

National Innovation Day
Quiz on Innovation and IPR
15th October 2022

To celebrate National Innovation Day (Birth Anniversary of Dr. APJ Abdul Kalam) Institution's Innovation Cell (IIC), Ministry of Education, **Dronacharya Group of Institutions, Greater Noida** organized “**Quiz on Innovation & IPR**” on **15th October 2022**. Students of 2nd and 3rd year participated in quiz.

The objective to organize the quiz was to evaluate the knowledge of students in innovation and IPR.

The students were provided with google form to register for the quiz. The rules and regulations of quiz were explained to students. Around 70 students registered for the competition. There were 2 rounds of quiz. First round was the elimination round. All the shortlisted students went for the final round.

In the end **Abhishek** (2nd Year CSE student) was announced as winner as he answered maximum question correctly. Prof. (Dr.) K.K. Saini (Director) praised the event organizers and motivated students to participate in such events.

The objective to organize the quiz was to evaluate the knowledge of students in innovation and IPR.

Benefits: students were able to think critically and can get into the habit of innovative learning.



Poster Competition on “World Creativity & Innovation Day”

21st April, 2023

Institution’s Innovation Council (IIC), Ministry of Education (MoE), Dronacharya Group of Institution, Greater Noida celebrated “World Creativity and Innovation Day” on 21st April, 2023. 75 students of all B.Tech departments participated in the celebration. The day is a global observance aimed at promoting creative and innovative thinking as a way to solve problems and improve human lives.

The event was coordinated by Prof. (Dr.) Ritu Soryan and she briefed the students about the activity to be performed. A poster competition was held in the seminar hall and students enthusiastically participated in the competition. The rules and regulations of the competition were pre-articulated to the students. Prof. (Dr.) Ritu Soryan told the students to work upon improving critical thinking and encouraged all to think outside the box, explore new and unconventional solutions to the challenges facing humanity and depict their ideas through the designs. She also addressed that innovation is an essential tool for economic growth and development. Students were asked to showcase their innovative and creativity posters to the judges for final evaluation.

The competition motivated students to improve their analytical skills. Lastly, winning posters were awarded with certificates and cash prize of INR 6000. Winners of the competition were:

Position	Name	Prize Amount
1 st	Prerna Halsi (CSIT)	3000
2 nd	Komal Papnai (CSIT)	2000
3 rd	Pranjal Raikwar (CSE)	1000

Objective: Aimed at promoting creative and innovative thinking as a way to solve problems & improve human lives

Benefits: Students understood the importance of creativity and Innovation and they showcased their innovative and creativity posters



Mentoring Session on YUKTI - National Innovation Repository

10th April 2023

YUKTI - National Innovation Repository is an initiative of the **Institution's Innovation Council, Ministry of Education (MoE)**. It is implemented by MoE's Innovation Cell and AICTE to build a system of repository of ideas, innovations and startups developed in academic institutions and enabling institutions to systematically foster the I&E culture by managing and nurturing these innovations by offering continuous support in terms of one-to-one mentorship, grant assistance, referral and linkage with incubation units, connecting with Angel/Venture Capital (VC) investors network, knowledge agencies, etc.

Institutions play an important role in this process; they have to identify ideas, innovations, startups from students, alumni throughout the year for building the repository. To help students understand YUKTI Innovation Repository and Challenges, **Institution's Innovation Council (IIC), Ministry of Education (MoE), Dronacharya Group of Institutions, Greater Noida** organized a workshop “**Mentoring session on YUKTI - National Innovation Repository**” under the guidance of Prof. Sanghamitra V Arora, (IIC Convenor). 52 students along with 7 faculty members attended the workshop.

The objective of the workshop was to brief students about the innovation repository, challenges, the process of registration and submission. Workshop was aimed to encourage students to design innovations that are helpful to people and utilize most from the YUKTI portal.

The event ended with a vote of thanks from Prof Sanghamitra. She encouraged the students to design innovations that can help in solving real world problems that are faced by society. Students actively participated in the workshop and interacted with the speaker.



Innovation Boot Camp

20th -21st February 2023

Institution's Innovation Council (IIC), Ministry of Education (MoE), Dronacharya Group of Institutions, Greater Noida organized "Innovation Boot Camp" on 20th -21st February 2023.

The objective of boot camp was to guide students so that they can transform their innovation into a valid solution.

Day 1: "Tools and Techniques for Patent Filing"

Institution's Innovation Council (IIC), Ministry of Education (MoE), Dronacharya Group of Institutions, Greater Noida conducted a seminar on "Tools and Techniques for Patent Filing" on 20th February, 2023. 43 students attended the seminar. The speaker of the seminar was Prof. Sanghamitra V. Arora (Head, RDC).

She started the session by explaining about Patents. She explained that a patent is an exclusive right for an invention which could be in the form of product, process or idea and exclude others from using, making or selling it. To get this right, information pertaining to the invention is required to be filed through an application. Moving further, she discussed various tools and techniques available for Patent filing. Patent Filing Process was discussed in detail.

- She illuminated the students that the Inventors can file the patent by themselves or can take the help of any patent filing agency or professional.
- Then, search if the invention is patentable or not.
- The next step in the process of Patent filing includes the drafting of the Patent application. If the invention is in testing stage only, she guided all to go for Provisional Patent Application.
- After drafting, the applicant is required to submit the application along with the requisite fee and also told about the link to be used for same, viz: <http://www.ipindia.nic.in/form-and-fees.html>
- Afterwards, she told about publishing of the patent by the Indian Patent Office (IPO) upon fulfilling certain criteria. The time period for publishing may vary from 1 month to 18 months and after.
- Once the examiner from IPO finds no objection in the patent application, the patent is then published in the official patent gazette.

She also highlighted KAPILA which is one such platform for receiving grant for the patent thus approved by the IPO. She also told about Indian Patent Act 1970 and briefed about its scope.

The seminar was informative and helped the students understand the techniques involved in Patent Filing.

Day 2: Exposure Visit

Institution's Innovation Council (IIC), Ministry of Education (MoE), Dronacharya Group of Institutions, Greater Noida organized a exposure visit to the "ELECARAMA Expo-2023" on 21st February, 2023 at India Expo Mart, Greater Noida. Shri, RK Singh, Minister of Power, Govt. of India, officially inaugurated the 15th edition of ELECARAMA 2023 on 18th February, 2023. This was the largest solo electrical exhibition in the world. 43 students of B.Tech 3rd year from ECE, EEE, and ECS Department along with faculty member Dr. Hari Mohan Rai, went to the Elecrama Expo 2023 to witness the recent advancements that were on display.

The main objective behind the visit was to acquaint the students with the latest and most cutting-edge technologies in the field of "Electronics and Electricals."

Over 1500 exhibitors displayed their products and technologies. ELECARAMA is the premier exhibition of the Indian Electrical Industry ecosystem. It is the largest stand-alone show in the electrical and allied equipment industry. In addition, it is the largest transmission and distribution show in the world. It serves as a connection point between India and the rest of the world for the industry. ELECARAMA brings

together the full spectrum of solutions that are used to power the planet, from the source all the way to the sockets and everything in between. Featuring not only equipment and technology, but also thought leadership platforms for everything to do with electricity, ranging from technical conclaves to industry summits.

Students were exposed to latest technologies that are being used in the Electrical Industry. Students gained an understanding of the advancements that have been made in Transformers, Transmission Line Towers, Power Electronics, Motors, Lifts & Escalators, Insulators, Industrial Control & Automation Systems, Generators, Cable Accessories, Energy Meter, etc.

Visitors came from all over India and other parts of the world to visit the Hitachi Hi-Rel Booth, which was truly showcasing a "Powerhouse" with its range of power electronic products display, including UPS, VDD and Solar Inverter, amongst others. Key product attractions include the Industrial UPS System – 160 KVA – i4eti Model, the Stallion Battery Charger – 24 VDC, the Low voltage Drives – HIVECTOL HVI E & E2 Series (Prototypes), and the Grid Tied Solar String Inverters – 250 kW, 50 kW, 20 kW, and 3 kW – HIVERTER Si Series.

Students not only gained knowledge about electrical and electronic components, features, products, and services, but also had the opportunity to interact with representatives from a number of companies. In general, the trip exceeded everyone's expectations, and especially for the students, it proved to be an incredible learning opportunity.

Objective: To guide students so that they can transform their innovation into a valid solution.

Benefits: Students learnt the importance of patent filing & how it can be filed & got to know the latest innovation in electrical & electronic components.



Celebration on National Science Day

Science Fiesta, 2023

27th – 28th February, 2023

Institution's Innovation Council (IIC), Ministry of Education (MoE), Dronacharya Group of Institutions, Greater Noida celebrated **"National Science Day"** on **27th – 28th February, 2023**. The celebration was held in line with India's G20 presidency. **87 students** participated in the celebration activities.

The celebration was held in order to commemorate the invention of the Raman Effect in India by the Indian physicist, Sir Chandrasekhara Venkata Raman on the same day in the year 1928. The theme was "Global Science for Global Well-Being". The ultimate aim of celebrating the day was to provide awareness of Science among the engineering students.

Dr. Sanghamitra V. Arora was the program coordinator. The events were judged by Dr. Mamta Bhardwaj and Dr. Hari Mohan Rai. Various events were held across two day celebration which included Debate competition, Poster Presentation, PPT Presentation and Project Presentation. The guidelines for participating in the competition were pre articulated to all.

On 27th February, students actively participated in the debate competition. The theme for the competition was 'The Science of Today is Technology of Tomorrow.' Students expressed their views on the stated topic and focused upon the need of Innovation through their potential words. The second competition of the day was Poster Presentation Competition on the theme 'Innovation in Science.' Students expressed their outlooks by way of beautiful posters. Students were guided by their respective mentors and their efforts were applauded by the judges of the event.

On 28th February, the first competition was PPT Competition. The theme of the competition was 'Impact of Scientific Innovation in Human Life.' Students made thought breaking slides. The designs and the content were very well placed in each slide. The next competition of the day was Project Presentation

Competition. Students presented their Real Time Innovative Projects in front of the judges and gave a briefing of their projects along with the demonstration.

Students actively participated in the competitions and also learned a lot by way of participation. All the participants' efforts were appreciated and were awarded with Certificate of Achievement.

Objective: To provide awareness of Science among the students and engage them in innovative activities.

Benefits: Students got platform to showcase their innovative ideas and were mentored by the experts.

List of Winners:

Competition	Student Name	Branch	Position
Debate	Bhupender Singh	3rd year- CSE	Runner Up
	Shreyan Shukla	2nd Year- CSE	Winner
Poster	Komal Papnai	1st Year - CSIT	Winner
	Tanu Srivastava	3rd year- CSIT	Runner Up
PPT Presentation Competition	Saptarishi Pal	2nd Year- ECE	Winner
	Raghav Verma	3rd Year - CSE	Runner Up
Project Competition	Ananya Biswal	4th year - CSE	Winner
	Ayushya	4th year - CSE	Runner Up

Glimpses:





Session on Becoming a World Class Innovator – Growth through Innovation

2nd November, 2022

Institution's Innovation Council (IIC), Ministry of Education (MoE) Dronacharya Group of Institutions, Greater Noida organized a session on “**Becoming a World Class Innovator – Growth through Innovation**” for B.Tech & MBA students on **2nd November, 2022**. The keynote speaker of the session was **Dr. Rajeev Kumar Mehajan** (Scientist “C” and Advisor (Ministry of Science & Technology). 250 students attended the session.

The main motive of the session was to make the students aware about the need for innovation in the country and the way through which a country can flourish by carrying innovation activities at large.

Mr. Rajeev Kumar Mehajan explained and laid stress upon the need for innovation by the young, budding & talented students. He motivated all the students to take up research work and to expand the horizons of critical thinking.

Students of Dronacharya Group of Institutions enthusiastically listened throughout the session. **Students were highly benefitted from the session.** In the last, Mr. Mehajan invited queries from the students & solutions were provided. Students actively listened throughout the session.

Objective: To make the students aware about the need for innovation in present scenario.

Benefit: Students got motivated to take up the research work and expand their horizons of critical thinking.



International Conference on Optimization Technique in Engineering & Technology

(ICOTET'22)

8th – 9th July 2022

Institution's Innovation Council (IIC), Ministry of Education (MoE), Dronacharya Group of

Institutions, Greater Noida successfully organized a two day “International Conference on Optimization Technique in Engineering & Technology” (ICOTET'22) in association with CRC Press - Taylor & Francis Group from 8th - 9th July 2022. The Chief Guest of the conference was Prof. Prem Vrat, Former Vice Chancellor, AKTU, Professor of Eminence & Chief Mentor. In the conference chair was Prof. Pradeep Kumar, Former Vice Chancellor, DTU, Professor IIT Roorkee and the guest speaker of the session was Mr. Gordian Overschmidt, Founder & CEO of ODE Systems GmbH Berlin, Germany.

Around 200 papers were received from industries, researchers & academics in above said areas of Communication and computing systems and adapted papers have been included in the conference proceedings. The inaugural session was conducted by Prof. Prem Vrat. The orator of the first day session was Mr. Gordian Overschmidt. He explained the importance of various engineering fields available for studying in engineering. He motivated the students to write research papers and explained the need of carrying research work in engineering. Various research scholars presented the papers and the same were analyzed by the eminent speakers. The research scholars from all the fields of study came to one platform and discussed their ideas. Various techniques of optimization in engineering & technology was also explained to the students. There were many queries of the students and the same were settled by the speaker of the session one by one.

On the second day, Prof. Pradeep Kumar continued the session and explained various optimization tools available and how students can take the best use of those techniques. The importance of experimentation was also explained to the students.

The closing ceremony was followed by distribution of best paper awards to the selected participants. The Conference provided a global platform for interaction among the knowledge holders belonging to industry, academia and various areas of society. The conference was a great learning experience for everyone and the participants gave valuable positive feedbacks.



TECH SURAKSHA- An Internal Hackathon

1st & 10th April 2023

Institution's Innovation Council (IIC), Ministry of Education (MoE), Dronacharya Group of Institutions, Greater Noida organized Tech Suraksha- An Internal Hackathon on 1st & 10th April 2023. 42 teams registered and presented their ideas.

‘KAVACH-2023’ a unique national Hackathon to identify innovative concepts and technology solutions for addressing the security challenges of the 21st century faced by our intelligence agencies. It is conceived to challenge India's innovative minds to conceptualize ideas and framework in the domain of cyber security using artificial intelligence, deep learning, machine learning, automation, big data and cloud computing.

The internal hackathon was held in a competitive environment, with each team working on creative solutions. The teams were required to present their ideas and solutions to a jury panel. Jury members for the hackathon were: **Mr. V.N. Shukla** (CTO & Senior Consultant, CSC e-governance Services Pvt. Ltd), **Mr. Rishabh Sharma** (CEO, CodeDev), **Mr. Akhilesh Garg** (Software Engineer, BlackNGreen Mobile Solutions), **Dr. Seema Shukla** (Director, DGI, Gr. Noida), **Dr. Shailesh Singh** (Associate Professor, DGI, Gr. Noida). Participated teams have been evaluated in two steps: 1) Mentoring session was held in computer centre lab. 2) Afterwards, PPT's were evaluated in conference room.

The students showcased creative solutions for various problem statements of KAVACH 2023. The competition sought creative ideas and technological solutions to address cyber security and cybercrime challenges confronting law enforcement agencies and ordinary citizens.

Objective: To provide students with a platform to solve some of the cyber security problems everyone face.

Benefits: The students showcased creative solutions for various problem statements of KAVACH 2023.

Instagram : <https://www.instagram.com/p/CrDVvCEvHLq/>

Twitter : <https://twitter.com/DronacharyaDgi/status/1642050988788920322/photo/2>

Linkedin: <https://www.linkedin.com/school/dronacharya-group-of-institutions-delhi-ncr-28b379186/posts/?feedView=all>



Technical Session on Growing Presence of Women in Engineering

4th March, 2023

Institution's Innovation Council (IIC), Ministry of Education (MoE), Dronacharya Group of Institutions, Greater Noida organized a technical session on “Growing Presence of Women in Engineering” on 4th March, 2023. The keynote speaker of the session was Ms. Swati Grover (Founder, Disaster Resilient Foundation) Female faculty members and female students of the college attended the session.

Program coordinator Prof. Priya Satsangi (HOD – MBA Department) introduced the eminent speaker of the day. Starting the session, Ms. Swati laid stress upon the fact, gender gap has been prevalent in the

society from beginning in the areas of Science and Technology. The main reasons behind low enrollment of females in the engineering domain are the lack of motivation, inadequacy of role model and lack of confidence. Continuing the session, Ms. Swati Grover motivated the students to build stronger critical and analytical skills. She asked all to have high confidence levels and participate in as many events, workshops, competitions and conferences as possible. She urged all to be innovatively sound and always strive for creating out of the box.

In the last, she raised the voice and urged to be unapologetically you and believe in yourself and be focused. She also told participants to motivate the middle school girl students aware about engineering discipline in order to bridge the gap of male and female in engineering.

Objective: To make student aware of importance of technical education for female and independent living.

Benefits: Students understood the importance and were motivated to spread this awareness to the society.

Glimpses:



Workshop on “Design Thinking, Critical Thinking and Innovation Design”

10th February, 2023

Institution’s Innovation Council, Ministry of Education (MoE), Dronacharya Group of Institutions, Greater Noida organized a workshop on **“Design Thinking, Critical Thinking and Innovation Design”** on **10th February, 2023**. **IIC Ambassador, Dr. Bipin Pandey** was the eminent speaker of the workshop. 85 students attended the workshop.

The objective behind conducting the workshop was to educate the students and highlight the importance of Design Thinking, Critical Thinking and Innovation Design.

The speaker started the session by highlighting the fact that to carry innovation, critical thinking is a vital parameter. Assumptions must be made and there should be no lacking in the efforts to make the assumptions a reality. He said, the world is becoming more and more digital, it’s not the first click that matters, what matters are the actions that needs to be performed afterwards. To make an idea a successful reality, proper implementation of the thoughts is also necessary. Following were the topics that were taught in the session:

- Elements of Design Thinking
- Design Thinking Process
- Problem identification techniques/tools
- Customer journey map
- Empathy map template
- Need of social media
- Prototype techniques/tools
- Ideation techniques/tools

The session also covered how Design Thinking and Critical Thinking abilities are used to produce what customers really want. It also focuses upon delivering tangible and intangible products keeping in mind the feasibility and economical aspect of the product thus produced.

Overall, it was a rousing session for the attendees.

Objective: To educate the students& highlight the need of Design Thinking,Critical Thinking & Innovation Design

Benefits: Student understood Design Thinking Process & Elements involved in Design Thinking and got to know about Problem identification techniques/tools



Yukti Innovation Challenge 2023: An Internal Hackathon

13th - 14th April 2023

Institution's Innovation Council (IIC), Ministry of Education (MoE), Dronacharya Group of Institutions, Greater Noida organized "Yukti Innovation Challenge – An Internal Hackathon" on 13th - 14th April, 2023. 30 teams participated in the event.

YUKTI – National Innovation Repository (NIR) is an initiative of the Ministry of Education (MoE) Government of India and it is implemented by MoE's Innovation Cell and AICTE to build a system of repository of ideas, innovations and startups developed in academic institutions and enabling institutions to systematically foster the I&E culture by managing and nurturing these innovations by offering continuous support in terms of one-to-one mentorship, grant assistance, referral and linkage with incubation units, connecting with Angel/Venture Capital (VC) investors network, knowledge agencies, etc.

The internal hackathon was held in a competitive environment, with each team working on creative solutions. The teams were required to present their ideas and solutions to a jury panel in two rounds. During their assessment, the judges placed a strong emphasis on innovation and creativity. The following were the details of the jury panels:

- Bipin Pandey
- Sanghamitra V Arora
- Shailesh Kumar Singh

The students showed enthusiasm and presented many innovative ideas. The competition sought creative ideas and technological solutions to address challenges in the world. The suggested solutions' innovation

and creativity, objectives of the work, feasibility and relevance for real-world issues, presentation skills, and commercial viability were among the judging factors.

All the 10 chosen teams' work demonstrated technical proficiency and creative abilities with cutting-edge technologies such as Artificial Intelligence/Machine Learning, Deep Learning, Data Analytics, etc. to find reliable, secure, and efficient technological solutions for the challenges in the 21st century.

Objective: Provide a platform for 360-degree experiential learning from idea generation to venture creation

Benefits: Shortlisted the best 10 ideas that to be nominated for Yukti Innovation Challenge

