

# 2015 Rochester Section Joint Chapters Meeting

## March 31, 2015

### RIT Inn & Conference Center, 5257 W. Henrietta Road

Registration: 4:00-4:30 PM

Chapter Technical Presentations: 4:30 – 5:30 PM and 5:30 – 6:30 PM (see below)

Social and Refreshments (Cash Bar) 6:30 – 7:00 PM Dinner & Keynote Presentation: 7:00 – 9.30 PM



## Keynote Speaker: Dr. Stefan Wurm

SEMATECH Director of Strategic Alliances



# Collaborative Research and Development in a Dynamically Evolving High Technology Landscape

The semiconductor industry landscape today looks very different than it did when SEMATECH was founded in the late 1980's to help drive and coordinate collaborative research in a highly competitive industry with more than 20 leading-edge chip companies. Today semiconductor manufacturing is i) a highly consolidated industry with only a few

players that can afford to invest in leading edge development and manufacturing; ii) supplying a much more differentiated end market served by a new set of players, many of whom did not exist 25 years ago; and iii) supported by a supply chain where even the largest players struggle to fund research and development needs. While this provides opportunities for new models of successful collaborative research within the value chain of the semiconductor industry, it also points to a need for collaboration between industries that that have not traditionally cooperated. Examples include healthcare and scientific applications that increasingly rely on highly integrated silicon solutions. In this presentation we share our perspective on these industry changes and their implications for successful research and development collaboration.

#### **Presentations**

4:30 – 5:30 pm	Electron Devices	Dr. Min-Hwa Chi, Globalfoundries	FinFET technology: Overview and status at 14nm node and beyond	
	Signal Processing	Dr. Raja Bala, Xerox	Video Analytics in Transactional Services	
	Geospatial and Remote	Dr. Matthew J. Hoffman, RIT	Ground Target Tracking Utilizing DDDAS Based	
	Sensing		Control of an Adaptive Optical Sensor	
	Technology &	Scott Catlin, J.D., Univ. Rochester	URVentures: Commercializing University	
	Engineering Management		Technology	
5:30 – 6:30 pm	Photonics	Dr. Stefan Preble, RIT	Silicon Photonics – Light on a Chip for High	
			Performance Computing	
	Engineering in Medicine	Dr. Cristian Linte, RIT	On Augmented and Virtual Visualization	
	and Biology		Environments for Computer-Aided Diagnosis	
	Communications	Dr. Giridhar Mandyam, Qualcomm	User Authentication and the Mobile Web	
	Microwave Theory & Tech	Dr. Frank Scharf, CST of America	Modeling and Simulation of Plasma Based	
	Antennas & Propagation		Applications in the Microwave and RF Range	
	Technology & Engineering Management	Special Session with VC Panel	Panel discussion	

#### **Dinner Selections**

New York Strip Steak

Ten Ounces with Caramelized Onions & Cabernet Butter

Or Seared Salmon
Prosecco Cream Sauce

<u>Or</u>

Spicy Orecchiette

Pasta with Mixed Vegetables in Arrabbiata

**Dinner Reservations Required by March 23** (No charge for attending technical presentations)

Register on-line at <a href="https://meetings.vtools.ieee.org/m/31549">https://meetings.vtools.ieee.org/m/31549</a> (pay-pal accepted)

**Dinner**: \$30.00 (IEEE Member or IEEE Member spouse/significant other), \$40.00 (Non-member) \$15.00 (IEEE Student Member), \$20.00 (IEEE Student Non-member).