

## Internationales

**Another milestone of the Indo-German Cooperation**

The Institute for Print and Media Technology at Chemnitz University of Technology has launched a new laboratory for printed solar cells in Manipal, India on January 24th, 2013



Prof. Dr. Arved Hübler welcomed the guests who participated in the ceremonial opening of the pmINNOVATION lab in Manipal. Photo: pmTUC

From now on, the Institute for Print and Media Technology at Chemnitz University of Technology (pmTUC) has a second pillar in India: the pmINNOVATION lab in Manipal. The ceremonial opening was held on January 24th, 2013 at 4pm (local time) in the Innovation Centre of Manipal University. Prof. Dr. Arved C. Hübler from the Department of Print & Media Technology and Rector Prof. Dr. Arnold van Zyl participated in the inauguration. In future, the lab will serve as basis for analyses and projects on printed solar cells.

In a first step, the research activities in the new lab will concentrate on application-related tests on printed paper photovoltaics. This innovative technology, developed by the working group of Prof. Hübler, offers potentials to provide, for instance, energy in poorly developed areas. In cooperation with researchers of Manipal University and other Indian institutions, the efficiency of the technology will be analysed under real

conditions and possible business models for the market will be developed. An Indo-German Industrial Advisory Board will continually supervise the laboratory activities. The proximity of the "Manipal University Technology Business Incubator" (MUTBI) will create additional impulses to the development of marketing strategies.

Two researchers from pmTUC have already been in Manipal for the last two months in order to deal with the necessary formalities and to conduct and evaluate first experiments on printed solar cells. Björn Engler and Deep Prakash are alumni of the Indo-German double degree Master's programme Print and Media Technology. Thus, both know the Indian and German local conditions - a huge advantage when working in the new innovation lab. "Culture and working style of both countries couldn't be more different. And exactly here lies the challenge," Engler said. Therefore, a fast, step-wise expansion of the small launch team and a continuation of the research scope are planned.

On January 24th, the opening ceremony has been conducted by the Rector of Chemnitz University, Prof. van Zyl and Vice-Chancellor of Manipal University, Dr. Komattil Ramnarayan. Representatives of the German Embassy, the consulate and from the industry and science were also present. The inauguration was followed by a small exhibition on current research fields of the pmTUC. "The opening of the lab in India helps to promote the excellence of our university at the international level. As a result, more and more international students come to Chemnitz University. The number of Indian students alone has multiplied in the past years," Prof. van Zyl noted. In the winterterm 2010/2011, 40 Indian students were enrolled at Chemnitz University, whereas the number increased to 192 students in the winterterm 2012/13. Prof. Hübler is confident, too: "India offers a broad variety of chances for the internationalisation of our research cooperation. By launching pmINNOVATION in cooperation with Manipal University another milestone has been reached. The cooperation provides interesting development opportunities for both sides."

**Background: Cooperation of the Institute for Print and Media Technology with Manipal University**

The Institute for Print and Media Technology at Chemnitz University of Technology is a world-wide leader in the field of printed electronics and set technological milestones by inventing printed solar cells, printed loudspeakers, and printed transistor circuits. Since 2004, pmTUC maintains a relation to Manipal University. Started in 2008, the only Indo-German double degree Master's programme Print and Media Technology allows students from Chemnitz to study in Manipal and vice versa. The cooperation with Manipal University also includes doctoral procedures. The pmTUC, however, pursues further research projects in India such as IIT Kanpur which operates in the field of printed solar cells. Manipal University, on the contrary, is the oldest private university in India and has branches in other Indian cities, Malaysia and Dubai. Technical subjects offered at the Manipal Institute of Technology at Manipal University ranks regularly in the upper section of Indian university rankings.

**More information** are given by Prof. Dr. Arved Hübler, tel. +49 (0)371 531-23610, email. [pmhuebler@mb.tu-chemnitz.de](mailto:pmhuebler@mb.tu-chemnitz.de) or Conny Schuhmann, tel. +49 (0)371 531-35838, email. [conny.schuhmann@mb.tu-chemnitz.de](mailto:conny.schuhmann@mb.tu-chemnitz.de). Website of pmTUC's activities in India:



<http://www.pm-india.in>

(Author: Conny Schuhmann, Translation: Rebekka Völcker)

Katharina Thehos  
24.01.2013