ASTM International, in partnership with TÜV SÜD, is organizing an ONLINE WORKSHOP on Accelerating AM Technology Adoption through Standardization and Certification.

**Background**
As additive manufacturing (AM) matures as part of mainstream manufacturing, standards continue to be key in accelerating the adoption of AM technologies. However, AM technologies continue to advance rapidly and gaps exist in AM in meeting many industry-specific needs.

In regulated industries such as aerospace, medical, and automotive, for example, certification is essential to gain market access. Certification scheme development is quickly advancing, but it depends on specific standards to cover the entire AM value chain. Therefore, globally accepted market-relevant standards are required to meet the growing demand in the application of AM technology.

To further the development of consensus AM standards and to build awareness of how the AM community can be actively involved in the process, ASTM International formed the Additive Manufacturing Center of Excellence (AM CoE). The AM CoE works to bridge the gap between R&D and standards development as well as to further certification programs and workforce development.

**About the workshop**
This workshop is intended to provide an understanding of the following topics.
- Bridging the gap between standards and certification
- AM certification approach: meeting requirements for delivering AM parts to regulated industries

Standardization in powder bed fusion (PBF) processes, including:
- Multi-laser technology
- In-situ process monitoring and control
- Process workflow
- Digital workflow
- Materials
- Polymer process

This workshop features technical talks and panel discussions.

**Who should participate?**
This workshop is open to all AM professionals interested in exploring and understanding the standardization and certification process as well as further adopting and implementing best practices in their additive manufacturing activities.

For more information, contact workshop chairs:
Khalid Rafi
ASTM International
krafi@astm.org

Gregor Reischle
TÜV SÜD
Gregor.Reischle@tuev-sued.de
Agenda

9:00 a.m.  Virtual Platform Introduction and Instruction
9:20 a.m.  Role of ASTM AM CoE in Bridging the Gap Between Standardization and Certification
            Mahdi Jamshidinia, ASTM International
9:40 a.m.  AM Certification: Meeting the Requirements to Deliver AM Parts to Regulated Industries
            Gregor Reischle, TÜV®SÜD
10:00 a.m. Multi-Laser Technology on Powder Bed Fusion Process and the Implication on Standardization – Part 1
            Shane Collins, Additive Industries
            TBD, Renishaw
10:50 a.m. Recent Innovations in the PBF Process and its Impact on Standardization
            Roland Spiegelhalder, Trumpf
11:10 a.m. Standardization Requirements for Industrial Adoption of Binderjet Process
            Dan Brunermer, ExOne
11:30 a.m. Materials Development and Its Implication on Standardization
            Will Herbert, Carpenter Additive

12:50 p.m. Material Specifications and Qualification in Laser Powder Bed Fusion
            Ankit Saharan, EOS
1:10 p.m.  Real-Time Melt Pool Monitoring and Analytics for Metal Additive Manufacturing
            Darren Beckett, Sigma Labs
1:30 p.m.  Advances in Additive Manufacturing Automation and the Impact of Standardization
            Vishal Singh, Link3D
1:50 p.m.  Standardization in Digital AM Workflow
            Alexandre Donnadieu, 3yourmind
2:20 p.m.  TBD
2:40 p.m.  TBD
3:00 p.m.  TBD
3:20 p.m.  TBD
3:40 p.m.  TBD
4:00 p.m.  Panel Discussion
            Moderator: Carl Dekker, TBD
            Panelists: Shane Collins, Additive Industries
            Will Herbert, Carpenter Additive
            Darren Beckett, Sigma Labs
            Dan Brunermer, ExOne

10:40, 11:50, 2:10, 3:40 | BREAK/VIRTUAL NETWORKING

WORKSHOP PRICING

<table>
<thead>
<tr>
<th></th>
<th>If registered by 3/31/20</th>
<th>If registered after 3/31/20</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM Members</td>
<td>$100</td>
<td>$150</td>
</tr>
<tr>
<td>Non-Members</td>
<td>$150</td>
<td>$200</td>
</tr>
</tbody>
</table>

Additional registration details, an overview of the workshop agenda, and a list of presenters can be found at www.amcoe.org/events

LinkedIn: company/additive-manufacturing-center-of-excellence
Twitter: @astmamcoe

Register Today! www.amcoe.org/events
For additional information amcoe@astm.org

Supporting Organizations

For more information, contact workshop chairs:

Khalid Rafi
ASTM International
krafi@astm.org

Gregor Reischle
TÜV SÜD
Gregor.Reischle@tuev-sued.de

For additional information, contact workshop chairs:

For additional information, contact workshop chairs: