

Title: Advances in III-N Devices for 5G and Beyond

Patrick Fay is a Professor in the Dept. of Electrical Engineering at the University of Notre Dame; he received a Ph.D. in electrical engineering from the University of Illinois at Urbana-Champaign in 1996. His research focuses on the design, fabrication, and characterization of microwave and millimeter-wave electronic devices and circuits, as well as the use of micromachining techniques for the fabrication of RF through sub-millimeter-wave packaging. He established the High Speed Circuits and Devices Laboratory at Notre Dame, which includes device and circuit characterization capabilities at frequencies up to 1 THz. He also oversaw the design, construction, and commissioning of the 9000 sq. ft. class 100 cleanroom housed in Stinson-Remick Hall at Notre Dame, and has served as the director of this facility since 2003. Prof. Fay is a fellow of the IEEE, is an IEEE Electron Devices Society Distinguished Lecturer, and has published 11 book chapters and more than 350 articles in scientific journals and conference proceedings.

