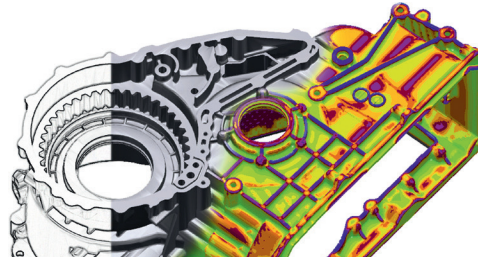


First Announcement

## **The Virtual Foundry – Status and Future Developments**

International conference and 46<sup>th</sup> Aachen Foundry Colloquium

March 19-20, 2020 | Foundry Institute, Aachen, Germany



# First Announcement

## International Conference „The Virtual Foundry“ | Foundry Night

Over the last 40 years, the virtualization of casting processes has become a success factor for the foundry industry. Software today predicts numerous aspects of the process sequence for the production of cast parts in a virtual environment. Whether to identify optimization potential, to design entire process chains or to develop efficient product designs - simulation programs support foundries and their customers daily to make important decisions with a high degree of certainty.

However, the diversity and complexity of the physics, materials, metallurgy and foundry processes still present significant challenges 40 years after the first application of simulation programs. For this reason the theme of this event is:

### **The Virtual Foundry – Status and Future Developments**

The international conference as part of the 46th Aachen Foundry Colloquium will include presentations in both German and English with simultaneous translation. They will provide an overview of the current state-of-the-art and variety of simulation applications for the foundry industry.

Leading experts from industry, software providers and academia from all over the world have already confirmed their participation for the invited keynote talks.

The presenters come from companies such as Nematik, Martinrea Honsel, Ford, Liebherr, ESI, Flow Science, MAGMA, RWP, Frech and research institutions such as TU Braunschweig, The University of Iowa, Jönköping University, ACCESS and the Foundry Institute of RWTH Aachen University, as well as guest speaker Prof. emer. Wilfried Kurz.

The focus of the conference is on the current and future demands on simulation tools from the point of view of the foundry industry and its customers. The event is therefore aimed at foundry engineers, casting buyers, designers and all those who, as beneficiaries of simulation results or as decision-makers for their company, would like to gain a concentrated overview of the latest status and the possibilities of simulation and optimization in the foundry in two days. The conference will cover all relevant casting processes and cast materials, product development of complex cast components, as well as the linking of different process steps along the entire process sequence of casting production.

# Program International Conference | Conference Dinner and Foundry Night | March 2020

	Wednesday, March 18	Thursday, March 19, 2020	Friday, March 20, 2020
Program/ Agenda	Seminar for Master and PhD Students	<p>from 10:00 Uhr</p> <p>Topics:</p> <ul style="list-style-type: none"> <li>• Basics of Virtual Casting Flow – Solidification – Stresses and Strains</li> <li>• Process – Microstructure – Properties</li> <li>• Virtual Optimization of Cast Materials Stahl – Aluminium – Gusseisen</li> <li>• Virtual Product Development and Quality Assurance</li> </ul>	<p>from 9:00 Uhr</p> <p>Topics:</p> <ul style="list-style-type: none"> <li>• The Virtual Process Chain in the Foundry</li> <li>• The Virtual Interface: Machine - Process</li> <li>• Data for all Applications</li> <li>• The Virtual Foundry as a Whole Plant</li> </ul> <p>End of Conference approx. 2 p.m.</p>
Evening Event	AGIFA Alumni-evening	Conference Dinner and Foundry Night	

*The Conference will be bilingual in German/English.  
Simultaneous translation will be provided.*

**Prior to the Conference the traditional Seminar for Master and PhD Students will take place**

Tuesday, March 17, 2020	Wednesday, March 18, 2020
<ul style="list-style-type: none"><li>• Arrival and Graduates Evening</li></ul>	<ul style="list-style-type: none"><li>• Excursion: MAGMA Giessereitechnologie GmbH, Aachen</li><li>• Presentations</li><li>• AGIFA Evening</li></ul>

Applications to participate in the Graduates Seminar send to [agifa@gi.rwth-aachen.de](mailto:agifa@gi.rwth-aachen.de)

The seminar is supported by



### AGIFA

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### Organization of the event

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### Conference fee:

Standard: 450 €  
Reduced: 150 €

Updated information is available under  
[foundry-conference-aachen.de](http://foundry-conference-aachen.de)