ABSTRACTS

Thursday, July 25, 2002

8:30 – 9:45 am
The Spirit *of* High Tech Entrepreneurship at MIT – What's Hot and What's Not
Mr. Kenneth P. Morse, Senior Lecturer and Managing Director, MIT Entrepreneurship Center

What are the critical success factors for starting and running a new, technology-based enterprise? How does MIT train the men and women who will make start up companies successful? What are the MIT resources available to our students and alumni?

9:45 – 10:45 am

10:45 – 11:00 am **BREAK**

11:00 – 12:00 noon
From Research to Release: The Tale of an Optimization Software Company
Dr. John Ruark, Co-Founder and Chief Technology Officer of Optiant

Too much research never enters the business mainstream because it is never successfully transformed from raw algorithms into robust, secure, scalable, and usable software. Combining the efforts of two MIT Ph.D. students, one focusing on supply-chain strategic inventory positioning research, the other focusing on creating enterprise-class algorithmic software solutions, four entrepreneurs founded Optiant, Inc., in August 2000, with the mission of bringing advanced research into the hands of supply-chain engineers who do not have advanced mathematical degrees.

The talk will focus on the requirements of a successful software development environment, which naturally extend beyond simply having a correct algorithm. Areas for discussion include building the team, defining the market, executing a repeatable software process, improving performance of algorithms so that end-users can perform what-if analyses, and ensuring the quality of the finished product.

To date, Optiant has raised $7 million from Battery Ventures, a leading venture capital firm, and has received numerous awards, including *ComputerWorld s* Top 100 Emerging Companies for 2002 and inclusion on *Start Magazine s* 2002 Hottest Companies list. Optiant s Chief Scientist was named as one of the world s 100 Top Young Innovators by *Technology Review.* Optiant customers include Fortune 500 manufactures of high-tech products and consumer-product goods.

12:00 – 1:00 pm

1:00 – 2:00 pm **LUNCH**

2:00 – 3:00 pm
"Ideas, Invention, Innovation and Implementation"
Professor Charles Cooney, Professor of Chemical & Biochemical Engineering and Faculty Director of the Deshpande Center for Technological Innovation

University research is an essential part of the foundation on which new companies are built. This comes in part because of the open environment of the academic community in which innovative thought is rewarded, failure is accepted as a starting point for another try and progress is measured by a stream of educated students and post doc's. The university role in the technology supply chain that supports formation and growth of innovative companies is especially clear in biotechnology where many early scientific discoveries have been converted into technology and commercial reality. Using examples from the successful growth of the biotech industry to illustrate the role in the recent creation of the Deshpande Center for Technological Innovation seeks to enhance this model and accelerate the transformation of ideas to implementation.

3:00 – 4:00 pm
Confessions of an Academic Entrepreneur
Arvind, Laboratory for Computer Science, M.I.T.

I will describe my transformation from a person who never read the Wall Street Journal, never bought or sold stocks, and never paid much attention to the startup scene to a person who is the founder and President of a 60-person company. This has required me to understand, among other things, the concept of *smart* money and its value, the difference between Sales and Marketing, accountants notion of profitability, and why an engineer with a Ph.D. from MIT may be valued less than an engineer with a B.S. and 10-years industrial experience. I will share with you the joys and the travails of the capitalist world in my young carrier as an entrepreneur.

Friday, July 26, 2002

8:30 – 9:30 am

9:30 – 10:30 am
Startup 101: Lessons from inside the Tornado
Dr. Res Saleh, Department of Electrical and Computer Engineering, The University of British Columbia

In 1995, during the frenzied days of an emerging internet-centric world, an electronic design automation (EDA) company quietly began operations in Silicon Valley, which was at the eye of the internet storm. This talk about the founding of Simplex Solutions, a successful EDA startup that beat the odds and eventually outlasted most of the internet startups. The company went public in 2001 and was recently acquired by Cadence. Simplex designs software products that verify integrated circuit designs before they are manufactured to detect signal integrity problems that may lead to chip failures. In this presentation, the experiences that shaped the company and led to its many successes will be described. In addition, the engineering process that produced the highest quality software in the industry will be highlighted. The talk will conclude with the key lessons learned while living inside the tornado.

10:30 – 10:45am **BREAK**

10:45 – 11:45 am

Survivable Product Lines and Scalable Business Models Derived from Engineering Science
Mr. Neil Goldfine, Founder and President of JENTEK Sensors, Inc.

For JENTEK, an early dilemma was to focus on one niche product/market or to delay product launch and develop a product line with a sustainable Engineering-Science advantage. Engineering-Science, a term coined by the late Prof. James Melcher, of MIT's Laboratory for Electromagnetic and Electronic Systems (LEES), can be defined as the development of products and services that meet a fundamental market need through engineering innovations that are founded upon scientific understanding. Development of a sustainable competitive advantage, by definition, takes years of R&D and anticipation of customer needs. JENTEK Sensors has selected the "Engineering-Science" track to develop a materials characterization product line that includes analytical methods, sensors, instrumentation, software and systems for imaging of material properties. After fifteen years of R & D, beginning at MIT LEES, and continuing with private investment and substantial government funding, JENTEK has just now launched its first full product line. Instead of heeding the advice of many to focus on a few applications, JENTEK has focused on developing a core product line and Engineering-Science capability with pervasive applications. The key to long-term success for JENTEK is empowering customers to develop and implement widely varying applications for this core product line. JENTEK is accomplishing this by providing rapid customization tools, and continuing to evolve and expand our product line to meet new customer driven challenges.

11:45 – 12:45 pm

12:45 – 2:00 pm **LUNCH**

2:00 – 3:00 pm