## **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.

## **Committees**

## **Scientific committee**

G. Bissacco, Denmark

S. Bruschi, Italy

P. Christiansen, Denmark

L. De Chiffre, Denmark

B. Denkena, Germany

K. Dohda, USA

L. Dubar, France

A. Dubois, France

G. Fromentin, France

P. Groche, Germany

I.S. Jawahir, USA

K. Kitamura, Japan

F. Klocke, Germany

M. Liewald, Germany

N. Mahayotsanun, Thailand

P.A.F. Martins, Portugal

S. Melkote, USA

P. Montmitonnet, France

K. Mori, Japan

G. Ngaile, USA

C.V. Nielsen, Denmark

V. Premanond, Thailand

S.R. Schmid, USA

V. Schulze, Germany

F. Vollertsen, Germany

Z. Wang, Japan

## Organizing committee

Professor Niels Bay, chairman

Dr. Chris V Nielsen, co-chairman

Mrs. Anette Fournais Kaltoft, secretary