

**CASC** Centre for Advanced Structural Ceramics **Imperial College**  
(CASC) London

We are a UK centre focused on structural ceramics research and teaching, world-leading in this key area and developing links with leading industrial and academic groups.

June 2018

13<sup>th</sup> Newsletter

CASC continues its activities supported by the **Industrial Consortium** formed by Morgan Advanced Materials, Asahi Glass, SAFRAN and John Crane. More than 30 students and postdoctoral researchers are working on projects funded by a variety of sources including EPSRC, EU and Industry.



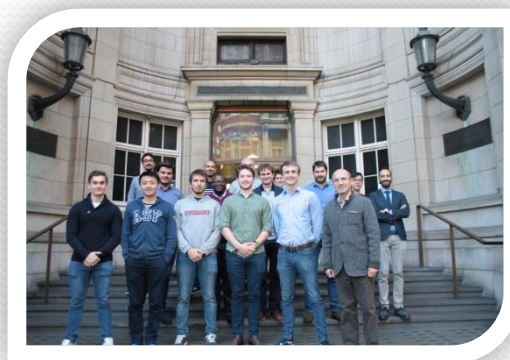
### Ceramics Summer School

The **ninth** edition of CASC Summer School will take place from the **10<sup>th</sup> to 12<sup>th</sup> of September 2018**.

This year, we will focus on Additive manufacturing, basic ceramics processing and mechanical properties. The summer school will consist of seminars given by the main researchers of the field and laboratory sessions where the attendees can apply what they have been learning.

Check our [webpage](#) and [twitter](#) (@CASC\_Imperial) for more information!

[Registration](#) is open now and includes accommodation, meals and access to all the activities.



2017 Summer School attendees

### CASC Goodbyes

- **Dr Eleonora D'Elia** left CASC in February as she started her new position as **Teaching Fellow** @ the Materials Department at Imperial College London.
- **Dr Dimitri Pletser** left in May to start as **Waste Management Consultant** at Wood group in Harwell, UK.
- **Dr Kristijonas Plausinaitis** is now an **Oracle Consultant** @ Namos Solutions Ltd, London.
- **Dr Claudia Gasparrini** is now a **Research Associate** @ Imperial College London.
- **Dr Annalisa Neri** finished her PhD in March. We wish her the best of luck!

## 2017 Sir Richard Brook Prize Award

This year the Sir Richard Brook Prize was won by **Dr Tahsin Ali Kassam**, from Brunel University. He worked under the supervision of **Prof Hari Babu Nadendla** on *The Effects of Alumina Purity, TICUSIL® Braze Preform Thickness, and Post-grinding Heat Treatment on the Microstructure, Mechanical and Nanomechanical Properties of Alumina-to-Alumina Brazed Joints*. The main goal of his project was to improve the ceramic-to-metal brazing process.

The members of CASC Steering Group Committee stated that the **work** submitted by all the candidates was very **impressive** and that they had a really difficult time choosing the winner. He was selected, among other candidates, due to the **high standards** of his work, as said by one of the external examiners.

The prize will be given in a Morgan Advanced Materials event later this year.

## CASC New Appointees

- **Mr. Emmanuel Max** started his PhD with **Dr Finn Giuliani** the 5<sup>th</sup> of April.
- **Mr. Rowan Hedgecock** will start his PhD under the supervision of **Dr Luc Vandeperre** in October.

## CASC new doctors

The past few months we have had some impressive quality PhD vivas by:

- **Annalisa Neri**, that passed on the 22<sup>nd</sup> of May. Her work was supervised by Prof Eduardo Saiz and Dr Arash Moavenian.
- **Giorgio Sernicola** that passed on the 16<sup>th</sup> of March. His work was supervised by Dr Finn Giuliani and Dr Ben Britton.
- **Claudia Gasparrini**, that passed her viva the 27<sup>th</sup> of February. Her work was supervised by Prof Bill Lee and Dr Luc Vandeperre.

## Prizes and Publications

- **Dr Ezra Feilden Irving's** [paper](#) in Scientific Reports, has been mentioned on [Diamond's Webpage](#). It has also been one of the top 100 read materials science papers for Scientific Reports in 2017.
- **Dr Luc Vandeperre** has won the prize for **Best Feedback** at the [Student Academic Choice Awards](#). Congrats!
- **Dr Cyril Besnard** has won the Tony Evans prize for the best ceramics PhD in the Department.
- **Dr Eleonora Cali** won the Constance Fligg Tipper Centenary Memorial Prize 2018 .



Dr Vandeperre with his prize

**Further information: [www.imperial.ac.uk/structural-ceramics](http://www.imperial.ac.uk/structural-ceramics) or +44 20 7594 2053**





Workshop attendees



Workshop winners and Professor Saiz

The “*9<sup>th</sup> International Workshop on Interfaces: New Frontiers in Biomaterials*”, with 90 attendees, was held in Santiago de Compostela (Spain), from the 16-18<sup>th</sup> of April 2018.

The main purpose of the workshop was to offer an **interdisciplinary meeting**, based in Europe, where researchers, from various backgrounds and stages of their careers, could actively share their work to a multidisciplinary audience, engage in critical discussions, and broaden their research networks.

The conference was a wonderful success, with fruitful discussion and scientific debate as well as new collaborations forged.

A major focus of the conference was to promote student and young researcher activity. In this regard, 8 of 25 contributed talks and 18 of 33 poster/rapid fire presentations were given by current PhD students. To further aid young researchers, a panel discussion titled “*Publishing with Impact*” was held at the end of the second day.

Imperial College  
London

ESB European Society for Biomaterials

USC  
UNIVERSIDADE DE SANTIAGO DE COMPOSTELA

INSTITUTO DE CERÁMICA



McGill

EORS  
JECS Trust

CASC



Committee with Keynote and Invited Speakers

## CASC Diary

- 17-21<sup>st</sup> June 2018 ➤ **7th International Congress on Ceramics (ICC7), Foz do Iguazu, Brazil.**
- 10-11<sup>th</sup> September 2018 ➤ **Recent Appointees in Materials Science (RAMS2018), Cardiff, UK.**

## Out and about

- 21-26 January 2018 ➤ **Dr Luc Vandeperre, Ms Jia Hui Teo and Dr Finn Giuliani** attended the *42nd International Conference and Expo on Advanced Ceramics and Composites*, Daytona Beach (USA).
- 30-31 January 2018 ➤ **Prof Saiz and Dr Elizarova** attended the *MAPP first international meeting* where **Ms Teo** presented her work on "Robocasting of solid state sintered SiC" and **Mr Cai** gave a flash presentation on "Rheology of emulsion-based inks for Robocasting".
- 28<sup>th</sup> February-1<sup>st</sup> March ➤ *RESLAG 5<sup>th</sup> follow up meeting*, where **Dr Alba Matas Adams** presented the results obtained the last few months on mechanical properties of refractory materials.
- 16-18 April 2018 ➤ *9<sup>th</sup> International Workshop on Interfaces. New Frontiers in Biomaterials*, Santiago de Compostela (Spain). **Mr Qiaosong Cai** presented a poster about his work on Robocasting of structural ceramics with core-shell structures. **Prof Saiz, Dr Matas Adams and Ms Neri** were part of the organising and scientific committee together with Dr Tallia and Prof Jones from Imperial College.
- 7-8 March 2018 ➤ The *Quarterly MAPP meeting* was held at Imperial College, London, and **Dr Iuliia Elizarova**, as part of the project, presented her work from the previous months.
- 3-4 May 2018 ➤ **Prof Eduardo Saiz** gave a talk at the *Young Ceramists Additive Manufacturing Forum* in Padua, Italy, about Robocasting. He was also chairing the first session.

## Visitors

- Dr Ozge Akbulut, Assistant Professor at **Sabanci University** (Turkey), visited CASC and gave a talk on "*Single additive enables 3D printing of highly loaded ceramic suspensions*" the 18<sup>th</sup> of May.
- We had a visitor from **ArcelorMittal** in March and April.
- Dr Moritz Von Witzleben, president of the **European Ceramic Society**, visited CASC and Imperial College the 11<sup>th</sup> of January.
- Dr Qiang Fu, from **Corning University** visited the department the 24<sup>th</sup> of January.

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