

## IIC Activity Report

“Innovation is seeing what everybody has seen and Thinking what nobody has thought.”

Dr. Albert, Szent- Györgyi

Under the tutelage of Ministry of Human Resource Development (MHRD), Govt. of India has established ‘MHRD’s Innovation Cell (MIC)’, an out-of-the-box approach to nurture and promote the culture of Innovation amongst all Higher Education Institutions (HEIs). Institution’s Innovation Council (IIC) was launched by Hon’ble Minister Shri Prakash Javadekar, Ministry of HRD, Govt. of India on Nov. 21, 2018. Being the Golden Jubilee Year, 2018 has been monumental in the annals of MCM DAV College since the college is one among the three selected institutions in the city where a systematic network of these IICs will be established and innovation in the Institution encouraged through diverse modes but all trajectories followed will foreground innovation promotion eco-system in these campuses. MHRD plans to prepare ground for Start-up/ entrepreneurship supporting Mechanism in HEIs, prepare them for Atal Ranking of Institutions on Innovation Achievements Framework (ARRIA) and nurture better cognitive ability amongst technology-driven students.

In sync with the action plan of turning ideas into praxis and giving new ideas a concrete shape, MCM DAV College kickstarted its first activity scheduled by IIC Cell on Nov. 21, 2018 where our enthusiastic students gave presentations on 15 grassroots innovators who have carved a niche for themselves by overcoming bottlenecks and facing real challenges. The presentations featured people who are awe-inspiring motivators as well as responsible citizens working in multifarious ways towards a common goal of scaling new heights of glory and taking India to a path of unprecedented development and fame.

Naghma Firdous gave a presentation on Aishwarya Lakshmi Ratan , Women for Women International Director of monitoring, research and evaluation at Women for Women International (WfWI). Her innovation lies in creating a Hybrid Digital Slate and Hybrid Pen; a low-cost digital system that combines the convenience of writing on paper, while simultaneously recording the handwritten entries and instantly storing them in a digital format. The device has caught the attention of MIT’s prestigious Technology Review magazine.

Sonalika Grover enlightened the audience with her PPT on Ritesh Agarwal, a young entrepreneur, who is the founder and CEO of hospitality business and app-Oyo Rooms-a network of 2,200 hotels operating in 154 cities across India-with monthly revenues of \$3.5m and 1,600 employees. Agarwal is a Thiel fellow and was listed as a Forbes 30 under 30 in 2016.

A motivating invention made by a 14 year old Remya Jose from Kerala was presented by Raveena of M.Com. I. She made an eco friendly, cheaper, low maintenance cost pedal-powered washing machine made from recycled bike parts.

A grassroots innovator Rai Singh Dahiya invented a Biomass Gassifier, a low-maintenance cost electricity with the help of which any biomass waste/residue can be converted into flammable as (producer gas) which in turn can be used to run an engine, stoves, furnace etc. It can generate electricity using various

forms of biomass feedstock including Bamboo/Bamboo Waste, Stalks of Cotton, pulses, coconut shells, maize cobs, branches and twigs.

Manuekta Sharma, M.Sc Chemistry gave an interesting presentation on Dr.Uddhab Bharali 's affordable and portable pomegranate de-seeder machine. It separates the outer cover and thin inner membrane without damaging the seeds. Bharali's invention does not stop here since he has also created a concrete brick making machine which produces 50 bricks per hour. The machine has been exported to Turkey and USA. He has also created other feasible devices for differently-abled persons.

Arushi Sood, MA Sociology (3rd sem) student made a presentation on Gursimran Singh, a young socially-responsible innovator and founder of 'Code Initiative' to address the spectrum of disability using technology. His invention "Eyescribe" is an assistive device having an 8 mega-pixel camera fixed to the frame that enables the capturing of an image. Once the image is captured, it is processed to produce an audio output. The person using this device wears an audio device, like earphones or bluetooth ones and connects them to Eyescribe , which then translates pictures and text into audio for easy usage. When its connected to a smartphone the translation of the text can occur in different languages, thus breaking all the language barriers for its users. The device that bring books alive was first screened at the Atal Tinkering Lab Innovation Challenge by the NITI Aayog in the FICCI Auditorium on November 2016. A grant of Rs. 20 Lakh by the NITI AAYOG for product development in commercial use was given forthe device.

Rahul Adhikari, founder of Better Plus Education, was the subject of another presentation made by our student. Better Plus Education system fosters and works upon empathy, team work, creative problem solving and collaborative leadership and built upon the edifice of changemaker mindset, the school produces students who turn into changemakers.

To the winners, who won because they did not give up,"said Vijay Shekhar Sharma, founder of Paytm and today, he stands as a testimony to his own statement. He had the courage to believe in his vision and put on stake his ownership so that he can start this site called paytm, a digital payment platform that allows you to transfer cash into the integrated wallet via online banking, debit cards, and credit cards, or even by depositing cash via select banks and partners.The Economic Times awarded him Entrepreneur of the Year, 2016. His innovation catapulted him to fame as he was recognized and awarded liberally by The Exchange4media Group, Amity University Gurgaon and India Today magazine, to name just a few.

Surbhi Bishnoi and Aditi Chaudhary of B.Sc. Medical inspired the audience with their presentation on Sh. Prem Singh Saini from Ambala, Haryana who has He built a multifunctional electronic robot called "BSF Robot", which could move independently or be remote controlled. The Robot can be used in emergency search and rescue teams as well as defense forces could use this robot. This innovation got him the National Award from National Innovation Foundation in December 2002. His list of inventions also include a hand operated dynamo for radios to work without batteries and heartbeat amplifier to send patient's heartbeat signals to a remotely located doctor.

Vishruti Sharma's presentation on Sonam Wangchuk, A Ladakhi engineer, innovator and education reformist presentation was equally interesting. He is best known for founding the Students' Educational and Cultural Movement of Ladakh (SECMOL - School of the students, by the students, for the students) that follows the alternative method of teaching through experience rather than through text books. Students learn life skills from real life experiences rather than gathering merely theoretical knowledge. He is also famous for creating Ice Stupas, the main idea behind which was to store winter water which otherwise go unused in the form of conical shaped ice heaps.

Bamboo Windmill invented by Mohammad Methar Hussain And Mushtaq Ahmad was the topic of presentation by Shubhangi and Ayushi. The final product cost Rs. 4500 vis-a-vis the commercially available wind mills which cost over Rs. 60,000. The salt farmers don't have to slog for hours with the water pump saves about Rs. 50,000 worth of diesel in six months and it has also reduced the carbon emission for every 100 tonnes of salt produced. This green technology that requires low installation cost and zero operating cost. In the next phase, GIAN (Grassroots Innovation Augmentation Network) plans to erect more windmills in other parts of Gujarat.

To augment the creative and critical faculties of mind, and to generate self-employability of students, MCM DAV has always led a pioneering trajectory and will continue to do so in the coming years. The presentations made by the students will lead to brainstorming among the staff as well as students.