

## **CIT-HiB Research Collaboration Meeting**

The research collaboration meeting regarding the ongoing collaborative research project of Coimbatore Institute of Technology, India and Bergen University College, Norway, entitled “Advanced Nanomaterials for Clean Energy Applications” was held at the Department of Physics, Coimbatore Institute of Technology, Coimbatore, India at 1.30 pm on December 5, 2015. The following faculty members and research scholars attended the meeting.

1. Dr.Dhayalan Velayuthapillai, Bergen University College, Norway.
2. Dr.N.Muthukumarasamy, CIT, India.
3. Dr.S.Agilan, CIT, India.
4. Dr.T.Venkatachalam, CIT, India.
5. Dr.C.P.Yoganand, CIT, India.
6. Dr.P.Suresh, CIT, India.
7. Dr.P.Balraju, CIT, India.
8. Mr.R.Sanjeevkumar, CIT, India.
9. Mr.G.Rajesh, CIT, India.
10. Mr,T.Venkatraman, CIT, India.
11. Ms.Y.Akila, CIT, India.
12. Mr.Ponnusamy, CIT, India.
13. Mr.D.Vinoth Pandi, CIT, India.
14. Mr.P.Selvakumar, CIT, India.
15. Mr.P.Yuvaraj, CIT, India.
16. Mr.Murugesan Rasakanu, Bergen University College, Norway.

Dr. Dhayalan Velayuthapillai welcomed all for the meeting and he described about the significance of collaborative project. The first agenda of the meeting was to review the progress of the project and the research collaboration between CIT and HiB. Dr.Dhayalan stated that the research work is progressing on expected lines and we have a good number of joint publications, the faculty and student mobility between the two institutions is going according to our work plan. Dr.N.Muthukumarasamy told that the visit of CIT students to Bergen University College and their stay there has exposed them to overseas laboratory practices and that has transformed them a lot and it has helped them to improve their laboratory skills. The collaboration is moving well and we had a workshop at Bergen and the International Conference at CIT. Dr.Agilan felt that the research scholars have to be more focused and fix targets and should work towards the target.

Dr. Dhayalan stated that it is not enough if we work only on experimental side and it is necessary that we also simultaneously built a strong group working on the theoretical side using computational modeling and simulation. Dr.T.Venkatachalam agreed with it and said he will actively involve himself in computational modeling and simulation of materials which will also be synthesized in the laboratory. Dr.C.P.Yoganand told that he will continue to work on plasma and also concentrate on the synthesis of quantum dots. Dr.P.Suresh stated that he is working in dye sensitized solar cells and he is interested in studying the different photoelectrodes used in dye sensitized solar cells. Dr.S.Balraju, told that he is interested in working on polymer solar cells and he will use the facilities available from this project. Mr.Venkatraman told that he is studying the working of different photoelectrodes used in dye sensitized solar cells and the results are encouraging. Mr.Rajesh stated that initially he had problems in preparing single phase CZTS thin films by chemical method and now he has almost optimized the deposition conditions. He also told that he wants to prepare device quality CZTS films by sputtering method and he has started the process of preparing CZTS films by sputtering method. Ms.Akila told how it is possible to obtain  $\text{TiO}_2$  with different nanostructures by using the simple chemical method. She also mentioned that our research scholars have to improve the laboratory managerial skills and develop good research article writing skills. Mr.Vinoth Pandi, and Mr.P.Selvakumar told that they have started to work on perovskite materials for solar cell applications. Mr.Murugesan Rasakanu explained about the computational modeling and simulation used in materials science and how theoretical simulation and the related experiment can be carried out simultaneously. The students stated that the working atmosphere is good and this collaborative project has helped them a lot and they also stated that student mobility associated with this project is a boon for them and working in the laboratory of Bergen University College, Norway was a wonderful experience for them and it gave them international exposure. The members also felt that there should be regular research seminars in which the research scholars will present their work on a periodic basis. All the members stated that we have to work together as a team to make interesting and impressive scientific contributions. At the end Dr. Dhayalan thanked all the members for their active participation and cooperation.