

# Preface



The biannual international conference series SheMet has its 16<sup>th</sup> anniversary in 2015. It is the 3<sup>rd</sup> time for the Institute of Manufacturing Technology at the Friedrich-Alexander-Universität Erlangen-Nürnberg to be honoured by hosting the conference. It is the first time for me to be the chairperson of this conference though not the first time I was involved in organising it. I could make use of a team incorporating both youth and experience to support me in Erlangen. Let me use this occasion to thank the two members of the LFT most involved into this conference, Ms. Julia Degner, a new participant to SheMet, and Dr. Hinnerk Hagenah, well known to all repeating participants as he has been involved in SheMet since 1998. The three of us were assisted by many others from my institute; my thanks go to all of them.

Representing one of the founding institutions of this most successful conference series I take pride in its long history, which started 1993 in Birmingham and has not been interrupted since then. All the preceding

conferences held in Belfast, Birmingham, Erlangen, Leuven, Twente and Palermo have been great, well organised occasions for researchers from university and industry to meet and exchange knowledge and ideas.

Not surprising to anybody involved with sheet metal for a longer time, this semi-finished product retains its attractiveness or even increases it in these days of low carbon emission, ecological footprint and sustainability. An impressive number of 6 keynote presentations from industry and science and a total of 70 papers from almost all regions of the world clearly document the unbroken fascination of and interest in sheet metal. The selection of the keynote speakers, the international character of our scientific advisory board as well as the interest of Germany's leading sheet metal producing and processing industry within the industrial advisory board and the contribution of our 4 major sponsors emphasize the importance of this conference series in a most impressive way.

SheMet has changed and adapted over its history. It has always managed to address the most important issues on its subject. In times where the producing industry has to face changes and new challenges by legal restrictions and economic limitations, traditional topics regain importance in the conference. Forming and modelling are the two largest sessions, closely followed by materials testing. However, though these headings sound familiar and old fashioned, the content is not. Science and industry show the flexibility and innovative power of sheet metal processing by providing new ideas and solutions to improve productivity while reducing ecological damage at the same time. The bases to innovations are a good understanding of the material and models making excessive real world tests avoidable. Thus the unbroken interest in these topics is not surprising. Some more recent approaches like incremental forming, hot stamping or sheet-bulk metal forming have already gained sufficient importance and interest to be presented in separate sessions. Due to the ever increasing necessity of detailed scheduling and worldwide cooperation and exchange sessions on planning and the special session on MatProFuture have been added to the conference. Altogether the selected topics and the response from all over the world shows the unbroken attractiveness of the conference.

I would like to thank the authors and presenters of this conference for their contribution. Without their efforts, their innovations and their devotion to sheet metal the conference could not be held. I hope all the attendees had an enjoyable stay in the nice city of Erlangen and judge their participation in SheMet 2015 a gain for themselves so they can keep the conference in good memory.

Prof. M. Merklein  
Chairperson, Organising Committee  
March 2015



# SheMet 2015

## 16<sup>th</sup> International Conference

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Prof. M. Merklein, PD Dr. H. Hagenah, J. Degner, M. Sc.