

# Preface

The present book contains the papers presented at The International Conference on Tribology in Manufacturing Processes & Joining by Plastic Deformation (ICTMP2018) held in Elsinore, Denmark 24<sup>th</sup> -26<sup>th</sup> of June 2018. The ICTMP was originally established by Professors K. Dohda, W.R.D. Wilson, S.R. Schmid and N. Bay. The series of conferences includes:

- 1997 – 1st ICTMP in Gifu, Japan
- 2004 – 2nd ICTMP in Nyborg, Denmark
- 2007 – 3rd ICTMP in Yokohama, Japan
- 2010 – 4th ICTMP in Nice, France
- 2012 – 5th ICTMP in Notre Dame, USA
- 2014 – 6th ICTMP in Darmstadt, Germany
- 2016 – 7th ICTMP in Phuket, Thailand
- 2018 – 8th ICTMP in Elsinore, Denmark

The aim of the conference is to present the latest research and development on tribology in manufacturing processes. Subjects like friction, lubrication and wear as well as surface engineering of both workpiece and tool are scopes of interest. As in the last two ICTMP conferences, the conference also includes joining by forming as a theme of interest.

The book contains three keynote papers and 49 session papers. The chapters in the book correspond to the sessions and include the following topics:

- 1. Surface Engineering
- 2. Galling
- 3. Lubrication
- 4. Simulative Testing
- 5. Tribology of Metal Forming Processes
- 6. Tribology of Machining Processes & Wear
- 7. Solid Phase Welding I
- 8. Solid Phase Welding II & Mechanical Joining I
- 9. Mechanical Joining II
- 10. Unconventional Joining Processes.

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