

## Preface

Molded Interconnect Devices (MID) enable a combination of mechanical, electrical/electronic, optical, thermal and fluidic functions by the direct application of circuitry on user-defined spatial thermoplastic substrates. The intelligent integration of different functions and the design freedom allow the realization of miniaturized and highly sophisticated mechatronic systems. Thereby the technology MID provides new approaches to meet the increasing requirements on functionality, integration density, reliability and costs.

Since the last conference in September 2012, agile and innovative providers of mechatronic systems, reliable modules and component manufacturers as well as competent machine and facility producers are driving forward the success of the technology MID. This is confirmed by the significant increase in serial applications in the last years and the growing availability of intelligent manufacturing solutions.

A further evidence of the increasing interest in the technology of Molded Interconnect Devices is the positive development of members in the Research Association 3-D MID e.V. Since its foundation in 1982 the number of members grew from eight to currently 95. The objective of the research association is the promotion and further development of the technology MID. In order to achieve this, numerous funded joint research projects in the field of material characterization, alternative manufacturing processes, assembly technologies as well as quality and reliability are implemented.

Beside these impulses to promote MID technology, the research association honors outstanding scientific work in the field of MID technology by its Research Award. In the course of this year's congress, the MID-Award will be given to a graduate for his excellent thesis on a forward-looking process for the manufacturing of MID. We are convinced this will motivate young scientists to perform further research projects in the future.

The biannually proceeded congress organized by the network 3-D MID e.V. offers a platform to experts and to those who are new with MID technology for an intensive exchange of knowledge and experiences. The extensive lecture program provides an excellent overview of the current state of the technology from both the industrial and the scientific perspective with parallel presentation sessions focused on the target-group. To substantiate the scientific range and significance this year the scientific congress papers are published for the first time in self-contained proceedings and thus indexed in all relevant and global recognized scientific databases. In addition to the extensive program, the participants have the possibility to get information directly from manufacturers, users and scientists at the technical exhibition or at the offered technical tour to leading MID research institutes.

Erlangen, September 2014

Jörg Franke

# **Congress Organization**

Research Association

Molded Interconnect Devices 3-D MID e.V

in cooperation with

Friedrich-Alexander University Erlangen-Nürnberg (FAU)

Institute for Factory Automation and Production Systems – FAPS

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Friedrich-Alexander University Erlangen-Nürnberg (FAU), DE

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Research Association 3-D MID e.V., DE

Kuhn, T.,

Research Association 3-D MID e.V., DE

Dr. Pojtinger A.,

2E mechatronic GmbH & Co. KG, DE

Wasilewski-Becker R.,

Research Association 3-D MID e.V., DE

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Research Association 3-D MID e.V., DE

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Friedrich-Alexander University Erlangen-Nürnberg (FAU), DE

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