



ANNUAL REPORT 2022 - 2023

DESIGN INNOVATION CENTRE

Lady Irwin College, SPOKE DICDU



Coordinator: Prof. Sushma Goel

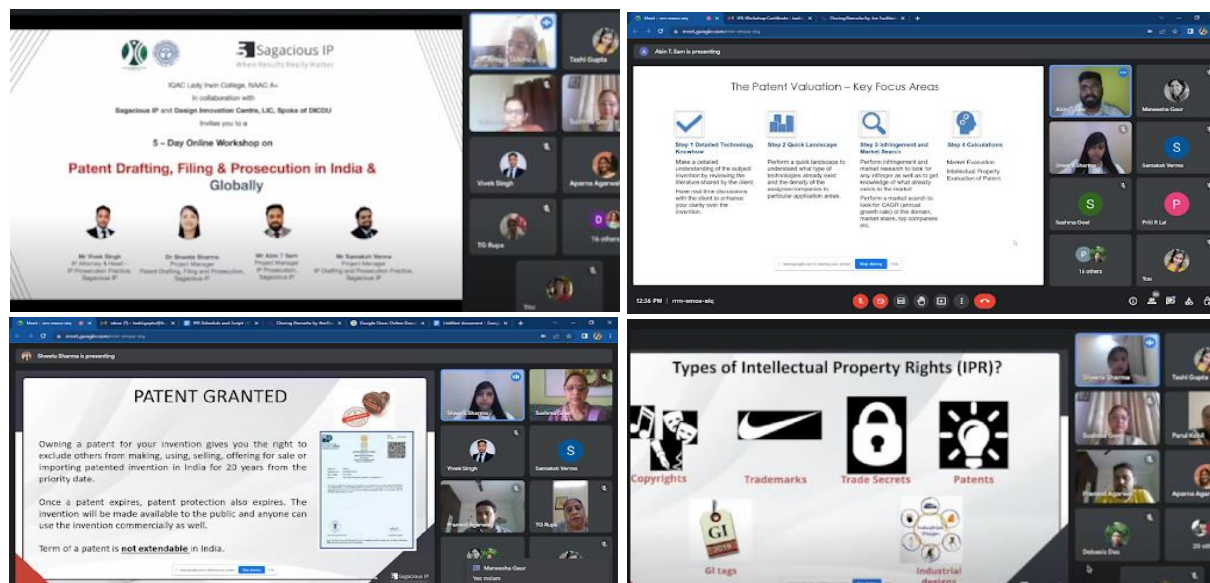
Year of Establishment of DIC, Lady Irwin College: 2019

Design Innovation Centre (DIC) has been established under National Initiative for Design Innovation (NIDI) Scheme as a flagship programme by MHRD. It is a platform for product or process innovations for students, faculty and citizens to give ideas that can be developed as products/ processes.

1.1 WORKSHOPS

1.1.1 Patent Drafting, Filing & Prosecution (29 June - 4 July 2022):

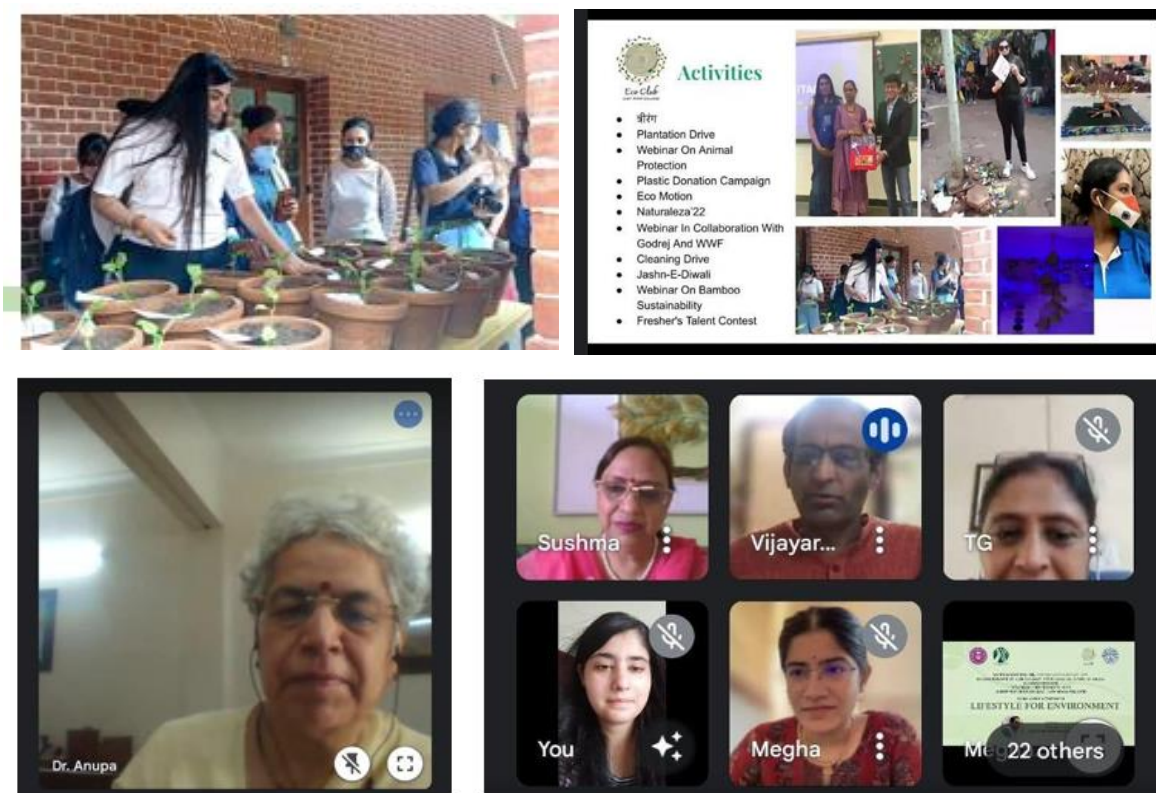
This workshop offered an intensive exploration into both global and Indian patent processes. Participants delved into effective strategies for drafting and filing patents, emphasizing clarity and precision. By focusing on practical applications and case studies, attendees gained valuable insights into navigating the complexities of patent prosecution, fostering a deeper understanding of intellectual property rights and protections.



Online Workshop on Patent Drafting, Filing & Prosecution

1.1.2 Lifestyle for Environment (17 June 2022):

Design Innovation Center in collaboration with Eco-Club Lady Irwin College, under the aegis of IQAC, organized the webinar 'Lifestyle for Environment', on 17 June 2022 to commemorate World Environment Day. Approximately 40 participants attended the workshop. The goal was to build awareness about the global initiative 'Lifestyle for the Environment – LiFE Movement' to solve the challenge faced by our planet using human-centric, collective efforts and robust action. To influence and persuade individuals, communities and organizations across the world to adopt an environment-conscious lifestyle.



Participants gaining practical knowledge and inspiration from the Lifestyle for Environment workshop

Delving into sustainable living practices, this workshop provided a comprehensive examination of ways individuals could reduce their environmental footprint. From eco-friendly consumption habits to waste reduction strategies, participants explored actionable steps towards a more sustainable lifestyle. Through interactive discussions and real-world examples, attendees gained practical knowledge and inspiration to make meaningful changes for environmental conservation.

1.1.3 Prototyping of Concepts (Jan 2023):

Offering hands-on guidance, this workshop equipped participants with the skills to transform conceptual ideas into tangible prototypes. Through practical exercises and demonstrations, attendees learned prototyping techniques and tools essential for product development. Emphasizing innovation and creativity, the workshop fostered an environment where participants could explore and refine their ideas, laying the groundwork for future innovation and entrepreneurship.

1.1.4 Paper Mache Workshop (7 Feb 2023):

This interactive session immersed participants in the traditional craft of paper Mache. From basic techniques to advanced artistic expressions, attendees explored the versatility of this age-old craft medium. Through guided instruction and hands-on practice, participants unleashed their creativity, learning to sculpt and mold Paper Mache into various forms. Beyond the artistic aspect, the workshop also delved into the historical and cultural significance of paper Mache, offering a holistic understanding of this enduring craft.



Participants doing hands-on experience and developing products from Paper Mache technique.

1.1.5 Developing Products using Fabric Waste (8 Feb 2023):

Focused on sustainable innovation, this workshop explored innovative ways to repurpose fabric waste into functional and eco-friendly products. Participants learned creative techniques for transforming discarded textiles into new materials, fostering resourcefulness and environmental stewardship. Through practical demonstrations and collaborative projects, attendees gained hands-on experience in product development while contributing to the circular economy. From upcycled fashion to household goods, the workshop inspired participants to rethink waste and embrace sustainable design principles.



Product developed by participants from discarded textiles.

1.2 TRAINING & MENTORING FOR PROJECTS (NATIONAL & INTERNATIONAL)

1.2.1 Training on Painting & Waste Reuse for International Abilympics Competition at Metz, France 2023 (of a PwD student - hearing impaired), (continuing from March 2020 to March 2023): This training initiative focused on equipping a hearing-impaired candidate for the Tenth International Abilympics 2023 Competition in France.



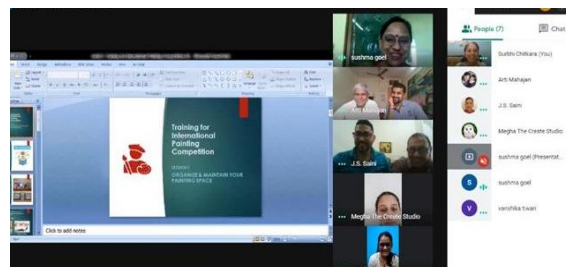
Felicitation of the Gold Medalist Chetan Pashilkar and Mentor Prof. Sushma Goel at 10th International Abilympics 2023 at Metz, France by President of India



1. Gold Medalist Mr. Chetan Pashilkar at the International Abilympics, Metz, France.



Felicitation of Mr. Chetan by the Minister of Social Justice and Empowerment



Training for International Painting Competition

Through a comprehensive program spanning from 16 March 2020 to March 2023, the mentee received specialized training in painting techniques and waste reuse strategies, empowering them to compete on an international stage while promoting sustainability. The mentee participated in the 10th International Abilympics 2023 in Metz, France on 'Painting and Waste Reuse'. This long-term engagement empowered the PwD mentee in the true sense (August 2020 to March 2023). Various activities and sessions on painting techniques and waste reuse helped the mentee to showcase their talent on a global platform, promoting inclusivity and diversity in skill-based competitions. He won Gold Medal in the for Painting and Waste Reuse Category in the Tenth International Competition 2023 and made the country proud. President of India felicitated all the winners along with their mentors on 30th March 2023. Minister of Social Justice and Empowerment also felicitated the winner and the mentor. There were felicitations by other Ministers as well.



Training for the International Abilympics France (August 2020 to March 2023)

1.2.3 Mentoring master's students for National ToyCathon Competition 2022 to design toys from waste materials (Sept 27-Nov 26 2022): This mentoring program aimed to empower master's students to innovate and create sustainable toys from waste materials for the National ToyCathon

Competition. Spanning from September 27 to November 26, 2022, the initiative provided guidance and support to participants, fostering creativity and environmental consciousness in toy design.

1.2.4 Mentoring a LLB student from Gujarat National Law university in December 2022 to January 2023): In this short-term mentoring project, an LLB student from Gujarat received guidance and support for their graduation project. Over the course of 20 hours spanning December 2022 to January 2023, the student benefited from mentorship tailored to their legal background, ensuring the successful completion of their academic endeavor.

1.3 INNOVATION WEEK 2023: Series of Workshops

- To celebrate Innovation Day / Week to commemorate birth anniversary of Dr. A P J Abdul Kalam, former President of India. The Innovation Series at Lady Irwin College scheduled from 7th February - 10th February, 2023 commenced with a workshop on Paper Mache led by Dr. Madhumita Puri from Avacayam. This session focused on the process of making Paper Mache diyas, emphasizing innovation and sustainability by using recycled materials. Participants were actively engaged in hands-on activities, creating *diya* 's and bowls from paper pulp and learning techniques to enhance durability.



Inauguration of Innovation Week 2023



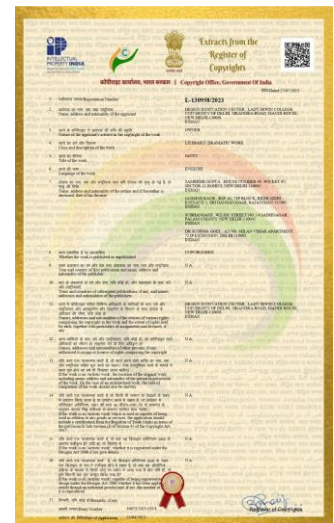
Product sale organized by students

- The series continued with a **session by Ms. Bhavna Mathur**, an alumna of the college and author of "**The Fragrant Healing Earth**," who spoke about environmental issues and career opportunities in writing and environmental journalism. Students enthusiastically interacted with Ms. Mathur, asking about her journey as an author and the inspiration behind her novels.
- Another **session featured Ms. Archana Puri** from the Apparel Training and Design Centre, who discussed '**Reusing fabric waste to create innovative product**'. Students were encouraged to brainstorm ideas and work in groups to produce innovative designs from temple waste fabric.
- The series concluded with a successful **product sale** organized by **students under their startup "Genesis."** This event highlighted the entrepreneurial spirit and creativity of the students, with a diverse range of products attracting faculty, students, and staff to support their venture. The Innovation Series effectively fostered learning, creativity, and sustainability within the college community.

1.4 COPYRIGHTS/ DESIGN REGISTRATIONS (Certificates awarded)

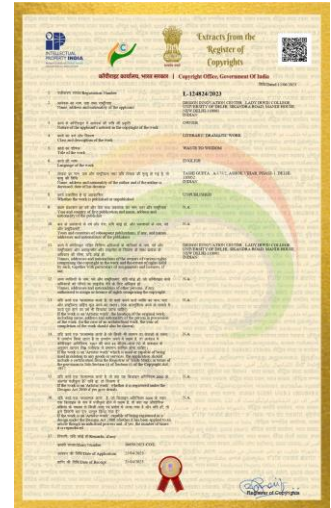
1.4.1 Intellectual Property Rights (Copyright)

- **Jantu**
 - Jantu is a concept based digital multipurpose toy designed for 5-11 years of age group but is enjoyable for all age groups. The main ideology behind this game is to shift the focus of children to an ethnic value generation mode of edutainment products.
 - The product has been recognized by MHRD as a ToyCathon challenge made under kind guidance of DIC MENTOR: Dr. Sushma Goel.



- **Waste to Wisdom**

- The game is about learning sequences of various solid waste management practices. Through this game, the child will learn various facts and Do's and Don'ts about solid waste management.
- It is a self-correcting time-based game which means it will have the answer which will be hidden while you answer. This is how the game will enhance the cognitive skills in children. Sequencing can be communicated in various ways, using words, pictures, music, and objects, for example. Practicing sequencing with your child using various tools and modalities can advance his or her skills and engagement in learning.



- **Vega Wheel**

- Compared to the conventional addition methods (line method, dot method, adding on fingers etc.), VEGA WHEEL will promote faster calculations. Such pedagogical tools (based on Vedic math) don't exist in the market which makes it different from existing pedagogical games. The VEGA WHEEL is a physical toy which includes four different types of pedagogical games
- The product has been recognized by MHRD as a ToyCathon challenge been made under kind guidance of DIC MENTOR: Dr. Sushma Goel



- **Bagu**

- The toy caters to meet the need in Anganwadi settings through incorporation of building components as learning aids (BaLA) such as walls of a room, this toy design has multiple features and toys which are missing link in child's emotional development in contemporary India. The basic trust values can easily be incorporated through activities like role play, story narration from ancient Indian scripts which promotes positive emotional values. Other educational activities like color systems, shapes and sizes etc. relevant to the age group are also included.
- The product has been recognized by MHRD as a ToyCathon challenge been made under kind guidance of DIC MENTOR: Dr. Sushma Goel



1.4.2 Intellectual Property Rights (Design Registration)

- Vendor's Cart (April-May, 2022)
- Worship Lamp (April-May, 2022)
- Solar Charpai (in process) (April-May, 2022)

1.5 PROJECTS MENTORED UNDER DIC

1.5.1 Incubation of Design Ideas

- **Graduation Project** of a M. Des. Industrial Design student Ms. Tashi Gupta (WUS University) (*January–May 2022*)
- **Post-Graduation masters project** of Anmol Yadav (*April 2022 onwards*)
- **Training on Painting & Waste Reuse for International Abilympics Competition at Metz, France 2023** (*of a PwD student - hearing impaired*) (*An Incubation Project*)
- **SUP Alternatives** (*April 2022 onwards*)
- **Toys/Games** (*April 2022 onwards*)
 - Ramayana Board Game (An Incubation Project)
 - Green Platter: Leaf plate Project (An Incubation Project)

- Shabdakhel (An Incubation Project)
- Letter-Platter (An Incubation Project)
- **Circular Approach to Design** (*April 2022 onwards*)
 - An Approach to Stubble Waste Management (An Incubation Project for Partial fulfilment of M.Des, WUS)
 - Composites - Rotating Pen Stand & Multi-Purpose Holder (An Incubation Project)