

15th International

Mechatronic Integration Discourse



HARTING AG, www.3D-Circuits.com

Amberg Congress Centrum, Germany, 21st – 22nd June 2023

2nd Call for Papers

The Internet of Things (IoT) leads to an ongoing change of our life: Laptops, tablets and smart phones translate spoken texts simultaneously in any language, answer semantical questions and support our daily life. Cars drive autonomously, use current traffic intelligence to avoid congestions and warn others instantly in case of any danger. Every object in the future factories is able to exchange data, work pieces may choose discretely their optimal process route and machines report maintenance issues betimes. And last but not least wearable electronic accompany us in watches to control our vital functions, in shoes to detect our pace and in glasses to display essential information.

All these kinds of innovative gimmicks applied in Cyber Physical Systems integrate sensory functions, electronic intelligence, energy storages, harvesting and communication capabilities in tightest installation spaces on freely formed surfaces and in light plastic housings. All of them use antennas, which have to be designed spatially to boost their emitting performance. More and more there will neither be enough space for flat circuit board, nor for other electromechanical parts.

Mechatronics integration extends from the chip level as MEMS, through packaging, assemblies and products, to the system level. In doing so, mechatronics integrates all physical areas: mechanics, electrics, electronics, thermics, magnetics, optics, computer science. For this purpose, there are of course not only planar build-up technologies, but also always spatial solutions. Furthermore, for mechatronic functions have to be applied on any kind of materials e.g. ceramics, fabrics, foils, paper/carton, even skin, we have to develop our structuring, metallization or printing processes dynamically further.

organized by
Research Association
Molded Interconnect Devices
3-D MID e.V.

in cooperation with
University of Erlangen-Nuremberg
Institute for Factory Automation
and Production Systems – FAPS



Submission of Abstracts and Papers

Experts of industry and science are invited to present a paper on the topics shown in the figure on the next page. For this, abstracts in the extent of 500 words have to be provided via the online conference tool including the following details:

- Title of the paper
- Preferred classification
(Industrial Track / Scientific Track)
- Allocation to field of topic
- Name and address of the author(s)

Further information and a template for your abstract is available at the congress pages on:

www.3d-mid.de/en/mid-congress/

Please note the dates stated below. Abstracts will be verified before acceptance by the program committee. All accepted contributions will be published in the congress proceedings. Information regarding the presentations will be sent separately. Speakers will be granted discounted participation fees.

Important Dates

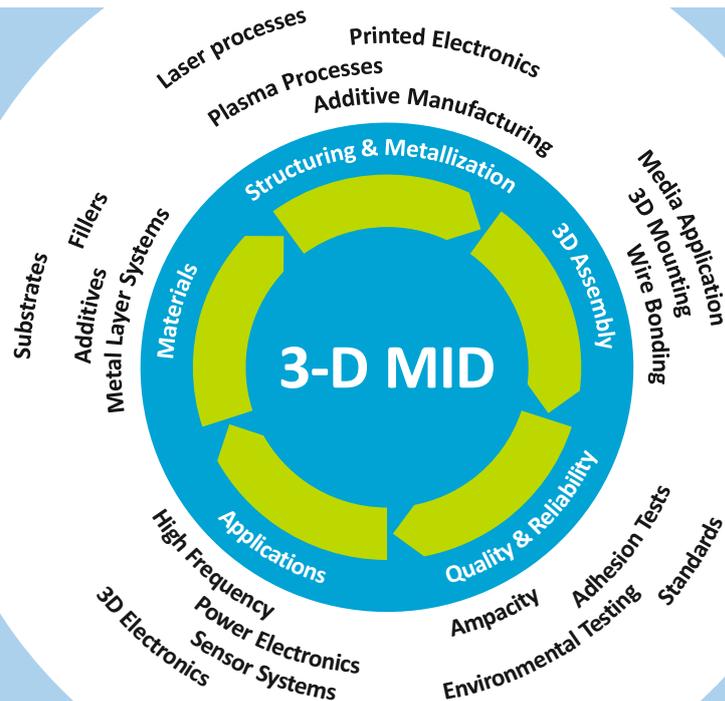
Submission of scientific papers	March 10 th , 2023
Submission of presentations	May 12 th , 2023
MID Congress	June 21 st – 22 nd , 2023
Technical Tour	June 22 nd , 2023

Contact

Research Association 3-D MID e.V.
Fuerther Str. 246b – GER-90429 Nuremberg
Phone: +49 911 5302-99100
E-Mail: congress@3dmid.de

www.3d-mid.de





General Information

Congress Location: The congress will take place at the Amberg Congress Centrum in Amberg (ACC) in Northern Bavaria. The airport of Nuremberg is within an hour's driving distance by car or train.

Conference Language: The conference language is English.

Research Market: All our current research projects funded by the German Federal Ministry for Economic Affairs and Climate Action (BMWK) and supervised by the Arbeitsgemeinschaft Industrieller Forschungsvereinigungen (AiF) will present their findings in a poster session.

Exhibition: The event will be complemented by an accompanying industrial exhibition with booths, table-top-presentations and posters. Further information is available at www.3dmid.de

Invited Keynotes: Distinguished scientists and industrial experts will present groundbreaking discoveries and latest serial applications in MID technology.

The MID Award 2023 will be granted for outstanding investigation in the field of MID technology by 3-D MID e.V.

Best Paper Award: 3-D MID e.V. honors the best paper and the best presentation with a Best Paper and a Best Presentation Award.

Technical Tour: On Thursday June 22nd, 2023 a tour through the Industry 4.0 model plant of Siemens AG Amberg is offered.

Further Information: For further information visit our website www.3d-mid.de or directly contact the 3-D MID e.V. office.

Organizing Committee

Prof. Franke, J. – University Erlangen-Nuremberg, GER
 Dr. Pojtinger, A. – 2E mechatronic GmbH & Co. KG, GER
 Dr. Reinhardt, A – Seho Systems GmbH, GER
 Sueß-Wolf, R. – Managing Director 3-D MID e.V., GER
 Landvogt, S. – Assistant to the Management 3-D MID e.V., GER

International Program Committee

Prof. Bastian, M. - SKZ, GER
 Barth, M. - TEPROSA GmbH, GER
 Prof. Bock, K. - TU Dresden, GER
 Prof. Brabec, C. - University Erlangen-Nuremberg, GER
 Prof. Drummer, D. - University Erlangen-Nuremberg, GER
 Prof. Dumitrescu, R. - Fraunhofer IEM, GER
 Prof. Feldmann, K. - Research Association 3-D MID e. V., GER
 Prof. Franke, J. - University Erlangen-Nuremberg, GER
 Prof. Gausemeier, J. - Heinz Nixdorf Institute, GER
 Prof. Gehde, M. - TU Chemnitz, GER
 Harder, T. - ECPE European Center for Power Electronics, GER
 Hellmich, M. - MID Solutions GmbH, GER
 Prof. Helmreich, K. - University Erlangen-Nuremberg, GER
 Dr. Hertweck, B. - Kern-Liebers, GER
 Hess, T. - HARTING AG, SU1
 Dr. Heyer, J. - hc-heyerconsulting, GER
 Dr. Juergenhake, C. - Juergenhake GmbH, GER
 Prof. Kaloudis, M. - TH Aschaffenburg, GER
 Dr. Krueger, R. - LPKF Laser & Electronics AG, GER
 Prof. Kuhmann, K. - Evonik Industries AG, GER
 Prof. Manteuffel, D. - University Hannover, GER
 Mildner, W. - MSWtech, GER
 Dr. Moguedet, M. - S2P, FR
 Obermaier, J. - HUAWAI Technologies Duesseldorf GmbH, GER
 Dr. Plueg, C. - Merck KGaA, GER
 Dr. Pojtinger, A. - 2E mechatronic GmbH & Co. KG, GER
 Prof. Reichenberger, M. - TH Nuremberg, GER
 Dr. Reinhardt, A. - Seho Systems GmbH, GER
 Rohde, H. - Robert Bosch GmbH, GER
 Dr. Stegmeier, S. - Siemens AG, GER
 Prof. Schulze, V. - Karlsruhe Institute of Technology, GER
 Zadarej, V. - Molex Inc., US
 Prof. Zimmermann, A. - Hahn-Schickard, GER