Report on Visit to Center of Excellence 3-D Printing Technology , Mechanical Engg. Dept.,L.D.College of Engg., Ahmedabad

(17-1-2020,Friday,1 pm -3 pm)

A visit to Center of Excellence 3-D Printing technology , Mechanical Engg. Dept.,L.D.College of Engg., Ahmedabad was organized on 17-1-2020,Friday,1-3 pm.

The students studying in ME((EC) Sem-1 having an elective of Advance Image Processing visited the center.

The U.S. Institute of 3D Technology (USI3DT) California, has signed an MoU with leading American 3D printer OEM 3D Systems and the state government of Gujarat, India. Under the MoU, seven 3D printing Centers of Excellence (CoE) are to be set up in technical institutes across the Gujarat region,

The USI3DT is an educational institute that has been promoting 3D printing to students in the USA, and was inspired by America Makes, the Ohio-based additive manufacturing accelerator. It aims to provide education and training in 3D printing for students as well as professionals in order to "maintain the pace with the technology of the future."

Catering to the upcoming demand for 3D printing professionals is a response to the lack of manpower in companies that can utilize the technology to its fullest extent. Alongside the cost of machines, many companies have been reluctant to adopt 3D printing in-house, preferring to use 3D printing services and on-demand bureaus to create prototypes. However, Deelip Menezes, Managing Director at 3D Systems, reported a desire from companies in India to purchase their own 3D printer.

USI3DT identified students as a way to overcome the lack of 3D printing experts as it claims they are able to see the potential of the technology, and are willing to learn, but are without practical courses required to learn. In order to create 3D printing courses for students in India, where there is demand for 3D printing professionals, the company established an Indian subsidiary – "3-D Systems", with Dr Yogesh Gandhi and Dr Ragin Shah.

3-D printing technology was invented by Chuck Hall.

Materials used are typically Metal powder,plastic. There are around 9 various types of 3-D Machine Technology like -Fused deposition-FDM modeling ,Stereo lithography-SLA,Multi Jet Printing,DMP.Other types of materials like Metal Printing metal powder,PLA ,ABS,silicon,concrete can also be used. Applications area include Prototyping,Aerospace applications ,Civil Applications -4000$ 4 BHK house ,Medical Applications , Jewellery Applications , Foot ware Applications ,Scanning 3-D Image processing ,PCB manufacturing.Mr Kariya explained in a nice manner.

The participant students got good knowledge about 3-D printing technology.

The visit was coordinated by Prof.Arun Nandurbarkar .

The department is thankful to Prof. Mihir V Shah,Head of the Department-EC for encouraging the cocurricular activity like this. The department is also thankful to the Prof.N.M.Bhatt - Head of the Department-Mechanical Engg Dept. for giving permission for the visit.

Glimpses: