



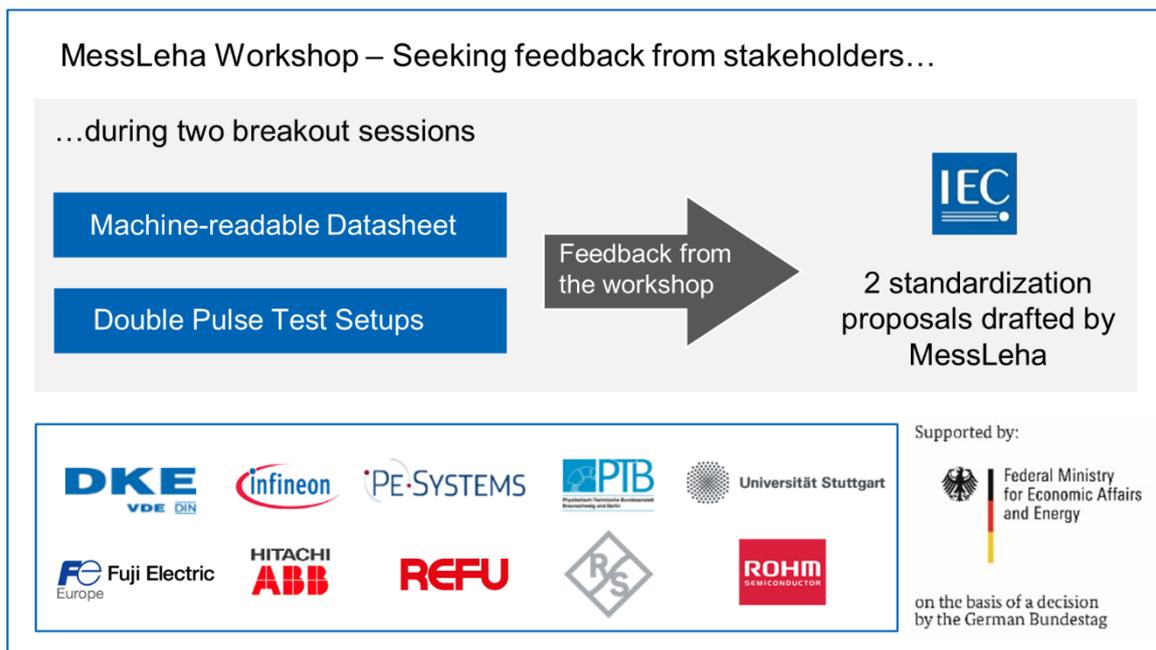
## Paving the Way for Seamless Characterization, Simulation and Development

The project MessLeha analyses measurement methods and environments for the characterization of fast switching power semiconductor and develops a digital datasheet suitable for all simulation tools.

We invite you to discuss these topics with us during an online workshop on

- **04 March 2021, 09:30 – 13:45 (CET)**

The feedback and stakeholder requirements gathered in two breakout sessions will be included in the ongoing work and the resulting standardization proposals for the International Electrotechnical Commission IEC.



### Registration

The workshop is aimed at users and developers of power electronic systems as well as manufacturers of power semiconductor and simulation tools.

Register [here](#) until **01 March 2021**. The workshop is free of charge.

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## Agenda

### 04 March 2021, Online Workshop

09:30 – 09:40 **Welcome and Introduction**

Alexandra Fabricius, VDE DKE

09:40 – 09:50 **Converter Design: But Where Do I Find the Right Device Model?  
How a Machine-Readable Datasheet Can Speed up the Design Process**

Anna-Lena Heller, PE-Systems GmbH

09:50 – 10:00 **Double Pulse Testing of Fast Switching Devices: Challenges and Opportunities**

Uwe Jansen, Infineon Technologies AG

10:00 – 10:20 **Challenges in Switching-Loss Determination of Fast-Switching Wide-Bandgap Semiconductors**

Ying Su, PTB Physikalisch Technische Bundesanstalt

Dominik Koch, University of Stuttgart

Philipp Ziegler, University of Stuttgart

10:20 – 10:30 **Switch to Breakout Sessions**

10:30 – 12:00 **Breakout Sessions**

#### **Track 1: Machine-readable Datasheet: Requirements, Hurdles, Solutions**

Vendors of power semiconductor devices have to decide for which of the available simulation tools they provide a model. How convenient the setup of a simulation for a customer is depends on whether they use the “right” tool. In the worst case, the device will not be considered due to the lack of a suitable model. By providing a machine-readable datasheet, the process of device model parametrization can be automated by the toolchain manufacturers. During the breakout session, all stakeholders are able to name and discuss their requirements to be taken up by the project in the standardization activities.

#### **Track 2: Double Pulse Test Setups: Capabilities, Targets, Gaps**

Double pulse testing of power semiconductors is a well-established method for power device characterization at the device manufacturer but with the introduction of wide bandgap devices like SiC new challenges arise. On the other hand, many design engineers are not aware what additional benefits double pulse testing in their own setup could provide. In an interactive session we will collect inputs from the participants to evaluate to what extent the MessLeha project already addresses the gaps and where further work is needed.

12:00 – 13:00 **Lunch Break**

13:00 – 13:30 **Workshop Summary and Results**

MessLeha Partners

13:30 – 13:40 **Next Steps**

13:40 – 13:45 **Closing Remarks**

Alexandra Fabricius, VDE DKE