
ISIPT Community Award for Outstanding Contribution	6 (156)
Event Organization Toolkits	7 (152)
Younger member interests	8 (118)
Members to raise new ideas and priorities	9 (117)
Publication citations database	10 (112)

All 10 varied topics gained significant Survey support. Implementation will depend upon editorial and content assistance plus funding for web-support. We will assemble a priority list soon and request volunteers to provide sections. The Industry Case Studies requested below respond to the topic ranked 3.

#### **INDUSTRY CASE STUDIES**

In our recent plenary meeting at WCIPT8 several members expressed the view that we should have more information on applications of IPT on the ISIPT website. We would like to mount short, simple application overviews. Please submit your overview:

- Outline of the type of the target process in general terms;
- IPT equipment/method in use;
- General information and benefits delivered to the application,
- 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: <a href="mailto:industry@isipt.org">industry@isipt.org</a>.

# ONGOING DEVELOPMENT OF OUR GLOBAL COMMUNITY

We are all affected by 'succession planning'; <u>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'.</u>

#### **COMMUNICATIONS WITH CHINA**

We are sorry that access to our members in China has been disrupted by an internet operational issue. This has meant that members in China could not access the ISIPT website and may also have missed some emails. This has now been investigated in depth and action has been taken to resolve this issue. We apologise if you have not received earlier Newsletters - recent Newsletters have been added on the ISIPT website, under the **News** tab, so that you will be able to check any previous items.

#### **ACKNOWLEDGEMENTS**

Thanks to Philip Ronson for ISIPT website support; and the VCIPT (a Partnership of the Universities of Leeds and Manchester, UK) for funding costs.

**ISIPT Executive Group** 

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