

20<sup>th</sup> — 22<sup>th</sup> October 2019 | Croydon, London, UK



[www.asranet.co.uk](http://www.asranet.co.uk)

3<sup>rd</sup> International Conference on   
Light Weight Materials & Engineering Structures

# LIMAS 2019

Call for Papers

Abstracts should be sent to [limas@asranet.co.uk](mailto:limas@asranet.co.uk), by the deadline of 20 April 2019  
Abstract to be maximum of 300 words. Abstract format is available [here](#)

## About the Conference

The modern trend in selection of materials for high strength-weight ratio is governed by the growing need for low-cost high performance structures. The amount of material has a direct bearing on cost. Therefore, the first step towards the cheapest structure is to minimize the weight without disproportionately affecting the fabrication cost. Composite materials are a matrix of two or materials that gives when combined superior properties of each materials while keeping the weight low. Fiberglass was the first modern material composite. It saw extensive use in the Marine and Aerospace sector along with aluminium. With increasing research more materials are coming more into the industrial arena. Carbon fibre in aircrafts and biomedicine, GFRP reinforced concrete for bridges, aluminium and GFRP in boat hulls and offshore energy. As light-weight applications mean the use of strong but low-density materials, alloys of aluminium are generally used. Light-weight steel which is an alloy with steel and aluminium has seen its share in the automotive and civil industry. However, new approaches in fabrication techniques are leading to increased use of fibre reinforced plastics. The use of strong but light-weight members helps to achieve this in that the overall stress levels in a construction are reduced together with handling, manipulation and pay-load cost. These factors are important in such applications as ships, high speed vessels and offshore structures. Friction stir welding is an innovative approach for fabrication in these cases. However, cost dominates the path forward as always. A careful balance of cost, performance and reliability determines the future of material and decides whether this would tip the scale against conservative structural option. This ever more pushes the need for academia to interact with the industry. LIMAS 2019 provides the perfect opportunity for you to do so, as it aims to provide an ideal platform for industry leading researchers, technology developers, industrial players and supply chain partners to converge. Bringing the pioneers together the conference aims to promote the methodologies, exchange of ideas and the way forward to commercialisation.

## Conference Themes

- ◆ Structural Design Criteria, Safety and Reliability
- ◆ Structural Analysis and Optimization
- ◆ Impact and Dynamic Structural Analysis
- ◆ Damage Tolerance of Composite Structures
- ◆ Processing - Manufacturing Technologies
- ◆ Manufacturing Up-Scaling and Automation
- ◆ Structural Testing Methods
- ◆ Multifunctional Composites - Adaptive Response and Reconfiguration
- ◆ Nanocomposites for Structural Lightweight
- ◆ Multifunctional Composites - Self-Healing and Bio-inspired Designs
- ◆ Friction Stir Welding in Lightweight Sandwich Structures
- ◆ Applications: Industry Needs
- ◆ Applications: Marine, Defence, Offshore
- ◆ Applications: Civil Engineering
- ◆ Applications: Aerospace

## Key Dates

Abstract Deadline:	20 April 2019	Abstract Acceptance:	20 June 2019
Full Payment:	20 <sup>th</sup> August 2019	Full Paper Submission:	20 September

2019 Abstract to be maximum of 300 words. Abstract/Paper format will be provided on request

## Organising Committee

Professor Purnendu Das  
ASRANet Ltd, UK

## Registration Fees

Full Registration:	£400
Student Registration:	£200

## Technical Advisory Panel

**Dr S. Aimmanee**, *KMUTT, Thailand*

**Dr C. Berggreen**, *Technical University of Denmark, Denmark*

**Dr T. Comlekci**, *University of West of Scotland, UK*

**Dr P. Hess**, *United States Navy, USA*

**Prof B. Kandola**, *University of Bolton, UK*

**Prof N. R. Mandal**, *retired IIT Kharagpur, India*

**Dr J. Peschmann**, *DNV-GL, Germany*

**Dr D. Roy**, *University of Edinburgh, UK*

**Dr J. Underwood**, *BMT Defence Services Ltd, UK*

**Dr A.J Sobey**, *University of Southampton, UK*

## At the Conference

The conference will officially begin on Sunday evening, 20th October 2019. The evening will commence with a wine and cheese reception for the delegates to network also to register for the conference. In the following days of the conference several papers will be presented focusing on variety of themes and subjects.

## About Croydon

Croydon has excellent road, rail and air connections providing first class transport links to London, the UK and overseas. Bus services are extensive. Croydon also has a Tramlink, a 28 kilometre environmentally friendly light rail service which links with New Addington, Beckenham, Elmers End and Wimbledon. Croydon has over 2,600 acres of parkland and open spaces. The rich inheritance comprises over 120 parks and nature reserves offering the widest possible range of sports and leisure. The surrounding fields and woods of the North Downs provide a natural framework around the borough. Croydon is home to Crystal Palace football club, who play at Selhurst Park. The council provides a very wide range of sports and recreational activities including four swimming pools. The Crystal Palace National Sports Centre is one of the country's premier athletics stadia. Croydon has two full championship golf courses, seven 8 hole courses, pitch and putt courses and driving ranges. Sailing and canoeing are available at South Norwood Lake. Croydon enjoys 20km of the London Loop and 34km of bridleway for horse riding and cycling.

## Getting Here

### Airport Connections

Croydon is well connected globally by all the London Airport through Emirates, KLM, Air France, Easyjet, Ryanair and many more. The airports are linked to Croydon by the Overground, Tram and the London Bus Network. There are direct service connections to London Gatwick and London Luton airports. Journey times from East Croydon to London Gatwick airport range from 15 to 36 minutes, with an average of 13 services per hour during the day. The journey time from East Croydon to London Luton airport is approximately 66 minutes, with an average of 4 services per hour during the day. There are no direct train services to London Heathrow airport, however Bus No X26 connects Heathrow airport to Croydon.

### Train Connections

Fast trains run into the centre of London terminating at Victoria, London Bridge or City Thameslink stations in about 15-20 minutes. The train service for London Luton airport also stops at London St Pancras (average journey time approximately 40 minutes), providing interconnections for Eurostar services.

### Tram Connections

Trams at the moment have destinations at Beckenham, Wimbledon, Elmers End and New Addington with all lines traveling through Croydon on the Croydon Loop. It can also be used to reach the Underground in Wimbledon.

## Accommodation

Below are a list of hotels close to the conference venue

<b>Jury's Inn</b>	<b>From £48</b>
<b>Croydon Park Hotel</b>	<b>From £60</b>
<b>The Lansdowne Hotel</b>	<b>From £60</b>
<b>Travelodge Croydon Central</b>	<b>From £43</b>
<b>Hampton by Hilton Croydon</b>	<b>From £60</b>
<b>Premier Inn</b>	<b>From £60</b>