



# Seminar

## BioPune Series

NCL  
Innovations



CII - Biotechnology Resource Center,  
NCL Innovation Park, Pune

BioPune Seminar Series Talk # 5  
on

Taking technology ideas from  
concept to commercialization:  
The case of Retrofittable  
Digital Radiography Systems

by

**Dr. Sreeram Dhurjaty**  
President, Dhurjaty Electronics  
Consulting LLC  
Co-founder, Jeevtronics Pvt. Ltd.

on

**Friday, 4 April 2014**  
4pm-5.30pm  
Training Room, Venture Center  
100 NCL Innovation Park  
Dr. Homi Bhabha (Pashan) Road,  
Pune – 411008

Tea shall be served at 3.45pm am at the venue

This is a free event but registration is required:

[Register](#)

<http://vcevents.pandaform.com/pub/m8qggl/new>

### Dr. Sreeram Dhurjaty



President, Dhurjaty Electronics Consulting LLC  
Co-founder, Jeevtronics Pvt. Ltd.

#### Abstract:

During the last 10 years, retrofittable radiography systems have created a revolution in Radiography. These systems that are the thickness of screen films have allowed traditional "Analog rooms" to be converted to "Digital Rooms" easily and seamlessly.

This talk traces the development of the first ever digital radiography system, first developed by Eastman Kodak and now sold by Carestream Health. One of the primary inventors of this system is the Author of this talk.

The evolution of the concept will be discussed. This will be followed by the challenges in the various technologies that were needed to realize the product. These include mechanical challenges, power conversion, the scintillator and detector, automatic exposure detection, and wireless, to name a few. Other challenges include the effect of temperature differences on the image. Image processing and rendering techniques as well as image transmission will be discussed. The challenges of commercializing this technology from the research lab to a commercial system will be detailed. This system has been a trailblazer which has instantiated various companies into selling retrofittable radiography systems. Recent advances in this field will be detailed during the latter part of this presentation.

#### About the speaker:

Ram held senior positions in engineering and research, in medical systems, at Eastman Kodak Company, Analogic, and Bose Corporation before embarking on a career of full time consulting. He was educated at IIT Bombay and Yale University and has degrees in Civil Engineering, Fluid mechanics, Electronic Instrumentation, Biomedical Engineering, and Control System Theory. Over his career he has designed medical systems such as Patient Monitors, Defibrillators, CT scanners, Fetal Monitoring systems, Digital and Computed Radiography, Telemedicine, Telerehabilitaion and precision analog circuitry for medical systems.

He has 15 issued patents in areas of medical devices and systems. He is passionate about affordable medical devices and is working on a hand-cranked defibrillator. He works closely with the Engineering World Health Organization (EWH.org) developing medical devices for undeveloped countries. He also consults on, in addition to power supplies for medical systems, efficient power supplies, and converters for small wind turbines.

Ram is also one of the co-founders of Jeevtronics, Pvt Ltd., Pune and is developing an affordable hand-cranked defibrillator for low and middle income countries.

Ram is an experienced pilot and enjoys flying to his client's location to discuss the next steps on a project.