



19.02.2025 Bratislava:

Elektrotechnický ústav Slovenskej akadémie vied, v.v.i., Dúbravská cesta 9, 841 04 Bratislava

Seminar:

Innovations in Thermal Design for Future Power Electronics

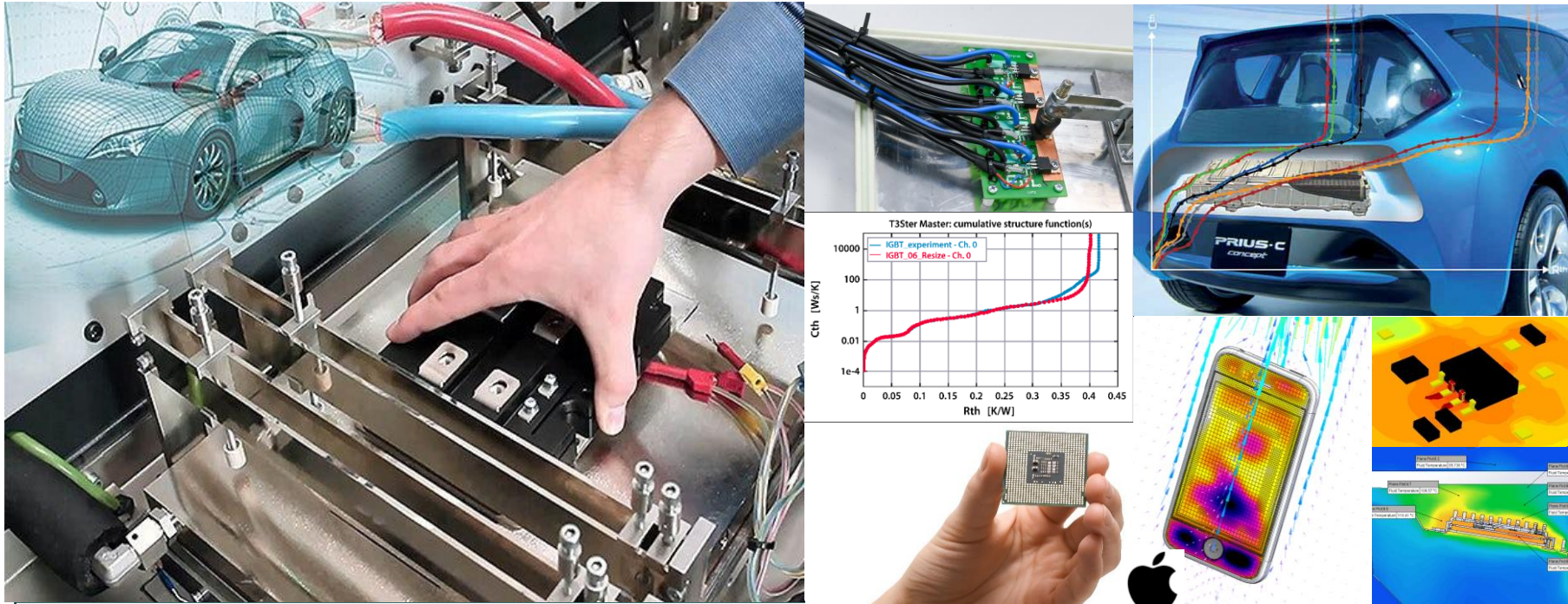
TechSim Engineering, the leading **SIEMENS** partner in CEE, and **Institute of Electrical Engineering, Slovak Academy of Science (IEE SAS)** invite you to join CoolFusion Seminar 2025, a premier event dedicated to exploring the **latest trends in thermal simulation and testing** for advanced electronics design.

Learn from experienced speakers, explore cutting-edge innovations in thermal simulation, and have the opportunity to see future **electronics research laboratories at IEE SAS**. Don't miss this must-attend event for the future of electronics design!

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Innovations in Thermal Design for Future Power Electronics

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08:00	Registration of participants
08:30	Opening of the seminar <ul style="list-style-type: none">• New IEE SAS - Siemens Power Testing Collaboration
09:00	How to design a performance-optimized power module... in a week <ul style="list-style-type: none">• Ideal power module design and verification flow• Efficient use of multidisciplinary simulation and testing• Up to 78% of time and cost reduction in designing power modules
9:45	Coffee Break
10:15	Testing 1 – How to get most accurate thermal metrics <ul style="list-style-type: none">• Description of SIEMENS T3STER - Non-destructive – non intrusive testing method• Introduction of transient testing• Introduction of power cycling
11:00	Testing 2 – Laboratory tour & Demo of a power module transient measurement <ul style="list-style-type: none">• Capabilities of IEE SAS laboratory• SIEMENS Hardware, use cases• Postprocessing• Q&A
12:00	Lunch
13:30	Testing 3 – Accessing reliability and quality of semiconductors and power electronics <ul style="list-style-type: none">• Power cycling features• Structure function during power cycling• Challenges during measurement
14:30	Simulations 1 – 3D CFD solutions tailored for electronics thermal design <ul style="list-style-type: none">• Highly-accurate thermal models for CAD and thermal engineers• Dedicated capabilities for electronics cooling specific applications• Automated model calibration based on testing
15:15	Break
15:45	Simulations 2 – Demo - How to save design time and raise simulation accuracy
16:45	References and success stories from the industry <ul style="list-style-type: none">• Boosting the range of Electric Vehicle by 10% while halving charging time• Understanding time to failure, manufacturing variability, and accurate thermal performance• >30% reduction in errors, rework and claims
17:30	Close