

Preface

The 11th International Symposium on the Science and Processing of cast Iron (SPCI-XI) was organized under the umbrella of Casting Innovation Centre (CIC) that represents the collaboration between the Swedish Foundry Organization, Swerea Swecast and Jönköping University. This symposium was held between 4th and 7th of September 2017 in Jönköping, Sweden.

The scope of the scientific meeting was similar to the previously organized symposiums in this field, hosted by Detroit, USA (1964), Geneva, Switzerland (1974), Stockholm, Sweden (1984), Tokyo, Japan (1989), Nancy, France (1994), Birmingham, USA (1998), Barcelona, Spain (2002), Beijing, China (2006), Luxor, Egypt (2010) and Mar del Plata, Argentina (2014) including main topics such:

- Fundamental research on metallurgy, solidification and solid-state transformations of cast iron.
- Thermo-physical and thermo-mechanical properties of cast iron.
- Modelling and simulation of phenomena related to processing of cast iron.
- Recent technological developments of melting, casting, heat treatment and process control.
- Novel developments and applications of cast iron.

A collection of the scientific contributions from the previous symposiums can be found under the following link: <https://scholar.google.se/citations?hl=sv&user=iaRxbEMAAAJ>

More than 160 researchers, producers and users of cast iron from 27 countries gathered and discussed the advances in the science and processing of cast iron. A number of 86 peer reviewed papers were presented in 11 oral sections and one poster section. Each oral section was followed by a complementary section where the oral presentations were posted also as a poster promoting the interaction between authors and audience. The general impression related to this type of organization was a good one and much appreciated by the participants.

Young researchers in PhD student or Post-Doctoral positions were emphasized by the audience, selecting the best Young Researcher Paper Awards which was attributed to Jacques Bourdie (France), Björn Domeij and Péter Svidró (Sweden), and Atsushi Ito (Japan).

Short documentary movies were produced from the conference which can be found under the following links:

https://play.hj.se/media/SPCI-XI+-+Why+SwedenF/1_tw09yh9t

https://play.hj.se/media/SPCI-XI+-+The+Conference/1_9wv7jqlg

https://play.hj.se/media/SPCI-XI+-+The+Future+of+Cast+Iron/1_ioj03gfp

Next SPCI-XII symposium will be held in the autumn of 2020 or spring of 2021 in Sapporo, Japan organized by Professor Hideyuki Yasuda and the Japanese Foundry Association.

The Editors,

Attila Diószegi

attila.dioszegi@ju.se

Vasile-Lucian Diaconu

diaconu.vasilelucian@yahoo.com

Anders E.W. Jarfors

anders.jarfors@ju.se

Committees

International Scientific Committee

Roberto Boeri	UNMdP-CONICET, Argentina
Sarum Boonmee	Suranaree University of Technology, Thailand
Andriy Burbelko	AGH Univ of Science and Technology, Poland
Manuel Castro	CINVESTAV, Mexico
Adrian Catalina	Caterpillar Inc., USA
Attila Diószegi	Jönköping University, Sweden,
Steve Dawson	SinterCast Limited, United Kingdom
Jessica Elfsberg	Scania CVB AB, Sweden
Hasse Fredriksson	KTH, Sweden
Marcin Gorny	AGH Univ of Science and Technology, Poland
Wilson Luiz Guesser	Tupy, Brazil
Zenon Ignaszak	Poznan University of Technology, Poland
Wojciech Kapturkiewicz	AGH Univ. of Sci. and Technology, Poland
Jacques Lacaze	CIRIMAT, ENSIACET, France
Frans Mampaey	Sirris, Belgium
Juan M. Massone	UNMdP-CONICET, Argentina
Werner Menk	Georg Fischer, Switzerland
Primož Mrvar	University of Ljubljana, Slovenia
Adel Nofal	CMRDI, Egypt
Andreas Bührig-Polaczek	RWTH, Germany
Iulian Riposan	Univ Polytechnica of Bucharest, Romania
András Roósz	University of Miskolc, Hungary
Carlos Silva Ribeiro	University of Porto, Portugal
Pål Schmidt	Volvo Group Truck Operation, Sweden
Doru. M. Stefanescu	Ohio State Univ; Univ. of Alabama, USA
Ramón Suárez	Azterlan, Spain
Guoxiong Sun	Southeast University, China
Niels Skat Tiedje	Technical University of Denmark, Denmark
Babette Tonn	TU Clausthal, Germany
Takateru Umeda	University of Tokyo, Japan
Robert C. Voigt	Pennsylvania State University, USA
Jiandong XING	Xi'an Jiaotong University, China
Hideyuki Yasuda	Kyoto University, Japan
Yongzhen Zhang	Henan University of Science and Technology, China
Lena Magnusson Åberg	Volvo Powertrain, Sweden
Peter Schumacher	Montanuniversität Leoben, Austria
Torbjørn Skaland	Elkem, Norway

Chairman

Organizing Committee

HONORARY CHAIRMAN

Ingvar L Svensson

Jönköping University

CHAIRMAN

Attila Diószegi

Jönköping University

CO-CHAIRMAN

Anders Jarfors

Jönköping University

GENERAL SECRETARY

Vasile-Lucian Diaconu

Jönköping University

Magnus Wessén

Jönköping University

Taishi Matshusita

Jönköping University

József Tamás Svidró

Jönköping University

Jakob Olofsson

Jönköping University

Ehsan Ghassemali

Jönköping University

Ilia Belov

Jönköping University

Judit Svidró

Jönköping University

Henrik Borgström

Swerea SWECAST

Anders Gotte

Swerea SWECAST

Lennart Elmquist

Swerea SWECAST

Åsa Lauenstein

Swerea SWECAST

Torsten Sjögren

SP

Mathias König

Scania CV AB

Martin Selin

Scania CV AB

Izudin Dugic

Linnaeus University

Daniel Holmgren

Federal Mogul

Johan Ekengård

Sandvik Mining and Rock Technology