

#### N.4: US patent for RF substrate used in solid-state RF amplifiers

High power solid-state RF amplifier, developed indigenously at RRCAT makes use of imported RF substrates in bulk for realising MOSFET based RF circuits. World over only handful of industries are manufacturing this substrate. Since this material is used for the commercial as well as strategic applications, they fall under the embargo category. Understanding its strategic importance, an indigenous and novel RF substrate with better properties has been developed jointly by RRCAT and Centre for Materials for Electronics Technology (C-MET), under a flagship BRNS funded project. As a spin-off of project's research outcomes, US patent of this substrate had been filed in 2014. It was granted jointly to DEITY and DAE in Nov. 2016. This patent (US 9505902 B2) was officially handed over to Dr. P. A. Naik, Director, RRCAT on 28 Feb 2017 at RRCAT by Dr. N. R. Munirathnam, Director General, C-MET. With in-house production of these substrates within our country, foreign dependency will be removed for developing RF circuits in future.



Handing over of US patent to Director, RRCAT (third from left) by Director General, C-MET (second from left)

Reported by:  
Akhilesh Jain (ajain@rrcat.gov.in)

#### N.5: M. Tech. Students' fest – “ANUGOONJ 2k17”

RRCAT organized M. Tech. students' fest named “ANUGOONJ 2k17” on 10<sup>th</sup> April, 2017. The fest is mainly organized by the M. Tech. students of various Indian institutes/ universities carrying project work towards the partial fulfilment of their M. Tech/M. Sc. degree. The fest was inaugurated by Dr. P. A. Naik, Director, RRCAT. The fest had scientific and cultural sessions. In the scientific session, around 100 students presented posters on the topic related to their respective project. They enthusiastically participated in the event by explaining the work being carried out by them at RRCAT. A large number of RRCAT staff and research scholars actively interacted with the students and motivated them with their suggestions and feedback.



Dr. P A Naik, Director RRCAT inaugurating the Poster Session of ANUGOONJ 2k17



Students displaying message of स्वच्छ भारत अभियान

The poster session was followed by a lively cultural programme presented by the students. The cultural programme had folk dance, songs and a drama titled, गज, फुट और इंच. During the programme, Swachhata Pledge was also taken. The program ended with National Anthem leaving pleasant memories of ANUGOONJ 2k17.

Contributed by:  
C. P. Paul (paulcp@rrcat.gov.in) and Manoj Kumar