

TEC+2022

PANEL 6: ADVANCEMENTS AND CHALLENGES IN HIGHER VOLTAGE (800+ V) ELECTRIC VEHICLES AND AIRCRAFT

16 JUNE 2022 | 2PM - 3:40PM



As electrification is applied to increasingly higher power demand applications (trucks and aircraft), operation at high voltage (800 V to 3 kV) is required so that current is kept low for low losses and heat generation. High voltage operation comes with new design challenges to control partial discharge and arcing. For aviation applications operation at altitude is even more challenging as partial discharge initiation voltage can drop radically with increasing altitude and air pressure. Design standards and even fundamental physics understanding of material degradation under high field is lacking. This panel of industry and academic experts will discuss the challenges, technical approaches and ongoing research efforts in HV operation and distribution.

Speakers:



ANDY WOODWORTH

NASA Glenn Research Center-
Hybrid Electric Aircraft
Materials Technical Lead



RICHARD ANDERSSON

PhD, Electrical Engineer at
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THIERRY LEBEY

Head of Research on High
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JEAN RIVENC

Expert in High Voltage,
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PASCAL THALIN

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