

## 7<sup>th</sup> Asian Thermal Spray Conference 23<sup>th</sup>-25<sup>th</sup> September 2015 Xi'an, China

### About ATSC

The Asian Thermal Spray Conference (ATSC) has emerged as a flagship event in the Asia-Pacific region. The major objective is to provide an attractive forum for all stakeholders (researchers from industry, R&D institutions and academia; practitioners from thermal spray service providers; equipment and feedstock manufacturers as well as OEMs and users). The event is also expected to provide an ideal platform for young researchers and engineers to familiarize themselves with recent advances in this rapidly evolving, yet industrially well-entrenched technology as well as for various companies to exhibit relevant products to a dedicated audience. The past editions of the event organized in Japan, Korea, Singapore and India were extremely successful in realizing the above objectives. The 7<sup>th</sup> edition of ATSC will be held in China for the second time in the city of Xi'an from 23<sup>th</sup> to 25<sup>th</sup> in September 2015.

### Call for Papers

The Technical Program at the 7<sup>th</sup> ATSC will address diverse aspects related to thermal spray science and technology, ranging from fundamental research to industrial applications. Prospective authors are invited to submit abstracts of papers dealing with, but not restricted to, any of the several themes listed below:

- Cold Spray/Kinetic Spray
- Solution and Suspension based Spray Processes
- Advances in Thermal Spray Processes
- Hybrid Spray Processes
- Processing-Structure-Property correlations
- Advanced Characterization of Coatings
- Mechanical Properties of Coatings
- Modeling & Simulation
- Process Control & Diagnostics
- Thermal Barrier Coatings
- Repair & Refurbishment
- Wear & Corrosion Protection
- Novel Functional Applications
- Environmental/Occupational Safety

An abstract of 250~500 words, in English, together with full contact details, should reach the Conference Secretariat **no later than 30<sup>th</sup> June 2015**. Abstract template should be used and can be found in conference website. The authors should indicate their presentation by oral or poster. Two-page extended abstracts of all accepted papers to be presented at ATSC 2015 will be included in conference proceeding, and will be **due by 30<sup>th</sup> July 2015**. Selected papers will appear as a special issue of Journal of Thermal Spray Technology dedicated to ATSC 2015.



## Venue

ATSC 2015 will be held at Xi'an, called Chang'an in ancient times. Xi'an records the great changes of the Chinese nation including being as capitals of 13 dynasties. The cultural and historical significance, as well as the abundant relics and sites, help Xi'an enjoy the laudatory title of 'Natural History Museum'. The museum of Terra Cotta Warriors and Horses is praised as 'the eighth major miracle of the world' and the Xi'an Circumvallation is the largest and most intact Ming Dynasty castle in the world. The Big Wild Goose Pagoda is a well-preserved ancient building and a holy place for Buddhists. Besides the brilliant

cultural and historical elements, the modernization of Xi'an also keeps up with international trends. In addition to direct flights from many overseas destinations, the international airport in Xi'an also makes it convenient to connect with all other cities in China. Surrounded by rivers and mountains, Xi'an enjoys its favorable geographical location with semi-moist monsoon climate, based on which pleasant temperatures ranging between 15-30 degrees Celsius will be expected during the Conference.

*The Big Wild  
Goose Pagoda*



*The Terra Cotta Warriors  
and Horses*



*The Xi'an Circumvallation*



## Exhibition

An exhibition will be held, offering an opportunity to exhibit products, equipment or advertise capabilities. The sponsorship opportunities are also available. Further details can be obtained from the Conference Secretariat.

## Important Dates

**Submission of Abstract 30<sup>th</sup> June 2015**

**Extended abstract 30<sup>th</sup> July 2015**

**Conference 23<sup>th</sup>-25<sup>th</sup> Sept. 2015**

*Organized by*  
**Asian Thermal Spray Society**

*In association with*

State Key Laboratory for Mechanical Behavior of Materials,  
Xi'an Jiaotong University, Xi'an, China

**ATSC website: <http://www.asiantss.com/>**

### Contact:

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**Updated  
new date!**

# High-lights of the ATSC 2015

The following two plenary sessions will provide you with the knowledge on latest development of applications of thermal spray coatings, advances in fundamental researches, cutting edge technologies of both cold spraying and PS-PVD by distinguished leading guest speakers.

Plenary Session I: Latest advances in thermal spraying: from Applications to Fundamentals. The following two presentations are scheduled.

## **Dr. Noriyuki Mifune: The latest advances of Applications Development in Thermal Spraying**

Dr. Mifune is the president of Tocalo Co. Ltd Japan, which is one of largest thermal spray coatings job shop companies around the world. The continuous developments on coating applications make the Tocalo to be one of world leading companies on development of various coatings applications. Dr. Mifune's talk focuses on the latest application developments of thermal spray coatings.

## **Prof. Pierre Fauchais: The latest researches advances of Thermal Spraying: from splat to coating formation**

The splat formation is the most fundamental process in thermal spray coating deposition. The understanding of splat formation makes one to effectively utilize thermal spraying. The lecture by Prof. Fauchais, from University of Limoges, spans wide range of splat formations involved in different plasma spray processes including suspension plasma spraying and relates it to coating formation and microstructure evolution for a better understanding of thermal spray physics.

Plenary Session II: Cutting Edges Research Developments of New Processes: from Cold Spraying to PS-PVD, i.e. deposition from solid to vapor phase.

## **Prof. Changhee Lee: The latest advances in Research and Applications Development of cold spraying**

After fundamental researches for two decades, cold spraying is entering the application phase in a wide horizons from protective coatings, functional coatings to additive manufacturing. The lecture by Prof. Lee, from Hanyang University, presents the latest research achievements and application developments.

## **Prof. Robert Vassen: The latest advances of PS-PVD processes**

The PS-PVD is emerging rapidly as a new thermal spray process. With the process the coating can be deposited either by evaporated vapor phase, droplets or alternative gas and liquid droplets. Thus, the coatings of distinct diverse microstructures with a wide range of thickness can be tailored towards new application developments. The talk by Dr. Vassen, from Research Center Julichi Germany, will focus on the latest advances on the coating deposition fundamentals of PS-PVD and the development of typical applications under progress.