

## Editorial

The area of hot sheet metal forming of high-performance steel is under continuous development and has seen rapid growth in recent years. The industrial and research community within this field is now well established all over the world. Since its innovation in Sweden in the 1970s, press hardening has become a global technology. The driving forces for the current fast development, with focus on the automotive sector, are the concern for environment and passenger safety. Press hardening and related thermo-mechanical processes represent technologies with outstanding potential to meet global environmental challenges as well as the safety aspects within the transportation sector. What started as a niche technology has developed into a real mainstream area in light-weight design.

To fully support this potential of the technology, further innovations in press hardening steel (PHS) are essential. Research and Development both in academia as well as in industry are the most important prerequisites for continuing innovation. With the Swedish German Centre of Excellence for Hot Sheet Metal forming of High-Performance Steel -CHS<sup>2</sup>- the University of Kassel (Germany) and Luleå University of Technology (Sweden) have established a worldwide unique competence network to meet the future challenges of hot sheet metal forming technology. Through cooperation with Association for Iron & Steel Technology (AIST), this community is further strengthened in the North American region.

The biannual CHS<sup>2</sup> conference series has after 5 very successful conferences since 2008 grown into the leading platform for scientific exchange in PHS and related technologies. The conference has established itself as an important international arena, promoting research, networking and innovation. The CHS<sup>2</sup> conference undoubtedly constitutes the most important event for the international scientific community in the field.

Continuing with the same enthusiasm, specialists from all over the world will get together during the 6<sup>th</sup> CHS<sup>2</sup> 2017 and present their latest findings in this key technological field in order to benefit from each other's experience and expertise. Topics like tailored properties, microstructure, material and product performance, new surface coatings and new steels for press hardening as well as pertinent tribological aspects will be in focus in the same way as thermal processing, monitoring, modeling, simulation and, of course, new PHS part innovations and design principles.

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