School of Electronics

1. Workshop on ARM Microcontroller Programming and Interfacing (WAMPI-2015)



School of Electronics (University Teaching Department) is currently celebrating its 25th year of existence. It was established in 1990 jointly by UGC and Department of Electronics (Now called DeitY), New Delhi. To commemorate the occasion, a week long Workshop on ARM Microcontroller Programming and Interfacing (WAMPI-2015) was organized by the School of Electronics during 29th June to 04th July 2015.

The inaugural function took place on 29th June. Honorable Vice-Chancellor Dr. D. P. Singh was presided the function. Dr. Sumant Katiyal, DCDC, Dr. Abhay Kumar, Head of the Department, and Dr. Prakash D Vyavahare of SGSITS, Indore were also present. Dr. D. P. Singh emphasized on need on learning newer technologies to achieve greater heights in ones professional life. Dr. Vyavahare also encouraged and blessed the participants by his invigorating speech. Head of the Department, Dr. Abhay Kumar welcomed all the participants. Workshop coordinator Dr. Manju K. Chattopadhyay highlighted the need of learning 32-bit ARM Microcontrollers in

current scenario. ARM a 32 bit processor, is well known for applications in state-ofthe-art cell phones, tablets, gaming consoles, routers, automotive control systems, smart lighting, connected metering and home entertainment devices.

The main Speaker Prof. P. W. Dandekar, a visiting Professor at IIT Gandhinagar, is an expert on Microcontroller based Embedded solutions. He believes in preparing "Industry Ready" students for IT and auto industry in Computer Science / Information Technology /Electrical Eng. /Electronics. Prof. Dhananjay Gadre from Netaji Shubhash Institute of Technology, N. Delhi demonstrated a number of projects with out of the box ideas. Dr. Manju Chattopadhyay delievered lectures on ARM Architecture and Assembly Language programming. Mr. N. Karmakar spoke on Real Time Operating Systems.

The training programme was participatory and hands on. Everything taught was tried out immediately on STM32 Nucleo board boards. Participants needed to have some background in Digital Electronics, in C programming and a brief idea about Microcontrollers.

WAMPI-2015 received an overwhelming response from various students and teachers of technical colleges of Vidisha, Bhopal and Indore. Total registered participants were 34. This number includes faculty members from Engineering colleges like SATI – Vidisha, SGSITS, School of Computer Science, Institute of Engineering Technology, Shri Vaishnav Institute of Technology and IIT Indore. The feedbacks received from participants were very encouraging.

Event Photographs









2. Department of Electronics & Information Technology (DeitY) Granted 02 Fellowship under "Visvesvaraya Ph.D. Scheme for Electronics and IT" to School of Electronics

Department of Electronics and Information Technology (DeitY), Ministry of Communications and Information Technology, Government of India has included School of Electronics under its prestigious "Visvesvaraya Ph.D. Scheme for Electronics and IT". School of Electronics has been granted 02 numbers of PhD Fellowships for full time candidates with overall funding of Rs 3.02 Crore has been sanctioned to the department under this scheme. This scheme shall last over 5 years in phased manner

It may be pertinent to note that so far, only IITs like institutions were considered under the this scheme. DAVV has become first university in MP and Central India which has been awarded this prestigious scheme.

The National Policy on Electronics (NPE) and the National Policy on Information (NPIT) give special thrust on significantly increasing the number of PhDs in the country. This is to enable India to compete globally in the coming years. In today's scenario, there is a need for a special programme to create necessary capacities to achieve the target. Visvesaraya PhD scheme proposes to give thrust to R&D, create innovative ecosystem and enhance India's competitiveness in the knowledge intensive sectors.

Govt of India has felt very strongly that there is a need to create more manpower having Ph.D's in Electronics and Computer Science discipline so as to cater to upcoming giant multinationals and also for carrying out indigenous research in these areas which are of strategic and cost cutting nature. DietY has identified many core areas of research wherein govt proposes to fund research projects in a substantial way.

Under this scheme sanctioned to School of Electronics, apart from infrastructural grant, fellowship, support for travel, and other support for young faculty has been sanctioned. The fellowship amount is Rs. 32000 (for I & II year) and Rs. 42000 (for III to V year) for each Ph.D student besides contingency of Rs. 30000 per year and Rs. 50000 for attending international conferences. Young faculty of the department shall be awarded Rs. 4 lakhs.

The current areas of research for which DietY has sanctioned above PhD scheme are: Signal Processing, VLSI design, Optoelectronics, Wireless Network, Embedded Systems and Semiconductor Device Modeling.

Nodal Persons appointed by Institution for the PhD Scheme of DeitY are Dr. Abhay Kumar, and Dr.(Ms) Manju K. Chattopadhyay. The admission to Ph.D under above scheme shall be through DET-2015 only.

3. <u>Expert lectures in the department:</u>

- 1 *Graphene : A step towards future Electronics* by Dr. Santosh K. Vishvakarma, IIT, Indore, on 18.03.2015
- 2 *Internet of Things (IoT)* by Dr. Rajkamal, Director, Medicaps Institute of Technology & Science, Indore, on 25.03.2015
- 3 *Mathematical Modeling and Simulation for Research* by Prof. M.N. Mehta and Prof. V. H. Pradhan from Sardar Vallabhbhai National Institute of Technology, Surat, on 30.01.2015
- 4 *Future Embedded Systems*, Dr. Rajkamal, Medicaps Institute of Technology & Science, Indore on 27 September, 2014