



**Prof. Mayank Srivastava**

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**TUTORIAL TOPIC:**

GaN power Transistors: Design

**TUTORIAL:**

Future power electronic products demand power transistors with high speed switching as well as RF amplification capabilities. High Electron Mobility Transistor (HEMT) - a relatively new device in power family - has shown a way forward to future power electronic requirements. This tutorial will walk the audience through the HEMT basics, device design essentials, recent progress and current challenges.

**PROFILE:**

Prof. Mayank Shrivastava has a wide experience and interest in the field of Nanoscale and power device design and modeling. He has taken several positions within the semiconductor industry. During 2008 and again in 2010, he was a Visiting Scholar at Infineon Technologies AG, Munich, Germany. During 2010-2011, he worked for Infineon Technologies, East Fishkill, NY, USA and later Intel, Mobile & Communications Group, USA. From Oct. 2011 till Aug. 2013 he was with Intel, Mobile & Communications Group, Munich Germany. In September 2013 he joined as a faculty in the Department of ESE at the Indian Institute of Science, Bangalore, India. Prof. Shrivastava was a recipient of several awards including the India TR35 award for the year 2010 (Young Innovator Award from MIT Technology Review 35). He has authored over 35 international journal and conference publications, and have 18 US patents issued or pending on his name.