

**INVENTUM GmbH**  
Marie-Curie-Straße 11-17  
53757 Sankt Augustin

August 2019

## PRESS RELEASE

Sankt Augustin, August 2019 – Fatigue Design and Materials Defects 2020 Announcement

### **4<sup>th</sup> International Symposium on Fatigue Design and Materials Defects 2020, 26-28 May 2020, Potsdam, Germany**

Following the successful symposia of Trondheim in 2011, in Paris in 2014 and in Lecco in 2017 we wish to announce the 4<sup>th</sup> International Symposium on Fatigue Design and Material Defects from May 26 – 28 2020 in Potsdam.

Material defects such as non-metallic inclusions, pores, micro-shrinkages etc. play a crucial role in fatigue crack initiation and propagation which in turn has significant consequences for structural integrity in terms of lifetime, fatigue strength and other characteristics of cyclically loaded components. The main objectives of the symposium are to improve the understanding of the mechanisms and the impact of defects on structural integrity, and to work out measures to improve the fatigue properties of materials and components.

To that purpose presentations are welcome which address the following topics:

- Defects and manufacturing processes
- Defect detection and monitoring
- Statistical considerations
- Defects and fatigue strength
- Short fatigue crack propagation starting at defects
- Critical defect sizes
- Defects as root causes of structural failure
- Modelling fatigue life and strength taking into account defects

All materials are concerned, particularly:

- High strength steels
- Cast aluminium alloys
- Nodular cast iron
- Sinter materials
- Weldments
- Materials generated by Additive Manufacturing

The organizers look forward receiving many contributions to the 4<sup>th</sup> International Symposium on Fatigue Design and Materials Defects 2020. In particular young scientists are very welcome to actively contribute to the conference by submitting an abstract.

**Postanschrift:**  
INVENTUM GmbH  
Marie-Curie-Straße 11-17  
D-53757 Sankt Augustin

**Kontakt:**  
T +49 (0)2241-2355449  
F +49 (0)2241-4930330  
info@inventum.de

**Postbank Frankfurt**  
IBAN DE30 5001 0060 0415 0056 05  
SWIFT-BIC PBNKDEFF

**Commerzbank AG Frankfurt**  
IBAN DE41 5008 0000 0610 1227 00  
SWIFT-BIC DRESDEFF33

# INVENTUM

The symposium will be chaired by Prof. Dr. Uwe Zerbst and Dr. Mauro Madia, Bundesanstalt für Materialforschung und -prüfung, Berlin (Germany)

We are looking forward seeing you in Potsdam.

Homepage:

[https://fdmd2020.inventum.de/home/?pk\\_campaign=Portal2](https://fdmd2020.inventum.de/home/?pk_campaign=Portal2)

Conference Office

INVENTUM GmbH

Marie-Curie-Straße 11-17

53757 Sankt Augustin (Germany)

+49 (0) 2241 2355449

[fdmd@inventum.de](mailto:fdmd@inventum.de)

*297 Wörter // 2.156 Zeichen*

## **About the INVENTUM GmbH**

As a competent partner for event organisation we are at your side for the planning and realisation of conferences, congresses and further education, so that you as the organiser can fully concentrate on the technical content and leave the actual organisation of your congress or your conference to us. INVENTUM GmbH is a 100 percent subsidiary of the German Society for Materials Science. [www.dgm.de](http://www.dgm.de).

[www.inventum.de](http://www.inventum.de)

## **Contact PR**

[presse@inventum.de](mailto:presse@inventum.de)

### **Postanschrift:**

INVENTUM GmbH  
Marie-Curie-Straße 11-17  
D-53757 Sankt Augustin

### **Kontakt:**

T +49 (0)2241-2355449  
F +49 (0)2241-4930330  
info@inventum.de

### **Postbank Frankfurt**

IBAN DE30 5001 0060 0415 0056 05  
SWIFT-BIC PBNKDEFF

### **Commerzbank AG Frankfurt**

IBAN DE41 5008 0000 0610 1227 00  
SWIFT-BIC DRESDEFF33