

## CONFERENCE ORGANISERS



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**Conference website:** [www.echt2020.com](http://www.echt2020.com)

In cooperation with



Association Suisse de Traitement  
Thermique des Matériaux



Schweizer Verband  
für Wärmebehandlung



## ECHT 2020 CALL FOR PAPERS

### International scientific committee

- Prof. Sybrand van der Zwaag (TU Delft, The Netherlands)
- Prof. Marcel Somers (TU Denmark, Denmark)
- Prof. Hans-Werner Zoch (Leibnitz Institute IWT Bremen, Germany)
- Prof. Massimo Pellizzari (University Trento, Italy)
- Prof. Peter Sommer (Rhine-Waal University, Germany)
- Hans Veltrop (Hans Veltrop Consultancy, The Netherlands)
- Sven Cure (VCST, Belgium)
- Jan Schamp (Punch Powertrain Systems, Belgium)
- Dr. Veronique Vitry (Université de Mons, Belgium)
- Dr. Patrick Jacquot (Bodycote, France)
- Prof. Sabine Denis (University of Lorraine, Nancy, France)
- Cyril Vernault (Safran group, France)
- Dr. Herwig Altena (Aichelin, Austria)
- Dr. Mathias Steinbacher (Leibnitz Institute IWT Bremen, Germany)
- Karl-Michael Winter (Process electronic GmbH, Germany)
- Dr Thomas Waldenmaier (Robert BOSCH GmbH, Germany)
- Pavel Stolar (Ecosond s.r.o, Czech Republic)

# SAVE THE DATE



**CARBURIZING, CARBO-NITRIDING  
AND C-BASED SURFACE  
ENGINEERING**

Including Opportunities for Industry 4.0



**25-27 MARCH 2020**

**FMCC**

**ANTWERP – BELGIUM**

[www.echt2020.com](http://www.echt2020.com)

## EXHIBITION & SPONSORSHIP

The Conference will feature a table-top exhibition that will represent many areas of industry with latest equipment, facilities and instruments, products and services in the fields of heat treatment and surface engineering.

Companies will be able to reinforce their participation and enhance their corporate identification by taking advantage of benefits offered to them as Contributing Sponsors of the Conference.

Companies interested in taking part in the table-top exhibition or sponsoring the Conference may contact the Organising Secretary : [echt2020@a3ts.org](mailto:echt2020@a3ts.org)

### VENUE : Antwerp



Antwerp is the largest city of Flanders with a long history, both cultural and economic. Antwerp is the most important economic centre with the second largest European harbour, the largest Mondial trade centre for diamonds and important industrial activities in many sectors.

Antwerp has an imposing architectural patrimony of nice historical and classical buildings, houses and squares in harmony with trendy modern designed buildings.

Antwerp has also a long tradition in hosting many famous artists of all disciplines and the important work can be admired in one of the many museums. Also the fashion school is recognised over the world. Antwerp is real multicultural city where you can taste in an pleasant way many of them by walking to the many picturesque squares and terraces.

For more information: <https://www.visitantwerpen.be>



### The Conference will be held at :

Flanders meeting  
& convention center  
Carnotstraat 4 - 2018  
Antwerp (Belgium)

## ECHT 2020 CALL FOR PAPERS

Carbon is one of the most important elements in steel to obtain desired properties in the core, case and on the surface. Optimal case and core properties are mainly obtained by the thermochemical heat treatments carburising and carbonitriding. The optimum surface properties in several applications are obtained by a variety of carbon-based surface engineering techniques like PVD, CVD and others. There are a large number of specific and application based processes and techniques available with typical advantages and disadvantages. Some of the processes and techniques are still in the development or in the optimization phase driven by new scientific insights in many specialized institutes.

The field of applications is very wide and the techniques are used in almost all industrial sectors.

A wide range in temperatures and process parameters are available to produce the best properties for each application. Due to the continuous evolution in the demands and new applications there is a continuous need to improve the existing processes and to development of new processes and techniques. Driving forces are quality, performance of parts, cost effectiveness, competitiveness, environment.

The possibilities offered by the use of computers, numerical methods, specific softwares, electronic devices are important for the actual state of the technique and the fast evolution to the new future state of the art evolution.

### Prospective authors wishing to present papers are invited to submit a tentative title and an abstract on the following topics:

- New theoretical insights and fundamental knowledge.
- Recent developments in the processes and application.
- Optimisation of processes and equipment
- Use of numerical methods for simulation and development of processes and parameters
- Influence of the materials to be treated
- Comparison between different techniques based on practical results obtained
- Measuring techniques: process parameters, microstructure evaluation, hardness measurement
- Quality Control and quality management
- Cost effectiveness and total cost of ownership
- Obtained results in specific applications
- Control of distortion: quenching, material and pre-heat treatment processes, design
- Environmental impact
- Failures and failure analysis

## ECHT 2020 CALL FOR PAPERS

Prospective authors wishing to present papers are invited to submit a tentative title and an abstract of about 300 words (in English) to the Organising Secretary ([echt2020@a3ts.org](mailto:echt2020@a3ts.org)) by September, 25, 2019. The abstract should provide sufficient information for a fair assessment and include the title of the paper, the author's names and contact details (address, telephone number and e-mail address). A technical poster session is also planned.

### To submit papers :

Fill in the form on the conference web site at:  
[www.echt2020.com](http://www.echt2020.com)

The conference language will be English.

DEADLINES	
Submission of abstracts	25 september 2019
Notification of Acceptance	25 october 2019
Preliminary Program	15 november 2019
Opening of the registrations	15 november 2019
Submission of full papers	31 january 2020

### PROCEEDINGS

The full text of the accepted papers will be published in the electronic proceedings and issued to attendees on arrival at the conference.