



## **Talk on “Interdisciplinary Approach in Innovation and Solutions Needed for Persons with Disabilities” by Lalit Kumar**

On 1st November 2022, Mr. Lalit Kumar, Indian author and disability rights activist, delivered an invited talk on Interdisciplinary Approach in Innovation and Solutions Needed for Persons with Disabilities - for students of all three courses of Cluster Innovation Centre [B.Tech. (IT&MI), B.A. Hons HSS and M.Sc. ME].

Mr. Lalit opened the talk by sharing details about his own personal experiences, and how he realized the various advantages of interdisciplinary studies. He informed the attendees that he had been afflicted with polio at the age of 4, which had an adverse effect on his life. He explained how, despite coming from a family of carpenters, he kept his focus on studies during his childhood.



Despite being on crutches, Mr. Lalit told the audience that he managed to keep his head up, and in 1997, he graduated with a B. Sc. Degree, and went on to attain an M. Sc. – even though he had accessibility issues while working in labs. He also pointed out that

he had undergone multiple surgeries against polio disfigurement, but hard work yielded successful results.

Mr. Lalit explained that he felt the need to set high goals and pursue them, refusing to take the easier route of accepting a government job. After working as a computer programmer, he landed his dream job – a permanent position at the United Nations. After 5 years at this job, he resigned, to pursue a Masters degree from Edinburgh, Scotland. However, he enunciated that he felt like he still hadn't found his calling.



He then pursued a PHD from Lowell University, which he later dropped in order to establish projects in India, including work as a social media expert, YouTuber, and more. He explained that he had recently started work in the field of disability studies, and informed the audience that the foundation of innovation is new ideas.

He pointed out that Indian students are often held back by fixed concepts, and that interdisciplinary fields can help merge and improve ideas.

He talked about some of the projects he had worked on, which included EURExpress – which is an atlas of millions of images of embryos of mice – and has 8 labs in 6 European countries; Kavita Kosh – which caters to those interested in Indian Literature – and is a project Mr. Lalit found very satisfying, as working on it combined the

disciplines of technology and literature. He has also worked on creating a free braille translator, which is able to translate many languages to braille.

He then asked the audience to ponder upon the meaning of innovation, and to think of the difference between invention and discovery. He explained that need creates the scope for innovation.

He then gave an example of a door knob – and how a lever knob is much more practical to use for persons with disabilities, as opposed to a round door knob – which can be hard to use for a person with no hands, or a person on crutches. He used this example to impart the message that simple things can create a massive difference in people's lives.

He discussed how solutions for persons with disabilities should be need-oriented, customizable, cost effective and should be able to promote integration. Further examples given by Mr. Lalit were those of Rubik's cubes with patterns to represent different colors for the visually impaired, tilted mirrors for those afflicted with dwarfism, and 3-D printed textile paintings for the blind. He emphasized that having a universal design is crucial.

To end the talk, a lively question-and-answer segment was held, in which the students participated enthusiastically. The students and faculty of CIC found this talk to be highly informative and enriching.

