Plan now to attend the 2019 International Thermal Spray Conference and Exposition (ITSC), the world’s foremost international conference and exhibition for thermal spray technologists, researchers, manufacturers and suppliers. The organizing societies are excited to offer a conference filled with new technologies, new market trends and new market segments!

REGISTER NOW
asminternational.org/itsc

An ASM Materials Solutions Event
CAN’T MISS EVENTS, INCLUDE:

• Special keynote presentations and panel sessions from prestigious industry experts.
• Information packed technical sessions, featuring more than 300 presentations.
• A diverse exposition with more than 75 companies and organizations showcasing state-of-the-art products and services.
• Industrial Forum in the Exhibit Hall, including approximately 30-35 invited presentations from local companies and exhibitors.
• Oerlikon Metco Young Professionals Session and Competition
• And much more!

LOCATION

InterContinental Yokohama Grand (Headquarters Hotel)
PACIFICO Yokohama Convention Center (Technical Program / Exhibit Hall)

ORGANIZING COMMITTEE

ITSC 2019 GENERAL CHAIRS

W. Krömmer, The Linde Group (Germany)
A. McDonald, University of Alberta (Canada)

ITSC 2019 TECHNICAL CHAIRS

K. Bobzin, RWTH Aachen University (Germany)
W. Lenling, TST Engineered Coatings Solutions (United States)

ITSC 2019 LOCAL HOST COMMITTEE LIAISONS

M. Fukumoto, Toyohashi University of Technology (Japan)
K. Ogawa, Tohoku University (Japan)
K. Shinoda, National Institute of Advanced Industrial Science and Technology (Japan)
Coating processes that are thought to utilize purely collision pressure or impact force such as aerosol deposition (AD) method and cold spray (CS) method are attracting attention. These accelerate microparticles and ultrafine particles by carry gas to several hundred m/sec or more, make them into a jet stream and collide with the substrate, realize dense coating with good adhesion just by supplying purely mechanical energy. It is thought that fine particles of metals and ceramics are macroscopically bonded at room temperature while remaining in a nearly solid state. In fact, it has been confirmed that, in the aerosol deposition method, it is possible to form a dense ceramic thin film or a thick film having a microcrystal structure of several tens of nanometers or less at room temperature and to obtain excellent electromechanical properties. Then, in the field of semiconductor manufacturing equipment, it has been commercialized as an important coating process. This is called “Room Temperature Impact Consolidation (RTIC)”. When viewed as a powder forming process, this phenomenon is fundamentally different from a thermal spray coating and shock compaction, in which raw material particles are brought into a molten or semi-molten state to obtain bonding between primary particles. In this presentation, the deposition mechanism of the AD process with RTIC phenomenon and the importance of this phenomenon for the future coating technology are explained.
COMPREHENSIVE TECHNICAL PROGRAMMING
MONDAY, MAY 27 - WEDNESDAY, MAY 29
More than 36 separate sessions will be offered on the latest thermal spray research and development topics, including fundamentals, additive manufacturing, renewable energy, environmental impact of coatings, hybrid fabrication processes, new coatings materials development and multi-scale modelling and artificial intelligence. The technical program will also feature a Cool Japan Symposium, featuring presentations by Japanese Industry and Academia.

INDUSTRIAL FORUM
MONDAY, MAY 27 - WEDNESDAY, MAY 29
During exhibition hours, approximately 30-35 invited companies will provide 20 minute presentations on industry related topics, products and solutions.

OERLIKON METCO YOUNG PROFESSIONALS SESSION
MONDAY, MAY 27 | 15:30 - 16:30
ITSC 2019 will again feature the young innovative scientists/professionals competition-based award and recognition program. The goal is to encourage participation of young scientists in ITSC, to provide exposure to students and young scientists, and open potential opportunities for them in the global thermal spray community.

RECEPTION WITH EXHIBITORS / POSTER SESSION
MONDAY, MAY 27 | 17:30 - 19:00
The first day of the conference ends with a dedicated reception in the Exhibit Hall. Enjoy drinks and hors d’oeuvres while you mix, mingle and conduct business with exhibitors and fellow conference attendees.

NETWORKING EVENT AT THE YOKOHAMA LANDMARK TOWER SKY GARDEN
TUESDAY, MAY 28 | 19:00 - 21:00
Attendees will have the opportunity to build business relationships and network with key contacts across the thermal spray industry, while enjoying the best local food and entertainment. Separate ticket purchase is required.

EXHIBIT HALL
MONDAY, MAY 27 - WEDNESDAY, MAY 29
The ITSC show floor offers an unparalleled exposition featuring the world’s largest gathering of thermal spray equipment suppliers, consumable and accessory suppliers, vendors, and service providers. Visitors will find information about equipment for thermal spray, research and specialist institutes, applied research, and the latest innovations in thermal spray.

NISSAN INDUSTRY / TECHNICAL TOUR
THURSDAY, MAY 30 | 10:00 - 13:00 (SUBJECT TO CHANGE)
A special tour of the Nissan power train facilities will be offered post-conference. The Nissan GT-R engine manufacturing lines and arc spray booths will be shown for the very first time. Space is limited on this tour, so you will want to register early!
**EDUCATION SHORT COURSE**

**INTRODUCTION TO THERMAL SPRAYING (TWO-DAY COURSE)**  
**SATURDAY, MAY 25 - 08:30 - 18:30 | SUNDAY, MAY 26 - 08:30 - 13:00**

Improve your knowledge by taking an ASM Thermal Spray Society education short course. Taught by industry experts, these interactive learning experiences will help you stay up-to-date and competitive. Separate registration is required for these courses.

**Member:** $925 USD  
**Non-Member:** $1,075 USD  
**Student:** $550 USD

Instructor: Distinguished Professor Christopher Berndt, Professor of Surface Engineering & Technology, School of Engineering, Department of Mechanical Engineering and Product Design Engineering, Swinburne University of Technology

Thermal spraying has evolved from a technology designed to be a cost effective method of repairing worn components and machined parts to a process used to provide improved part performance and add longer life to components. As the thermal spray profession has changed, so has the need to ensure safe and consistent methods for thermal spray operators. Leaders in the Thermal Spray Society were brought together to compile their knowledge and experience in a comprehensive, easy to understand course.
HOT INDUSTRY!
The market size in the Japanese Thermal Spray Industry is approximately $830 million USD. The market can be divided into three categories: one for thermal spray job shops (approx. $420 million USD) second for in-house application by various industries such as automobile and electric companies (approx. $330 million USD), and the last for thermal spray equipment and consumables (approx. $80 million USD).

ACCESSIBILITY
Getting to Yokohama from anywhere in the world is easy, thanks to the city’s proximity to two international airports, Tokyo International Airport (Haneda) and Narita International Airport. The two airports together handle more than 2,100 international flights weekly from 90 cities in some 36 nations on more than 70 airlines.

MANUFACTURING
Japan has a large and highly advanced manufacturing sector. Manufactured goods from Japan enjoy a well-earned reputation for high quality, durability and sophistication. Japanese automotive manufacturers such as Toyota, Honda and Mitsubishi are among the largest in the world and attend ITSC.

DESTINATION
Yokohama is located in the center of Japan, along the coastline of Japan’s Pacific Ocean. Yokohama has been vigorously acquiring new cultures and information from foreign countries and introducing it to Japan. From first-time-ever things such as food to a wide range of cultures, which entitles Yokohama as the birthplace of Japan’s modern culture.

ITSC HEADQUARTERS HOTEL
(adjacent to PACIFICO Convention Center)

INTERCONTINENTAL YOKOHAMA GRAND
1-1-1 MINATO-MIRAI NISHI-KU
YOKOHAMA, KANAGAWA 220-8522 JAPAN

Group discounted rates will be available until April 23, 2019 (or when block is full, whichever occurs first).

Don’t delay! The hotel room block WILL sell out!

GETTING TO YOKOHAMA
Yokohama is a beautiful port city conveniently located 30 minutes from Metropolitan Tokyo by road or rail. Haneda Airport is the closest airport, approximately 25 minutes by taxi or shuttle. Narita Airport is approximately 90 minutes by train, bus or taxi.

NOTES:
Room rates are quoted in Japanese Yen
Room type is Superior Room (38 square meters), Non-Smoking
Room rates are per person, per night, inclusive of breakfast and 10% service charge
Check-in time is 14:00; check-out time is 11:00
### MAIN CONFERENCE DATES:
**SUNDAY, MAY 26, 2019 – WEDNESDAY, MAY 29, 2019**

### GROUP HOTEL ROOM RATES
*(IN JAPANESE YEN, PER PERSON):*

<table>
<thead>
<tr>
<th>Date</th>
<th>Single Occupancy</th>
<th>Double Occupancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>THURSDAY, MAY 23, 2019</td>
<td>22,000</td>
<td>14,000</td>
</tr>
<tr>
<td>FRIDAY, MAY 24, 2019</td>
<td>24,000</td>
<td>16,000</td>
</tr>
<tr>
<td>SATURDAY, MAY 25, 2019</td>
<td>36,000</td>
<td>23,000</td>
</tr>
<tr>
<td>SUNDAY, MAY 26, 2019</td>
<td>22,000</td>
<td>14,000</td>
</tr>
<tr>
<td>MONDAY, MAY 27, 2019</td>
<td>22,000</td>
<td>14,000</td>
</tr>
<tr>
<td>TUESDAY, MAY 28, 2019</td>
<td>22,000</td>
<td>14,000</td>
</tr>
<tr>
<td>WEDNESDAY, MAY 29, 2019</td>
<td>22,000</td>
<td>14,000</td>
</tr>
<tr>
<td>THURSDAY, MAY 30, 2019</td>
<td>22,000</td>
<td>14,000</td>
</tr>
<tr>
<td>FRIDAY, MAY 31, 2019</td>
<td>22,000</td>
<td>14,000</td>
</tr>
</tbody>
</table>

### REGISTRATION FEES

<table>
<thead>
<tr>
<th>Category</th>
<th>Early Bird Rate (by 4/19/19)</th>
<th>Regular Rate (4/20 - 5/24/19)</th>
<th>Onsite Rate (after 5/24/19)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FULL CONFERENCE - MEMBER</td>
<td>$1,025</td>
<td>$1,175</td>
<td>$1,225</td>
</tr>
<tr>
<td>FULL CONFERENCE - NONMEMBER</td>
<td>$1,180</td>
<td>$1,330</td>
<td>$1,380</td>
</tr>
<tr>
<td>PARTICIPANT* - MEMBER</td>
<td>$850</td>
<td>$975</td>
<td>$1,025</td>
</tr>
<tr>
<td>PARTICIPANT* - NONMEMBER</td>
<td>$950</td>
<td>$1,075</td>
<td>$1,125</td>
</tr>
<tr>
<td>STUDENT FULL CONFERENCE** - MEMBER</td>
<td>$299</td>
<td>$299</td>
<td>$299</td>
</tr>
<tr>
<td>STUDENT FULL CONFERENCE** - NONMEMBER</td>
<td>$350</td>
<td>$350</td>
<td>$350</td>
</tr>
</tbody>
</table>

*Participant rate applies to speakers/presenting authors and session chairs.

**In order to qualify for the Student rate, students must be an active BS, MS or PhD student, age 35 or under.

All registration fees listed above are reflected in USD.

Visit asminternational.org/itsc to register for the conference and secure your hotel reservation.
WHY EXHIBIT?
CONNECT with customers. MAKE new contacts. INCREASE your sales.

CONNECT WITH DECISION MAKERS

Engineer / Scientist 33%
Technician / Operator 3%
CEO / President / General Management 18%
Academic 7%
Manager / Supervisor of Division or Group 17%
Student 11%
Program / Project Manager 11%

CONNECT WITH THESE INDUSTRIES

Thermal Spray 45%
Academics 6%
Aerospace 21%
Primary Metals Production 3%
Contract / R&D / Consulting / Testing 9%
Other Industries 16%

Source: 2018 ITSC Registrant Data

For more information: exposales@asminternational.org