

Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore

Faculty of Engineering

**Report on one day National Seminar on
"Innovations in Biomedical Devices" NSIBD'17**

The **National seminar on Innovations in Biomedical Devices** (NSIBD'17) organised by the department of Biomedical Instrumentation on 12th July 2017 offered a huge platform for discussing recent developments in the field of Medical Devices with the involvement of the scientists from DRDO, with the focus on research at the Faculty of Engineering expected to take a new dimension. Dr.S.Maragatham, Dean, Faculty of Engineering welcomed the gathering.

Dr. Upendra Kumar Singh, Director of Defence Bio Engineering an Electro Medical Laboratory (DEBEL), DRDO, Bengaluru, delivered the keynote address. In his address, he motivated the faculty and students to step out and come with new innovations to protect, prevent, diagnose and treat.

He explained the differences between invention and innovation and also stressed upon the urgent requirements in health care delivery that arises within the medical field due to new diseases, consciousness of larger segments of population about health care and change of life style and rapid advancements in technologies like ICT, MEMS and Nano which have paved the way for acceleration in newer innovations in the development of medical technologies.

Methodology for innovation to scout, explore, develop, optimize solutions and deployment in the market was discussed. Innovation tracks of de novo, derivative and concurrent development in other technologies were elaborated for its effects in biomedical technologies. Various Medical Technological innovations in the field of life support and combat medical technology, which resulted in product developments for military applications and inducted in large number by Indian armed forces were deliberated. He also enlightened the audience on the successful outcomes of the DEBEL projects.

Dr. Upendra Kumar Singh is the Chief Executive Officer (CEO) of the Society for Biomedical Technology (SBMT) started by Dr APJ Abdul Kalam to help the common man with development of affordable biomedical devices. Innovative ideas of exploring and customizing defence technologies through SBMT were also discussed.

Novel ideas for creating Strategy, Tactical and Operational frame works within Universities and Research Institutions were elaborated to accelerate various innovations in medical device developments.

The University conferred the award of Honorary Professor on Dr. Upendra Kumar Singh for his vital contributions to Science and Technology.

The other technical resource persons were Dr.M.Ramasubba Reddy, Professor & Head of Biomedical Engineering, IIT Chennai who brought forth the evolution of Biomedical Engineering from 15th century medical practice to the latest innovations and Dr. P.K. Aswini Kumar, Retired Scientist National Physical Laboratory, Delhi, who emphasized on the process of technology transfer subsequently done after the innovations are successful. He also focussed on the procedures for filing patents. Oral paper presentations and poster competitions were conducted to enthuse the participants.



Dr. Upendra Kumar Singh addressing the delegates



Release of proceedings of seminar

Seen from L to R: Dr.S.Jagannathan, Director (Engineering), Dr.S.Kowsalya, Registrar, Dr.Upendra Kumar Singh, Director (DEBEL), DRDO, Dr.S.Maragatham, Dean, Faculty of Engineering, Dr.Judith Justin, Professor & Head, Department of Biomedical Instrumentation Engineering