



# POORNIMA UNIVERSITY

27<sup>th</sup> January 2016

## Report on Jaipur foot visit with Ms. Claire Gutermuth

On **25 January 2016**, a visit to Jaipur Foot, an NGO run by Bhagwan Mahaveer Sahayta Samiti was organized for students of ME branch of Poornima University.

The visit was done by 10 students of Mechanical Department of Poornima University with Ms. Claire Gutermuth, Ms. Shalini Singh and Mr. Pratish Rawat, Dy HOD (ME).

Ms. Claire, student of Fulbright-Nehru Student Research Program from Medical Sciences is working on a project of **Low Cost Prosthetic Design and Care for Persons with Amputations**. She has passion of using human-centered design to solve problems in underserved populations. In 2014, she interned in the Design Studio of the Tech Museum of Innovation in San Jose where she learned to 3D-print. While she was there, she learned about a global online community called Enabling the Future (e-NABLE) that 3D-prints and donates prosthetic hands for children. She has shadowed and collaborated with many prosthetists and completed an extensive literature review on care for persons with amputations in India as an independent study at Davidson College.

At present she is working with the ISHWAR Institute of Prosthetics and Orthotics in New Delhi. Through surveys and semi-structured interviews, she is collecting qualitative data concerning the needs and perspectives of people with amputations in India from both urban and rural areas. Concurrently, she is researching the availability and advancement of 3D-printing technology in New Delhi. Through these two avenues, she is exploring how 3D-printing might be used for low-cost prosthetic design to serve the needs of low-resource populations in the developing world.

**Bhagwan Mahaveer Viklang Sahayata Samiti (BMVSS)** is the world's largest organization serving the disabled. This NGO provides all its assistance, including artificial limbs, calipers and other aids and appliances **totally free of charge**. There we met **Chief Patron Shri D.R. Mehta**, who explained us the whole processes of manufacturing of artificial limbs, how they are implanted in the body. There we saw that how these artificial limbs are manufactured through injection molding. There we also saw how wheel chairs are manufactured and got chance to visit GAIT LAB too.

D.R. Mehta told us that BMVSS was registered as a society under the Rajasthan Societies Registration Act on March 29, 1975. It is a pan-Indian organization having 22 branches in India. Since inception, BMVSS has rehabilitated more than 1.3 million amputees and polio patients by fitting /

providing artificial limbs (Jaipur Foot variations), calipers, and other aids and appliances, mostly in India and also in 26 countries across the world. BMVSS has forged agreements with Stanford University, USA; Massachusetts Institute of Technology (MIT), USA; the Indian Space Research Organization; and Indian Institute of Technology (IIT), Jodhpur, for research and development, Professors of other IITs, namely Chennai, Delhi and Mumbai, too are helping BMVSS.

There we saw hundreds of people who came for artificial hands and legs. This organization is helping millions of people and definitely Ms. Claire is going to contribute towards advancement in artificial limbs. Thanks to such kind hearted people.



