## Activity 34: Research Visit to University of Technology PETRONAS, Malaysia

MoU with Center for Intelligent Signal and Imaging Research (CISIR) of UTP Malaysia is signed for faculty and student exchange, and collaborative research work. Universiti Teknologi Petronas Malaysia invited following faculty members for the period of 1st to 8th August 2016 for collaborative research activities, participation in training, discussion on upcoming projects and future activities and discussion on grant proposals.

Following are the details of activities carried out during this visit.

Meeting with Vice Chancellor, Hon' Datuk (Ir) Dr. Abdul Rahim Haji Hashim at Board Room, Chancellor Complex of UTP. Meeting started with the welcoming and introduction of the present dignitaries. Dignitaries present were, Ir. Dr. Abdul Rahim Haji Hashim, Vice-Chancellor, UTP, Malaysia, Ir. Dr. Ahmad Fadzil Md. Hani, Dy. Vice-Chancellor, UTP, Malaysia, Dr. Naufal Bin Saad, Director MoR, CISIR, UTP, Malaysia, Prof. Fabrice M., Dr. Nidal Kamel, Dr. Sarat Chandra Dass, Dr. Ibrahima Faye, Dr. Tang, Dr. Zuki, Dr. Leela, Dr. Dileep Kumar, Dr. Kokare M. B., Dr. Talbar S. N., Dr. Holambe R. S., Dr. Doye D. D., Dr. Manthalkar R. R., Dr. Nandedkar A. V., Dr. Kejgir S. G., Dr. Lenina SVB, Hon' Vice Chancellor thanked SGGSIE&T, Nanded for the Research Collaboration and encouraged for future activities to be undertaken proactively by both the centers. Dr. Naufal introduced about UTP and the courses offered and the achievements of the institute so far. Dr. Kokare introduced about SGGSIE&T, the courses offered, institute infrastructure and achievements of the institute.



Figure 1 Meeting with Vice-Chancellor was followed by the UTP campus visit including the departments, Library, Auditorium, Research Building, Village Hostel and CISIR (Center for Intelligent Signal and Imaging Research).



Day 3 started with the presentation by Dr. Naufal regarding the introduction of CISIR and the projects being carried out. Followed by the presentation by Dr. Kokare, regarding the information of Center of Excellence in Signal and Image Processing and the projects undertaken.





Presentation by Dr. Dileep Kumar, about the overview of the collaboration between UTP and SGGSIE&T, Targets achieved so far and the research activities carried out collaboratively. Progress presentation by Mr. Akash Gandhamal, Research exchange student working at UTP from SGGSIE&T on project "Volumetric Assessment of Artciular Cartilage in Knee Osteoarthritis using MR Imaging".





Presentation sessions were followed by the discussions with the research supervisors of both the centers regarding the projects being carried out and the projects to be undertaken collaboratively between UTP and SGGSIE&T. Projects being carried out at both the centers are broadly related to Biomedical signal and imaging research like, Knee Osteoarthritis, Diabetic Retinopathy, Biometrics, EEG signal processing, Near Infrared Imaging, functional NIR, etc. Day started with visit to different laboratories in CISIR and discussions with research scholars regarding the projects undertaken.

Discussions with the students followed by the expert talks by Dr. Holambe R. S. on "Orthogonal Transforms: from Fourier to Wavelets" and by Dr. Manthalkar R. R. on "Interpersonal Neuro Biology" for the research scholars working under CISIR.



Workshop at Heritage Hotel, Cameron Highlands on "International Project Proposals and Grant Writings". Discussion with Research Supervisors of both the centers regarding the projects to be undertaken jointly. Discussion was also followed by the joint-proposal writing and submission of the collaborative research activities between UTP, Malaysia and SGGSIE&T, Nanded.



Concluding day of the One Week workshop on "International Project Proposals and Grant Writings" by Dr. Naufal and finalizing the list of projects to be jointly undertaken between UTP and SGGSIE&T along with the two way mobility of the research students and supervisors

## **Outcome:**

- 1. Prepared five proposals jointly with UTP Malaysia for international funding.
- 2. Discussed collaborative research activities and student exchange with UTP Malaysia.
- 3. Under this collaborative activity, ten to twelve PG students will join UTP for one year for their M Tech project from July 2017.
- 4. Three research scholars will join for collaborative research for the period of one year from November 2016.
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- 7. Two PG students (Mr. Rodney and Mr. Feng) from UTP will join SGGSIE&T for giving training on the emotiv machine from 16th October to 27th October 2017.