



## Colloquium



Date and time: Friday, September 25, 2015, 10:30 - 11:30 a.m.  
Venue: BB133

Title: **Big Data Analytics in Semiconductor Manufacturing**

Speaker: **Sanjai Sharma**  
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**Abstract:** These days, size, type and complexity of data in semiconductor manufacturing is at all-time high. With circuit geometries, manufacturing a typical microchip of size smaller than 30 nm (~100000 times smaller than hair) requires ~1000 process steps. At each such step, every decision is extremely critical and needs to be data-driven. Many times, a make or break situation for a company with the investment of multi-billion dollars rides on just a couple of data-driven process changes done in a timely manner. In this talk, I will discuss the general big-data challenges in semiconductor manufacturing industry and highlight the data analytics technologies and skill set required to resolve these challenges.

**Speaker's brief bio:** Sanjai Sharma manages a global team which is responsible for providing Yield/Equipment Data Analysis Solutions at Globalfoundries Inc. Sanjai graduated with a Master's degree from Indian Institute of technology, Delhi in 1998 and since then he has been working in semiconductor industry. Before joining Globalfoundries Inc. in 2012, he has worked with Applied Materials Inc. and Micron Technology Inc. Sanjai specializes in data analytics systems and technologies.