# CALL FOR PAPERS





# Special Session on DC Shipboard Power Systems for the future All Electric Ships

IECON 2018 - The 44<sup>th</sup> Annual Conference of the IEEE Industrial Electronics Society October 21-23, 2018, Washington D.C, USA



#### TOPIC OF THE SPECIAL SESSION

Medium Voltage Direct Current (MVDC) power distribution was selected by the US Navy as the power distribution architecture of their future ships. The aim is to enhance power density and system's efficiency, while enabling new capabilities (e.g. management of storage systems, supplying of pulsed loads and innovative radars, system reconfiguration in case of fault, improved power flow control). For reaching the aforementioned advantages of MVDC shipboard power system, a widespread use of controlled power converters is conceivable.

## Topics of the Session

- Electric propulsion: machines and variable speed drives
- Generating systems: machines and control
- ➤ Power conversion: AC-DC and DC-DC interface converters
- > DC power system architectures
- > Analysis of DC short-circuit and Short Circuit Detection
- > Power converters for system reconfiguration
- > Centralized/decentralized control for DC Bus regulation
- > Analysis of CPL behavior
- > Power management and load sharing
- Integration, control and impact of energy storage and pulsed loads

#### IEEE IES Technical Committee Sponsoring the Special Session:

➤ IES TC on Smart Grids (TC-SG)

### Author's schedule:

- Deadline for submission of special session papers Date 1 (use from http://www.iecon2018.org)
- Notification of acceptance
  Date 2 (use from <a href="http://www.iecon2018.org">http://www.iecon2018.org</a>)
- Deadline for submission of final manuscripts Date 3 (use from http://www.iecon2018.org)

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