PURDUE UNIVERSITY

Birck Nanotechnology Center

Gaurav joined Analog Devices in 2007 after finishing his Master of Science at Marquette University. His Master's thesis work focused on design and evaluation of Piezoelectric Lamb Acoustic Wave Devices. At Analog Devices, he has contributed to the design, simulation, verification and successful release of multiple automotive and consumer grade MEMS gyroscope and accelerometer programs. He is currently working as a senior member of MEMS Inertial Sensors design group and has 2 patents issued and 7 pending.

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Birck Thursday Lunch Seminar Series
Gaurav Vohra

Thursday, November 15, 2018
12:00pm – 1:00pm
BRK 1001 – Lunch Provided

MEMS Gyroscopes: Modeling stress-to-offset, towards design improvements

Offset stability for Gyroscopes is extremely important for MEMS devices, especially for safety critical applications. Tiny stresses resulting from tens of nanometers of deformation can violate the data sheet specification for offset. Identification and understanding of stress related offset mechanisms plays a key role in improving the performance of the next generation of MEMS sensors. This talk will cover the basics of gyroscope and highlight the difficulties of simulating stresses for vibrating sensors (like gyroscopes) and improving the stress sensitivity through design changes by an order of magnitude with experimental validation.

PURDUE UNIVERSITY Discovery Park