

37th INTERNATIONAL DEEP-DRAWING RESEARCH GROUP CONFERENCE - “FORMING OF HIGH PERFORMANCE SHEET MATERIALS AND COMPONENTS” – IDDRG 2018



The 36th IDDRG conference was held June 3-7, 2018 in Waterloo, Canada and was hosted by the University of Waterloo. The conference chairs were Professors Michael Worswick and Cliff Butcher of the University of Waterloo and Professor Alexander Bardelcik of the University of Guelph. The conference theme was “*Forming of high performance sheet materials and components*”.

International Deep Drawing Research Group

IDDRG was started in the late 1950s as an organization of national groups devoted to the study of sheet metal forming including forming processes, materials, formability issues, tooling, tribology and many other interesting aspects of sheet metal forming research and industrial practices.

The IDDRG conference is a gathering of the world’s leading production specialists and researchers to discuss the technical challenges and latest advancements in sheet metal forming technology. The conference is designed to provide a rich environment for knowledge development, discussions and interactions.

Conference Topics

The 2018 conference featured the usual range of IDDRG topics, plus a few specialized topics on crash and forming of composite/hybrid materials:

- AHSS and Gen-3 steels
- Hot Stamping – all aspects including tailoring, tooling, furnace, new materials, etc.
- Warm/hot forming of aluminum, magnesium, and titanium (mini-symposium)
- Formability characterization methodologies
- Constitutive modelling and formability prediction
- Interaction of forming and crashworthiness
- Fracture characterization: local and global formability
- Sheared edge formability (mini-symposium)



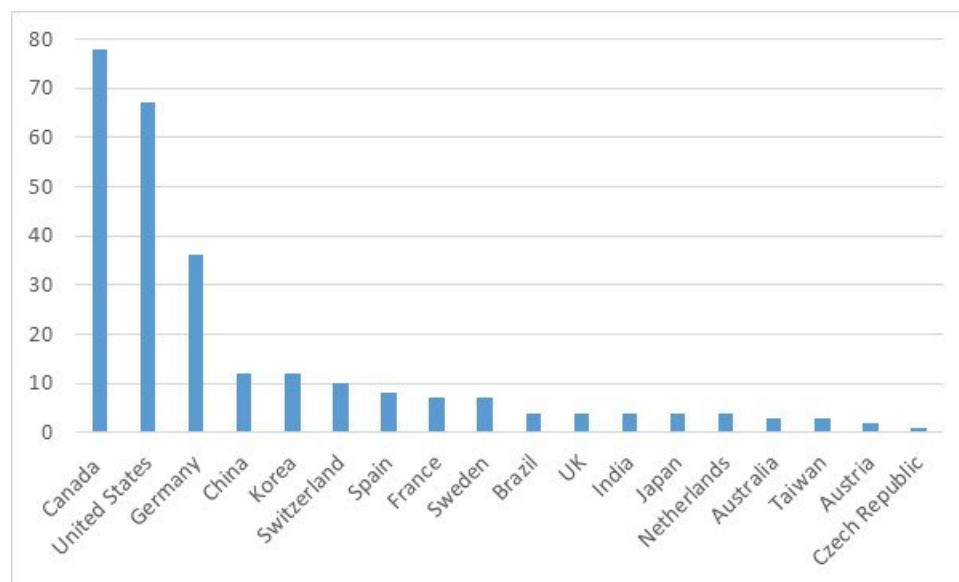
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- Tribology and wear
- Springback
- Advanced forming processes
- Forming of composite and hybrid materials

The warm forming and sheared edge formability topics were addressed as mini-symposia organized by Dr. Hyunok Kim of EWI Forming and Professor Sergey Golovashchenko of Oakland University, respectively.

Participants

In total, 266 participants from 18 countries attended IDDRG 2018. The participant breakdown by country is given in the chart, below. Of these, approximately 47% were from industry, 46% were from academia, with the balance from private/government laboratories (7%).



Participant breakdown by country.

Acknowledgement

The conference co-chairs wish to express their deep appreciation to the many supporters of IDDRG 2018, including the participants, paper reviewers, keynote speakers, Scientific Committee members, Local Organizing Committee members and the Conference Sponsors and Exhibitors.

Keynote speakers

- Dorel Banabic, Technical University of Cluj Napoca, Romania
- Bart Carleer, Autoform, Germany
- James Dykeman, Honda R&D Americas, USA
- Pavel Hora, ETH Zurich, Switzerland
- Mathias Liewald, Universität Stuttgart, Germany
- Marion Merklein, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany
- Tim Skszek, Magna International, Corporate R&D, USA
- Thomas Stoughton, GM R&D Center, USA
- Michael Worswick, University of Waterloo, Canada

Scientific Committee

Abu-Farha, F. (USA)	Kim, H. (USA)	Schaeffler, D. (USA)
Altan, T. (USA)	Kinsey, B. (USA)	Shi, M. (USA)
Anderson, D. (USA)	Korkolis, Y. (USA)	Sigvant, M. (Sweden)
Anyasodor, G. (Sweden)	Kuwabara, T. (Japan)	Steglich, D. (Germany)
Asnafi, N. (Sweden)	Langerak, N. (Netherlands)	Stoughton, T. (USA)
Banabic, D. (Romania)	Lee, M. (South Korea)	Tekkaya, E. (Germany)
Barlat, F. (South Korea)	Malcolm, S. (USA)	Thullier, S. (France)
Chen, F-K (Taiwan)	Manach, P. (France)	Tisza, M. (Hungary)
Chiriac, C. (USA)	McClure, T. (USA)	Ulintz, P. (USA)
Deng, Z. (USA)	Merklein, M. (Germany)	van den Boogaard, A.H. (Netherlands)
Duroux, P. (France)	Mohr, D. (Switzerland)	van Tyne, C. (USA)
Dykeman, J. (USA)	Music, O. (Turkey)	Volk, W. (Germany)
Golovashchenko, S. (USA)	Narasimhan, K. (India)	Williams, B. (Canada)
Green, D. (Canada)	Nikare, C. (USA)	Yoon, J. (Australia)
Hance, B. (USA)	Oldenberg, M. (Sweden)	Yoshida, F. (Japan)
Hora, P. (Switzerland)	Peura, P. (Finland)	Zhang, S.H. (China)
Huh, H. (South Korea)	Pourboghrat, F. (USA)	Zhou, D.J. (USA)
Inal, K. (Canada)	Rolfe, B. (Australia)	
Jain, M. (Canada)	Santos, A. (Portugal)	

Local Organizing Committee (University of Waterloo)

Armin Abedini	Christopher Kohar	Cale Peister
Zohreh Asaee	Isabella McKenzie	Meghan Schmuck
Sante di Cecco	Ross McKenzie	Cameron Tolton
Ryan George	Alireza Mohamadizadeh	Matt Tummers
Jose Imbert	Kaab Omer	Laurie Wilfong

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EXHIBITORS



TOUR HOSTS



Editors

- Professor Michael Worswick, University of Waterloo
- Professor Cliff Butcher, University of Waterloo
- Professor Alexander Bardelcik, University of Guelph