



## Berlin, Germany

Berlin is not just Germany's political centre, but it is also among the most dynamic economic and scientific regions in Europe. The capital offers excellent conditions for business and investors by a well-developed infrastructure and a strong science and research community.

Berlin encompasses Germany's largest concentration of scientific institutions, among others, three major universities and institutes of Fraunhofer, Helmholtz and Max Planck, also corporate research and development departments as well as many startups. The entrepreneurial activity is also diverse, including IT, chemical, electrical and mechanical engineering, service and logistics. The manufacturing sector of Berlin/Brandenburg capital's region is a highly productive economic sector, represented by companies such as Siemens, Daimler, Alstom, Rolls-Royce and the new Tesla factory. In addition, the dynamic service sector contributes to an increasingly networked value creation.

These different stakeholders, e.g., research institutions, startups, industry and the service sector, are committing to transform Berlin in a climate-neutral city by 2050. This is planned to be reached through the development and application of new energy and climate protection strategies, in which sustainable manufacturing plays an essential role.

## Contact

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## Venue

The 18th GCSM will take place at the Production Technology Centre (PTZ), which integrates Technische Universität Berlin, Institut für Werkzeugmaschinen und Fabrikbetrieb (IWF) and Fraunhofer Institut für Produktionsanlagen und Konstruktionstechnik (IPK). At PTZ, a manifold of projects on innovative value creation, with special reference to manufacturing technology and management, are carried out. Synergies between experienced research, teaching staff and young students characterize the environment at the PTZ.

## 18th GCSM goes hybrid

GCSM 2022 will be a hybrid event, enabling in person attendance and virtual participation. The program will include physical sessions with on-site presentations as well as virtual sessions for remote participants.

## Past Conferences

2003 	2004 	2005 	2006 	2007 	2008 
2009 	2010 	2011 	2012 	2013 	2014 
2015 	2016 	2017 	2018 	2019 	2022 

**October 5 to 7, 2022**

**Berlin, Germany**



**18<sup>th</sup>**

**Global Conference  
on Sustainable  
Manufacturing**



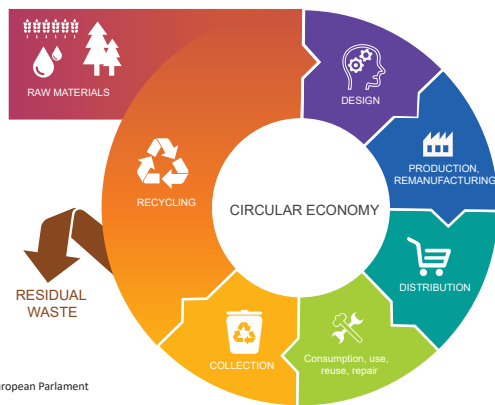
**GCSM**

*"Manufacturing driving  
Circular Economy"*



Sponsored by CIRP  
International Academy  
for Production Engineering





# 18<sup>th</sup> GCSM

## Contents:

TU Berlin (IWF) and Fraunhofer (IPK) would be happy to welcome you to our 18th GCSM, in cooperation with the partner acatech. The focus of the 18th GCSM relies on **Manufacturing driving the Circular Economy**.

The following areas of application are addressed:

- Sustainable Manufacturing technologies for the mobility, energy and construction sector and for machines and equipments
- Artificial Intelligence for Sustainability

These application areas were selected based on their relevance for sustainable manufacturing as well as the high environmental impact the cause, especially due to greenhouse gases emissions.

## Our GSCM:

The GCSM serves as a global forum for academics, researchers and specialists from universities, research institutes and industry across the globe, working on topics related to sustainable manufacturing. A unique feature of the GCSM conference series is its integration of industrial engineering perspectives, sustainable manufacturing applications in emerging and developing countries as well as education and workforce development for advancing sustainable manufacturing. Sustainable Manufacturing is buzzwords for our annual global conference, since 2003 and now for the third time in 18 years in Berlin. The conference aims to exploit manufacturing engineering potentials for bridging the gap between awareness on sustainability challenges and means to systematically and concretely cope with them.

We look forward to meet you in Berlin for the 18th GCSM!

Best regards,

*Holger Kohl and Günther Seliger*

## Deadlines

Abstract submission:	March 22, 2022
Notification of abstract acceptance/rejection:	April 2, 2022
Full paper submission:	May 7, 2022
Notification of full paper acceptance/rejection:	July 5, 2022
Deadline for the final manuscript submission:	July 19, 2022

## Registration fees

### In Berlin

Early bird	€ 600	On or before July 31, 2022
Regular	€ 650	On or before August 31, 2022
On-site	€ 700	After August 31, 2022

### Virtual Conference

Early bird	€ 300	On or before July 31, 2022
Regular	€ 350	On or before August 31, 2022

## Topics

### Sustainable Products

- Product (re)design for circular economy
- Product recovery, reuse and remanufacturing
- Product life cycle, information and knowledge management
- Product service systems

### Sustainable Manufacturing Processes

- Circular economy and manufacturing processes
- Manufacturing processes, tools and equipment
- Energy and resource efficiency
- Resource utilization and waste reduction
- Maintenance, service, repair and overhaul of manufacturing machines and equipment

### Sustainable Manufacturing Systems

- Circular economy and manufacturing systems
- Manufacturing system design
- Production planning, scheduling and control
- Sustainable reconfigurable manufacturing systems
- Sustainable supply chains

### Crosscutting Topics in Sustainable Manufacturing

- Circular economy
- CO2 neutral production
- Strategies and business models
- Industry 4.0 and sustainable manufacturing
- Metrics for sustainable manufacturing
- Education and workforce development
- Sustainable smart cities

