

Joint Research Group

**Manuscriptology and Digital Humanities****Advanced Technologies for Imaging and Preservation of  
Ancient Palm-leaf Manuscripts****P. R. Mukund, Ph.D.**

(Professor of Electrical Engineering, Rochester Institute of Technology)

**Mon., 08<sup>th</sup> Nov.****07:15-8:45 am**  
(CET, USA Eastern)**13:15-14:45 Hrs**  
(CET Germany)**05:45-07:15 pm**  
(IST India)**09:15-10:45 pm**  
(JST Japan)

FREE online talk

[ZOOM LINK](#)Meeting ID:  
826 6024 3111Passcode:  
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Manuscripts on dried palm leaves were engraved with a sharp metal pen, and filled with vegetable ink for contrast. This was the medium of choice in southern part of India for a very long time. Many ancient texts on various subjects such as philosophy, science and medicine are available ranging in antiquity between three hundred and almost thousand years. As time passes, these manuscripts suffer from fading, fungus, and other factors that make extracting the image difficult.

In this talk, we look at using imaging at multiple spectra to extract good images even from damaged palm leaf manuscripts. Preservation of the images for very long term is needed for true archiving, which is not accomplished with storing digitized images on servers. A new technology using semiconductor manufacturing techniques will be presented that can archive images for many hundreds of years.

**Prof. P.R. Mukund** has been on the faculty of Electrical Engineering at RIT for over three decades. His area of specialization is analog and RF integrated circuit design. He has supervised the graduate research of over eighty MS and Ph.D. students. His research has been sponsored by the National Science Foundation and many leading semiconductor companies. Dr. Mukund is also a student and teacher of Vedic Science. He started a non-profit trust in India called Tara Prakashana ([www.taraprakashana.org](http://www.taraprakashana.org)) that has been involved in preservation and dissemination of Vedic knowledge since 2006.

