



**IWPSD 2021**  
 Indian Institute of Technology, New Delhi, India  
 14 - 17 December, 2021



## Symposium: Device Simulation and Modeling (HALL 3)

### DAY 1 (D1) (14<sup>th</sup> December 2021/Tuesday)

9:00-11:15	Inaugural Session and Keynote Talk - Hall 1 (Common for all symposia)	
Session-1 (Morning)		
Time (IST)	Speaker	Title
11:15 – 12:00	<b>Shreepad Karmalkar</b> (IIT Madras)	DSM-SKN-1: Charge-Sheet Super junction in Silicon Carbide
12:00 – 12:30	<b>Avirup Dasgupta</b> (IIT Roorkee)	DSM-I-1: BSIM-CMG: Compact Model for Gate-All-Around FETs
12:30 – 13:00	<b>Harshit Agarwal</b> (IIT Jodhpur)	DSM-I-2: Emerging trends in Nano electronics and role of Compact Modeling
LUNCH BREAK (13:00 – 14:00)		
Session-2 (Afternoon)		
Time (IST)	Speaker	Title
14:00 – 14:30	<b>Maryam Shojaei Baghini</b> (IIT Bombay)	DSM-I-3: $\mu$ W Energy Harvesting and Power Management
14:30 – 15:00	<b>Mayank Shrivastava</b> (IISc Bangalore)	DSM-I-4: How Computational Modeling Enabled Development of (India's First) GaN Based Power Transistor and Diode Technologies
15:00 – 15:15	<b>Anweshan Chakrabarti</b> (IIT Madras)	DSM-O-1: A surface potential based current model for Suspended Gate Field Effect Transistor prior to pull-in
15:00 – 15:30	<b>Yuvraj Misra</b> (IIT Mandi)	DSM-O-2: Switching in 2D Materials Memristors: A Quantum-Transport Study
15:30 – 15:45	<b>Vivek Kumar</b> (IIT Roorkee)	DSM-O-3: Optimization of Negative Differential Conductance (NDC) Point for Multi Gate Devices Considering Self Heating Effects using Surface to Volume Ratio (SVR)

16:00 – 16:15	<b>Tea Break</b>
16:15 – 17:15	<b>Industry Session-Hall 1 (Common for all symposia)</b>
17:15 – 18:45	<b>Plenary Session-Hall 1 (Common for all symposia)</b>
<b>END OF DAY-1</b>	

**DAY 2 (D2) (15<sup>th</sup> December 2021/Wednesday)**

<b>9:30-11:15</b>	<b>Plenary Session-Hall 1 (Common for all symposia)</b>	
<b>Session-1 (Morning)</b>		
<b>Time (IST)</b>	<b>Speaker</b>	<b>Title</b>
11:15 – 12:00	<b>Dev Alok Girdhar</b> (Renesas Inc. USA)	DSM-SKN-2: Power Device Simulations: Trends and Status
12:00 – 12:30	<b>Shree Prakash Tiwari</b> (IIT Jodhpur)	DSM-I-5: Design and Modeling Aspects for High Performance Organic Thin Film transistors and Circuits
12:30 – 12:45	<b>Abhishek Sharma</b> (SSPL, Delhi)	DSM-O-4: Effect of cavity length on edge emitting semiconductor laser performance
<b>LUNCH BREAK (13:00 – 14:00)</b>		