

THE DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING SPEAKER SERIES

PRESENTS

Designing for Extreme Environments



John Parry

Electrical Métier Manager, **Schlumberger**

Monday, **25 Nov. 2019**, 9.55 AM

Room **AH-106** (Agnes Arnold Hall)

LECTURE ABSTRACT

Designing tools for extreme environments, in the excess of 150 °C and pressures of >20,000 PSI can be extremely challenging and daunting – especially in downhole applications where you cannot exactly see what's going on beneath tens of thousands of feet! This talk focuses on designing electrical systems for harsh environments that requires knowledge well beyond basic electrical theory. In this presentation, specific aspects of simulation, testing, proper manufacturing processes and knowledge about mechanical limitation or electrical components in an overall extreme environment system will be covered.

SPEAKER BIOSKETCH

Mr. John Parry earned his M.S. degree from University of Iowa in 1996. Since then, he has spent over 23 years in various roles at Schlumberger Technology Corporation. Currently, he is the Electrical Métier Manager for the Sugar Land based center of Houston Formation Evaluation (HFE). In that 23 years at Schlumberger, he has designed acquisition, power supply, motor control, and inverter boards for Wireline Drilling and Wireline applications for temperatures in excesses of 150 °C, and tools operating beyond 20,000 PSI. John has developed motor control algorithms, for conveyance and communication applications. He has further designed induction and permanent magnet motors for conveyance and hydraulic pumps. John has been a technical and training & development manager for electrical engineers on the Sugar Land campus and the technical advisor for management on electrical activities there.

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Department of Electrical & Computer Engineering