A Five Day FDP on
"Signal Processing Applications using NI LabVIEW Multisim"

Department of Electronics & Communication Engineering, Narayana Engineering College, Nellore, organized a five-day faculty development program on "Signal Processing Applications using NI LabVIEW Multisim" in Association with National Instruments(Techlabs,Hyderbad) from 17th to 21st December 2018**.** In this FDP, **55 faculty members have participated**. Mr. N.Viswanath, Sr.Application Engineer, Techlabs, Hyderbad, Dr K Murali, Prof & HOD-ECE, M. Muralidhar, R&D In-Charge were the resource persons.

.

Lightening lamp by Principal G. Srinivasulu , ECE HOD Dr. K.Murali & Resource person N.Viswanath

The inaugural function of the FDP started with a welcome address by Dr. K Murali, HOD-ECE followed by the lighting of lamp by the Dignitaries. HOD of ECE presented the theme of the FDP and said that Signal processing plays an important role in various applications like Speaker verification, Interactive voice response systems etc.

Participants followed the FDP program

Later, the Principal of NECN addressed the staff members and said that FDPs will help for development of the faculty in all facets of their professional careers. FDPs will provide resources which will help the faculty to develop as scholars, to publish and share papers at professional conferences, and to improve their teaching performance in the class room.

Mr. N.Viswanath addressed the staff on technological developments on signal processing methods & algorithms. "Signal processing opens up new avenues of applications along with Language processing, for example i)as an aid to differently abled persons for communicating to the world, ii)Robotic and Machine learning, iii)Driverless cars, iv)Teacher-less Classes etc " are the aspects he added to his discussion.

Participants in the listening to the speaker

The next session at 11.15 AM began after tea break, where Mr. N.Viswanath introduced the topic signal processing basics to the participants and he also explained the role of NI LabVIEW in signal processing. His discussion started with the Introduction to LabVIEW Environment, Virtual Instrumentation Explanation, Getting started to LabVIEW Programming, Data Types, Data Flow Programming, Case structures.

Second day of FDP began with continuity of previous day session by Mr. N.Viswanath, who has explained about Filter concepts that helps to process the customer based on voice communications. Afternoon he outlined Convolutional algorithms with respect to a particular case specially in Sequence structures, Formula & Expression node, Tasks using above concepts.

On the third day the session began with Prof. M.Muralidhar discussion on LabVIEW Experiments on signal processing with his power point presentation. He further explained on the signal processing examples with respect to loops, Shift registers, Arrays, Clusters..

On fourth day he continued his discussion on biomedical signal processing applications using LabVIEW..

Participants in Hands on experience on LabVIEW

The fifth day began with ECE, HOD Mr. M.Murali explained about with applications in the field of electronics industry with State Machine & Property nodes.

On all five days the participants were given an opportunity for hands on training in understanding of signal processing in the computer lab practicing on NI LabVIEW software.

The FDP came to an end with valedictory function where Sri. N.Viswanath was the chief guest, who has appreciated Academic Staff College and Dept.ECE, NECN for organizing this kind of FDPs in latest technologies and also added that learning new technologies is live direct participation in nation building. FDP came to an end with a vote of thanks proposed by Dr.K.Santhi Sagar Reddy, Coordinator, FDP.

Participants with principal, HOD & Resource person

certificate distribution by Resource person, Principal, HOD.

All the sessions were very much informative. The discussed areas are of great benefit for the participants as the topics match with the current working domain. Participants were

enlightened with the most widely used advance technologies in this domain. This in turn will help in research activity and placement opportunity