

Jointly Organised by:

**ECK Pte Ltd**



In Conjunction with:

**9<sup>th</sup> Asian Thermal Spray Conference 2018**

## **Thermal Spray Coatings: From Fundamental Science to Industrial Application**

**14-15 November 2018 | 9.00am to 5.00pm | Venue: Nanyang Executive Centre, NTU**

### **How will you benefit from the course?**

The masterclass will provide the participants with a thorough and holistic review of the evolution of the thermal spray process. Participants will also gain insights on the fundamentals of the different thermal spray processes and in the process, enhance their ability to solve complex thermal spray issues in a systematic and practical manner. In addition, the course will also expose them to the emerging markets which the technology can be applied, thus challenging the trainees to explore potential business opportunities in the various industries.

### **What are the learning outcomes?**

The masterclass is customised for technologists and engineers who are keen to enhance their knowledge and skills in the thermal spray field. This course

- provides a thorough grounding and understanding of thermal spray processes.
- depicts the complex thermal spray scientific concepts in terms of simple physical models.
- integrates theoretical knowledge to practical engineering applications and commonly accepted thermal spray practices.

### **What are the topics to be covered?**

- Background information to thermal spray
- Prime principles of the thermal spray processes.
- Powders and their desirable characteristics.
- Design for thermal spray processes
- Testing and characterization
- Troubleshooting

### **Who should attend?**

This course is designed for Technologists, Engineers, and Technicians. Graduate students and other professionals entering the thermal spray field or those who wish to update their knowledge will also benefit from this course.

### **How will you benefit from this?**

The course is expected to benefit the participants through lectures, case studies, sharing of latest research methodologies and experiential session. Participants will receive a Certificate of Attendance after the course.



### **Professor Christopher C Berndt**

**University Distinguished Professor  
Professor of Surface Science and Interface Engineering  
Swinburne University of Technology  
Faculty Science Engineering and Technology**

Prof Berndt's professional responsibilities gravitate around the Thermal Spray Society of the ASM of which he has been a member since 1991. He was appointed as the Vice President of this society in 2000 and President in 2002 through to 2004. He was the Proceedings Editor for the Thermal Spray Conferences held in the USA from 1992-2003. He was the Founding Editor, and now Editor Emeritus, for the Journal of Thermal Spray Technology (first issued in 1992) which is published by ASM International. He was appointed to the Board of Directors of the American Society of Materials for the 2005-2008 period. Prof Berndt became Vice President of ASM Int. and progressed to President in October 2011. He was also the President of the Australian Ceramic Society from mid-2008 through to mid-2010.

Prof Berndt is a Member of some 103 professional Societies in the materials, mechanical, manufacturing and biomedical fields. He is a Fellow of the Australian Institution of Engineers, Fellow of ASM International, Fellow of the American Society of Mechanical Engineers, Fellow of the American Ceramic Society, Fellow of the Australian Ceramic Society, and Fellow of The Institution of Metallurgists (UK). He is also a Chartered Engineer (UK), a Professional Engineer (Australia), and a Member of the College of Bioengineers (Australia). Prof Berndt has held positions as a Faculty Fellow of Oak Ridge National Laboratory and Guest Scientist of Brookhaven National Laboratory. He was inducted into the Thermal Spray Hall of Fame in 2007.

Prof Berndt has more than 520 publications in the field of Materials Science and Engineering. He is the Editor / Co-editor of 10 conference proceedings on thermal spray and has an "h-index" of 53 and more than 10,300 citations to his work. He moved to Swinburne University of Technology (Melbourne, Victoria) in early 2008 as the founding Professor of Surface Science and Interface Engineering. He was the Director of the Industrial Research Institute Swinburne (IRIS) from March 2008 through August 2011. He was elevated to University Distinguished Professor in March 2014.

### **Course Fees:**

S\$1,000.00 per participant (before GST).

**To register, please email registration form to [pkkoh@eckpl.com](mailto:pkkoh@eckpl.com)**