National MEMS Design Centre

MEMS Design Centre at our college was inaugurated on 30th March 2012 by Dr. V. Ramgopal Rao, IIT Bombay and Dr. S. Mohan, IISc Bangalore for the benefit of users from this region. Later the centre has been renamed as a national MEMS design Centre equipping with site licenses of software's programs such as COVENTOR MEMS+, Intellisuite and COMSOL (as a Class kit of 30 licenses) under National Program on Micro and Smart Systems (NPMASS). Also have collaboration with IITB, Mumbai and IISc, Bangalore. Centre motivates the research activity in the field of MEMS by proper utilization of the facilities provided by NPMASS from design to fabrication of prototype MEMS products and specific field applications.

SVEC will also facilitate external researchers from other interested institutes (academic or National labs subject to individual software licensing conditions) to use the design tools. In this centre all the departments share the simulation facility supported by NPMASS and fabrication will be done in IITB or IISc Bangalore. The departments are required to promote the area of MEMS through independent department course at UG/PG levels to involve students and faculties in developing MEMS related projects and research activities. In the absence of required in -house comprehensive facilities for complete fabrication of MEMS, the short term strategy is to focus on design modeling and characterization.

Many of the faculty members were chosen the specialized topics on their discipline and their work is under progress. In the Institution we were organized training programs on MEMS Design using COMSOL Multiphysics and MEMS Design using CoventorWare. Many faculties attended various programs like conferences/workshops/training programs in India. The output generated by the centre is in the form of Prototypes, two research projects were completed and two were under progression.

Objective:

• To promote interdisciplinary research and to provide excellent opportunity for the faculty and students to endeavor innovation in MEMS.

• Further, to serve as a nodal centre of this region by extending facilities of National MEMS Design Centre to other Institutions.

