



**Dr. Markus Limbach**  
(SMB Construction International GmbH)



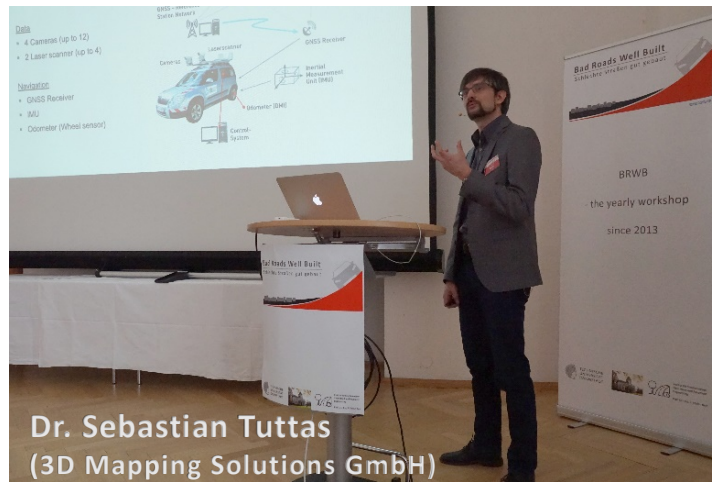
**Dr. Matthias Schollmeier**  
(Director Opel Testcenter Dudenhofen, retired)



**Dipl. Ing. Tim Alte Teigeler**  
(Otto Alte Teigeler GmbH)



**Dr. Robert Rasmussen**  
(The Transtec Group, Inc.)



**Dr. Sebastian Tuttas**  
(3D Mapping Solutions GmbH)



**Bad Roads Well Built**  
Schlechte Straßen gut gebaut

**2019**



**Dipl.-Ing. M. Lesemann** (ATC Aldenhoven)  
**Dipl.-Ing. F. Common** (IngenAix GmbH)



**Dr. Carsten Tilke** (Tilke GmbH & Co. KG)  
**Manuel Rubow, M.Eng.** (Tilke GmbH & Co. KG)



**Dr. Rainer Hart** (HART Consult Intern. GmbH)  
**Dipl.-Geol. Daniela Budach** (IBQ GmbH)

The workshop “Bad Roads Well Built 2019” was organized for the seventh time by the Institute of Road and Pavement Engineering at the Technische Universität (TU) Darmstadt/ Germany on February 22th, 2019.

More than 110 experts from 59 companies and institutes in 12 countries met in Darmstadt. With eight presentations, well known experts from the industry gave an overview of newest developments of test track design, construction, maintenance and of special requirements for facilities for testing autonomous driving. The experts, engineers, users and operators of Proving Grounds and test tracks shared their experience in animated discussions.

The day before the workshop, a visit of the new Daimler Proving Ground in Immendingen/Germany was offered. This Proving Ground has been specially designed for the testing of autonomous cars and systems. Reiner Imdahl, the PG manager, explained the special test tracks and functions. Part of the visit was a guided bus tour through the Proving Ground.

The day before the workshop was closed with a dinner in Darmstadt.

**Next workshop:  
28. Feb. 2020**



**Presenters** (from the left): Dr. S. Tuttas, Dr. M. Schollmaier, T. Alte-Teigeler, D. Budach, M. Lesemann, Prof. S. Bald, Dr. R. Hart, F.-J. Heßeler, F. Common, Dr. M. Limbach, Dr. C. Tilke, Dr. R. Rasmussen, M. Rubow, Dr. G. Faust

## Bad Roads Well Built 2019

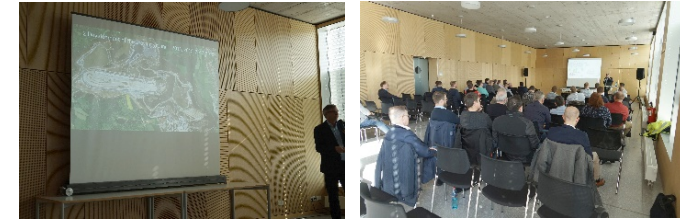
Sharing Experiences on Constructing Test Tracks for the Automotive Industry

Programme Committee: Dr.-Ing. Gerhard Faust Prof. Dr.-Ing. J. Stefan Bald  
Dr. rer. nat. Rainer Hart Dr.-Ing. Stefan Böhm

### Agenda

Time	Speaker	Topic
09:00 am - 09:15 am	Prof. Dr.-Ing. J. Stefan Bald Dr.-Ing. Gerhard Faust	Welcome and Opening
09:15 am - 09:45 am	Dr. Matthias Schollmeier (Director Opel Testcenter Dudenhofen, retired)	<b>Review and outlook:</b> Automotive PGs through the Ages
09:45 am – 10:15 am	Dr. Carsten Tilke (Tilke GmbH & Co. KG) Manuel Rubow, M.Eng. (Tilke GmbH & Co. KG)	<b>Vision:</b> New Requirements for PGs in the Future
10:15 am - 10:30 am	-----	Break
10:30 am - 11:00 am	Dr. Sebastian Tuttas (3D Mapping Solutions GmbH)	<b>Modern Surveying:</b> High Definition Survey of PGs and Test Tracks
11:00 am - 11:30 am	Dr. Rainer Hart (HART Consult International GmbH) Dipl.-Geol. Daniela Budach (IBQ GmbH)	<b>Asphaltmixture:</b> Type of Rock and Influ- ence for the Surface Texture of Asphalt
11:30 am - 12:00 am	Dr. Markus Limbach (SMB Construction International GmbH)	<b>Asphaltplacing:</b> Construction Limits using Asphalt for High Banked Tracks
12:00 am - 13:15 pm	-----	Lunch Break
13:15 pm - 13:45 pm	Dipl.-Ing. Tim Alte Teigeler (Otto Alte Teigeler GmbH)	<b>Surface Design:</b> Specific Surface Texture by “Grinding” and Usage of Prefabricated Concrete Elements
13:45 pm - 14:15 pm	Dr. Robert Rasmussen (The Transtec Group, Inc.)	<b>Surface Measurements:</b> How to Collect, Process and Use Data for Test Track Engineering
14:15 pm - 14:45 pm	-----	Break
14:45 pm - 15:15 pm	Dipl.-Ing. M. Lesemann (ATC Aldenhoven) Dipl.-Ing. F. Common (IngenAix GmbH)	<b>Urban Testenviroment:</b> The Aldenhoven PG/ Germany
03:00 pm - 03:30 pm	Prof. Dr.-Ing. J. Stefan Bald Dr.-Ing. Gerhard Faust	Final Discussion and Closure

## Visit of the Daimler Proving Ground



## Workshop Impressions

