

# pig MONTHLY

process intensification group | [www.pig.ncl.ac.uk](http://www.pig.ncl.ac.uk) | [www.pinetwork.org](http://www.pinetwork.org)

## Introduction

Welcome to the 2nd issue of the bi-monthly process intensification group newsletter. In this shorter article, recent news and a summary of the group's research activities for the last two months are presented. In addition, dates for the annual PIN and HEXAG meetings are announced and a new journal run by Prof David Reay is introduced.

## 2<sup>nd</sup> Advanced Workshop by EUROPIC

Dr Kamelia Boodhoo was recently invited to speak at the 2nd Advanced Workshop organized by EUROPIC in Dortmund, Germany on 19-20 January 2017. The theme of the workshop was "Process Intensification in High-Gravity Fields". Kamelia delivered a lecture on *Spinning Disc Technologies*.

EUROPIC is an industrial club of around 20 members, including major European chemical and pharmaceutical companies such as AkzoNobel, Hunstmann, DSM, etc. Each year, EUROPIC offers a course on PI fundamentals, which is well appreciated among the member companies. The Advanced Workshop is based on the idea to discuss selected topics in more depth with a group of experts. The recently held session was well attended by representatives from a range of companies such as Lonza, Sanofi, AkzoNobel, Arkema, Evonik, Solvay and Bayer to name but a few.

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Invited speakers at the 2nd Advanced Workshop, EUROPIC, Jan 2017

## PIG News

- The PIG would like to welcome the following new group members:
  - Aumber Abbas, *Postgraduate Student* (supervised by Dr Anh Phan and Dr Fernando Russo Abegao)
  - Ibrahim Mohammed, *Postgraduate Student* (supervised by Prof Harvey and Dr Jon Lee)
- Dr Takafumi Horie has now returned to Kobe University in Japan following his year long project in the PI group. His work will be highlighted in a future issue of this newsletter

## PIN & HEXAG Annual Meetings

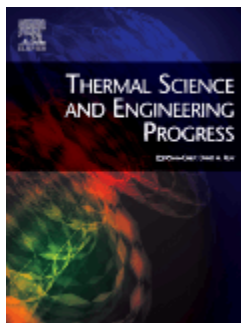
- The *Heat EXchanger Action Group (HEXAG)* meeting will be held in CEAM on Tuesday 20 June 2017
- The *Process Intensification Network (PIN)* meeting will be held in CEAM on the following day, Wednesday 21 June 2017
- Offers of talks (short 'impromptu's' or longer presentations) are welcome. Please contact either David Reay (HEXAG) or Adam Harvey (PIN)

## Thermal Science and Engineering Progress

A new Elsevier journal - "**Thermal Science and Engineering Progress (TSEP)**" - is now live on Evis, the Elsevier on-line paper processing system, and accepting submissions.

David Reay is the editor while Richard Law and Ahmed Mustaffar are on the Editorial Advisory Board. Barbara Sturm (Kassel University and Newcastle) is associate editor.

TSEP bridges the gap between thermal journals that are classified as either fundamental in nature or near-market. Topics covered include: rapid development of heat transfer technologies affecting traditional fields, and growth in research areas such as aerospace, thermal biological/medical systems, electronics and nano-tech, renewable energy systems, food production and minimizing thermal impact on climate change.



## Upcoming Conferences

- **ChemEngDayUK (27-28 March 2017)**, University of Birmingham).
- **WCCE10+ECCE11+ECAB4 (1-5 Oct 2017)**, Barcelona, Spain). **Extended Abstract Submission Deadline: 28th Feb 2017**
- **European Process Intensification Conference, EPIC (1-5 Oct 2017)**, Barcelona, Spain). **Extended Abstract Submission Deadline: 28th Feb 2017**
- **16th International Conference on Sustainable Energy Technologies, SET (17-20 July 2017)**, Bologna, Italy). Abstract submission deadline: **10th Feb 2017**
- **4th International Conference on Heat Transfer and Fluid Flow, HTFF (8-10 June 2017)**, Rome, Italy). **Extended Abstract Deadline: 1 March 2017**
- **Global Biotechnology Congress (10-13 July 2017)**, Boston, US). Abstract Submission Deadline: **10th June 2017**
- **15th UK Heat Transfer Conference (4-5 Sep 2017)**, Brunel University, London). Extended Abstract Submission Deadline (2 Pages): **16th June 2017**
- **2017 AIChE Annual Meeting (Oct 29-Nov 3 2017)**, Minneapolis, US). Abstract Submission Opening: **17th April 2017**

- **UK Fluids Conference (6-8 Sep 2017)**, Leeds University, UK). Abstract Submission Deadline: **24th April 2017**
- **6th World Congress on Biofuels and Bioenergy (5-6 Sep 2017)**, London, UK)
- **8th International Conference on Biofuels, Bioenergy & Bioeconomy (4-6 Dec 2017)**, Sao Paulo, Brazil)
- **2nd World Biodiesel Congress & Expo (6-7 Dec 2017)**, Dallas, Texas, US)

## Upcoming PIG Seminars

- Fri 3<sup>rd</sup> Feb, 12:00-13:00.  
**Richard Law:**  
"Heat transfer in OBRs and potential heat exchanger applications"
- Fri 10<sup>th</sup> Feb, 12:00-13:00.  
**Jonathan McDonough:**  
"Characterisation of 3D printed fluidic oscillators and their applications in process intensification"
- Fri 17<sup>th</sup> Feb, 12:00-13:00.  
**Jonathan Harris**
- Fri 24<sup>th</sup> Feb, 12:00-13:00.  
**Laura Diaz Silvarrey**
- Fri 3<sup>rd</sup> March, 12:00-13:00.  
**Akeem Babatunde**
- Fri 10<sup>th</sup> March, 12:00-13:00.  
**Sahr Sana**
- Fri 17<sup>th</sup> March, 12:00-13:00.  
**Dr Valentine Eze**



## Research Activity

### Recent Publications

- D Gonzalez-Juarez, JP Solano, R Herrero-Martin, AP Harvey. *Residence time distribution in multiorifice baffled tubes: a numerical study*. Chemical Engineering Research and Design 118 (2017) 259-269
- Safaa M.R. Ahmed, Anh N. Phan, Adam P. Harvey. *Scale-up of oscillatory helical baffled reactors based on residence time distribution*. Chemical Engineering & Technology. Article in-press. DOI: 10.1002/ceat.201600480

### Conferences, Workshops and Events

- Salihi Musa attended the National Biodiesel Conference and Expo in San Diego (16-19 January 2017). Salihi presented the following talk:
  - "Cost Effective Biodiesel Production by Oil Extraction in a Foam Column"

### PIG Seminars

- Toluwanimi Kolawole. "Pilot-scale post-combustion CO<sub>2</sub> capture using a rotating packed bed: Mass transfer studies and CO<sub>2</sub>-loading analysis method development". 2 Dec 2016
- Dr Haoyu Wang. "IBD: Solids handling in Taylor-Couette Reactors". 9 Dec 2016
- Ha Phan & James Hockaday. Introductions to PhD Projects. 13 Jan 2017
- Ibrahim Mohammed & Aumber Abbas. Introductions to PhD Projects. 27 Jan 2017

Salihi presenting at the National Biodiesel Conference and Expo, San Diego 2017

