

SUMSHODHINI'24



Report
on
SUMSHODHINI'24 of the Mechanical Engineering Department



Department of Mechanical Engineering

KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE

(An Autonomous Institute under Kakatiya University)

Warangal, Telangana

2024-2025

"SUMSHODHINI REPORT '2024" appears to be an outline of different segments and activities associated with the event "Sumshodhini 2024."

Sumshodhini 2024: An Overview

Sumshodhini 2024 was an academic and technical festival organized by the Department of Mechanical Engineering at Kakatiya Institute of Technology & Science (KITS), Warangal. Held over two days on October 18 and 19, 2024, this annual event aimed to foster a spirit of innovation, creativity, and scientific inquiry among students, faculty, and industry professionals. With a range of activities and sessions tailored to various aspects of engineering and technology, Sumshodhini 2024 provided a platform for knowledge sharing, practical application of engineering principles, and networking with experts and peers.

Sumshodhini 2024 celebrated technological innovation and creativity through a series of events and showcases. The event provided a platform for students and enthusiasts to explore various engineering and scientific fields, promote visionary thinking, and foster hands-on experiences across multiple disciplines.

Crafting the Cosmos: Aerospace and space Frontier Technologies:

This segment focused on innovations in aerospace, exploring advancements in space technologies and applications. Participants engaged with emerging trends and discussed future possibilities for space exploration and related technologies

Event Details and Activities:

1. Crafting the Cosmos: Aerospace & Space Frontier Technologies

- **Date & Venue:** October 18, 2024, at the Mechanical Seminar Hall (MSH)
- **Time:** 10.00 am to 6.00 pm
- **Faculty Organizers:** Sri. S. Ramesh, Sri. K. Kishore Kumar, Dr. E. Ramesh
- **Student Coordinator:** S. Vinitha
- **Student Organizers:** Ch. Nishal Reddy, Y.V.V. Sai Sri Sumanth, P. Abhinay Naik M. Jayaprakash,

Overview:

The “Crafting the Cosmos” session delved into the latest advancements and innovations in aerospace and space technology. Presentations covered emerging trends in space exploration, satellite technology, propulsion systems, and the future of human spaceflight.

Students were encouraged to present research papers, technical articles, and posters that showcased their understanding and contributions to aerospace engineering. This session aimed to inspire participants by connecting theoretical concepts with practical applications in one of the most aspirational fields of engineering.



Sri.Dhruti S.Das Incubation Manger at C-i2RE Founders lab

Mech Genius: Crafting the Future of Engineering (Technical Articles/Paper/ Poster/ Presentation) :

Featuring technical articles, papers, posters, and presentations, "Mech Genius" aimed to spotlight advancements in mechanical engineering. This part encouraged students to present research and findings, promoting collaboration and knowledge sharing among engineering minds.

Mech Genius: Crafting the Future of Engineering

- **Date & Venue:** October 19, 2024, at MSH
- **Time:** 9.10 to 11.30 am
- **Faculty Organizers:** Dr. K. Sridhar, Professor. Dr. G. Ganesh Kumar, Assoc. Prof. Dr. P. Prabhakar Rao, Assoc Prof. Sri. V. Prasanna, Asst. Prof.
- **Student Organizers:** S. Ravalika, Md. Muzammil Ayub Khan, Sd. Shadman Hussain.

Overview: “Mech Genius” focused on a broad array of topics within mechanical engineering, with participants presenting research articles, papers, and projects. The session highlighted innovations in areas such as thermodynamics, fluid mechanics, materials science, and robotics. Emphasis was placed on practical applications and the engineering solutions to real-world challenges, providing students with opportunities to refine their presentation and research skills and to engage with critical feedback from faculty and peers.



Visionary Pitch: Transforming Concepts into Reality:

Visionary Pitch invited participants to present and refine innovative concepts with real-world applications. The session likely involved pitching ideas, receiving feedback, and refining proposals for practical implementation, fostering an entrepreneurial mindset.

Visionary Pitch: Transforming Concepts into Reality

- **Date & Venue:** October 19, 2024, at MSH
- Time: 11.30 am to 12.30 pm
- Faculty Organizers: Dr. U. Shrinivas Balraj, Professor, Dr. A. Devaraju, Assoc. Prof. Dr. P. S. S. Murthy, Asst. Prof. Sri M. Anil Kumar, Asst. Prof.
- Student Organizers: R. Sravani, Saranya Marie Louie, B. Deekshitha,

Overview: The Visionary Pitch session encouraged students to present novel ideas with real-world applicability. Participants pitched their concepts, which ranged from innovative product designs to sustainable engineering solutions, in front of a panel of judges. The judges and audience provided feedback, fostering a collaborative environment where students could refine their ideas and learn the basics of pitching, prototyping, and business strategy. This session underscored the importance of transforming theoretical knowledge into practical, marketable solutions, helping students bridge the gap between academia and industry.





Aqua Launch: Reaching New Heights:

"Aqua Launch" focused on advancements related to water-based technology and innovations in hydroengineering. This could involve activities like water rocket launches or demonstrations related to fluid mechanics and environmental engineering.

Aqua Launch: Reaching New Heights

- **Date & Venue:** October 19, 2024, at KITSW Play Fields
- Time: 2.00 to 3.45 pm
- Faculty Organizers: Dr. S. Chandramouli, Asst. Prof. Sri S. Anil Kumar, Asst. Prof. Dr. G. Srinu, Asst. Prof. Sri P. Anil Kumar, Asst. Prof.
- Student Organizers: T. Akshay, G. Amarnath, M. Rahul,

Overview: "Aqua Launch" was a hands-on session focused on hydro-based technologies and engineering. The highlight was the water rocket demonstration, an activity that demonstrated principles of fluid mechanics, aerodynamics, and propulsion. Teams of students designed and launched water rockets, competing to achieve maximum height and distance. This event provided a fun yet educational opportunity to understand the dynamics of propulsion systems and reinforced basic engineering concepts in a practical setting





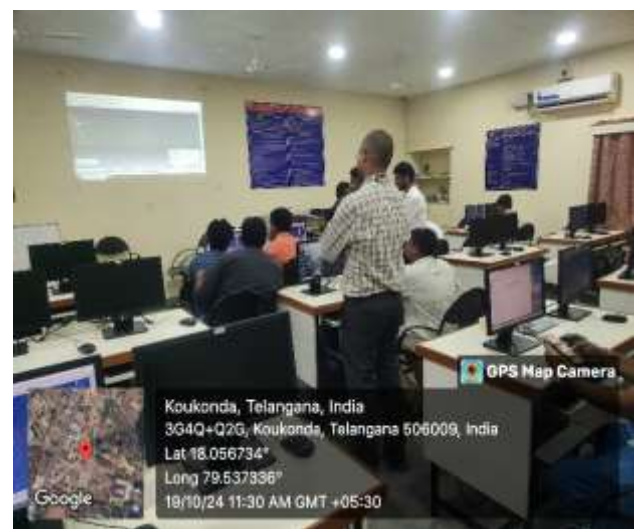
3D Visionaries: Creating Tomorrow with CAD :

This section was dedicated to computer-aided design (CAD) and 3D modeling, allowing participants to explore design principles and create detailed models, pushing the boundaries of 3D technology applications in engineering.

3D Visionaries: Creating Tomorrow with CAD

- **Date & Venue:** October 19, 2024, at MCAD Lab, Block III
- **Time:** 11.00 to 12.30 pm
- **Faculty Organizers:** Sri A. Hari Kumar and Sri S. Sripathy, Sri V. Rakesh
- **Student Organizers:** P. Venkateshwarlu, K. Aravind, Shoib Ali Khan, G. Premchand

Overview: This event focused on CAD (Computer-Aided Design), challenging students to design and visualize complex 3D models. Participants worked on software to create designs for various mechanical components, vehicles, and structures. Judges assessed participants based on creativity, accuracy, and the functional viability of their designs. This session highlighted the role of CAD in modern engineering and inspired students to explore design principles and techniques that are critical in fields like automotive and aerospace engineering.



Rush Bots: Engineering at Full Speed :

In the "Rush Bots" section, robotics enthusiasts engaged in activities that showcased the speed and efficiency of automated systems. The focus was likely on developing and demonstrating high-speed robotic prototypes.

Rush Bots: Engineering at Full Speed

- **Date & Venue:** October 19, 2024, at the Central Workshop
- **Time :** 2.00 to 3.45 pm
- **Faculty Organizers** Dr. G. Srinivasa Rao, Asst. Prof, Sri Ch. Karunakar, Asst Prof, Dr. MD, Sameer Asst. Prof.
- **Student Organizers:** B. Varun, Ch. Venkat, S. Adithya,

Overview: Rush Bots was a high-energy session where students demonstrated their robotic models in competitive settings. The event focused on speed and precision, with teams programming their robots to complete tasks under time constraints. This activity promoted teamwork, programming skills, and knowledge in automation. Participants gained insights into the intricacies of robotics, including sensors, motors, and control systems, encouraging them to innovate in the rapidly evolving field of automation.



Craken Egg :

Although specific details are not provided, "Craken Egg" might be an experimental or problem-solving session, encouraging innovative approaches in a challenge or competition format.

Craken Egg

- **Date & Venue:** October 19, 2024, at the Central Workshop
- **Time:** 3.00 to 4.00pm
- **Faculty Organizers:** Dr. J. Laxman, Asst. Prof. Dr. V. Srikanth, Asst. Prof. Sri V. Rajesh, Asst. Prof.
- **Student Organizers:** MD. Sumeer, Sulthan Ahmed, A. Vrushank,
- Specific details of this event were not provided, but it likely involved innovative problem-solving or experimental activities designed to challenge participants in creative engineering.



Sumshodhini Valedictory :

The event concluded with a valedictory session, where key achievements were celebrated, feedback was gathered, and plans for future events were discussed. This session served as an opportunity to reflect on Sumshodhini 2024's impact and to recognize the contributions of participants and organizers.

Valedictory Session

- This closing session included reflections on the event's success, acknowledgments of organizers and participants, and recognition of standout contributions. Faculty mentors and student organizers were acknowledged for their efforts in making Sumshodhini 2024 a memorable event.



Committees and Organizers:

The organization of Sumshodhini 2024 was facilitated by various committees, including Registration, Venue & Decoration, Anchoring, Design & Photography, and Publicity. Each committee consisted of faculty organizers and dedicated student coordinators, ensuring smooth planning and execution across the event.

Conclusion: Sumshodhini 2024 was a successful endeavour that provided a platform for students to showcase technical skills, fostered creativity in engineering design, and promoted collaboration among participants. The event demonstrated KITS Warangal's commitment to nurturing innovation and practical learning, marking another milestone in engineering education at the institute.

Conclusion:

Conclusion: Sumshodhini 2024 was a dynamic and successful celebration of engineering and innovation, bringing together the KITS Warangal community in a shared pursuit of knowledge and creativity. With a diverse array of activities, from aerospace exploration to CAD modeling and robotics challenges, the event encouraged students to push their boundaries, apply theoretical knowledge practically, and engage with peers and mentors. Sumshodhini 2024 highlighted the collaborative spirit of the institution and its commitment to fostering future leaders in engineering and technology.

Sumshodhini 2024 successfully brought together students, professionals, and enthusiasts, offering a dynamic range of experiences and learning opportunities. From aerospace exploration to robotics competitions, the event embodied the spirit of innovation and highlighted the creative potential of the next generation of engineers and scientists.

DEPARTMENT OF MECHANICAL ENGINEERING
SUMSHODHINI'24(18th- 19th October, 2024)

List of Participants

Sl.No	Name of the Department	Name of the Event	Roll Number	Name of the Student	Contact No	Amount received	Book & Bill No
1.	Mechanical	Crafting The Cosmos	B24ME004	V.Kavya	6301915557	600/-	9101
2.	Mechanical	Crafting The Cosmos	B24ME037	V.Naga Sai Dhanya	8712391975	600/-	9102
3.	Mechanical	Crafting The Cosmos	B24ME008	Y.Vijay Sidharth Reddy	9030562691	600/-	9103
4.	Mechanical	Crafting The Cosmos	B24ME021	D.Mahidhar	9030521196	600/-	9104
5.	Mechanical	Crafting The Cosmos	B24ME028	Ch.Navya Sri Reddy	8008931875	600/-	9105
6.	Mechanical	Crafting The Cosmos	B24ME001	S.Arun Kumar	8328012134	600/-	9106
7.	Mechanical	Rush Bots		Arun/Mahidhar/Harish	8328012134	450/-	9107
8.	Mechanical	Aqua Launch	B24ME008	Y.Vijay Sidharth Reddy	9030562691	100/-	9108
9.	Mechanical	Crafting The Cosmos	B24ME010	T.Hanumanth Reddy	9515130832	600/-	9109
10	Mechanical	Crafting The Cosmos	B24ME032	G.Dhanush	7093505079	600/-	9110
11	Mechanical	Aqua Launch	B24ME032	G.Dhanush	7093505079	100/-	9111
12	Mechanical	Rush Bots	B24ME032	G.Dhanush	7093505079	150/-	9112
13	Mechanical	3D Visionaries	B24ME032	G.Dhanush	7093505079	100/-	9113
14	Mechanical	Crafting The Cosmos	B23ME004	Vasudev	8309338513	600/-	9114
15	Mechanical	Crafting The Cosmos	B23ME037	Hemanth	9381490354	600/-	9115
16	Mechanical	Crafting The Cosmos	B24ME019	Harish Rao Gandra	9652301228	600/-	9116

17	Mechanical	Crafting The Cosmos	B24ME022	P.Raja Ram	9494213310	600/-	9117
18	CSE	Crafting The Cosmos	B24CS217	GopiChand	9392093335	600/-	9118
19	Mechanical	Crafting The Cosmos	B23ME064L	D.Mahesh	9182163921	600/-	9119
20	Mechanical	Crafting The Cosmos	B23ME065L	N.Hari Haran	9640427418	600/-	9120
21	Mechanical	Crafting The Cosmos	B22ME022	G.Pavan	8074161955	600/-	9121
22	Mechanical	Crafting The Cosmos	B22ME001	Syed Shadman	7680837296	600/-	9122
23	Mechanical	Mech Genius	B22ME001	Syed Shadman	7680837296	100/-	9123
24	Mechanical	Mech Genius		S.Adithya	8333941500	100/-	9124
25	Mechanical	Mech Genius	B22ME009	G.Premchand		100/-	9125
26	Mechanical	Mech Genius	B24ME008	Y.Vijay Sidharth Reddy	9030562691	100/-	9126
27	Mechanical	3D-Visionaries	B24ME022	P.Raja Ram	9494213310	100/-	9127
28	Mechanical	Visionary Pitch	B24ME004	V.Kavya	6301915557	100/-	9128
29	Mechanical	Crafting The Cosmos	B24ME024	B.Tejaswini		600/-	9129
30	Mechanical	3D-Visionaries	B23ME009	N.Ranjith		100/-	9130
31	Mechanical	Crafting The Cosmos	B24ME041	B.Pavan	9989637152	600/-	9131
32	Mechanical	Crafting The Cosmos	B24ME038	M,Dhamodhar	7995699518	600/-	9132
33	Mechanical	Crafting The Cosmos	B24ME006	Sohail	8008391525	600/-	9133
34	Mechanical	Crafting The Cosmos	B24ME065L	Ritwikesh	7386848682	600/-	9134
35	Mechanical	3D-Visionaries	B24ME065L	Ritwikesh	7386848682	100/-	9135
36	Mechanical	Mech Genius	B22ME128L	A.Pranay		100/-	9136
37	Mechanical	Mech Genius	B22ME131L	M.Suhas Chandra	9391906277	100/-	9137
38	Mechanical	Aqua Launch	B23ME031	A.Pallavi	9390386393	100/-	9138
39	Mechanical	Aqua Launch	B23ME015	K.Shilpa	7337310291	100/-	9139

40	Mechanical	Crafting The Cosmos	B24ME068L	Pragna	6300442055	600/-	9140
41	Mechanical	Crafting The Cosmos	B24ME063L	B.Divya	8919144667	600/-	9141
42	Mechanical	Crafting The Cosmos	B24ME024	B.Palson Raj	7075191347	600/-	9142
43	Mechanical	Crafting The Cosmos	B23ME010	T.Mohana Sai Haranadha Reddy	7827548978	600/-	9143
44	Mechanical	Mech Genius	B22ME132L	S.Vinitha	9121041350	100/-	9144
45	Mechanical	Mech Genius	B22ME122L	P.Vikas		100/-	9145
46	Mechanical	Crafting The Cosmos		B.Subbu	7993872971	600/-	9146
47	Mechanical	Mech Genius	B23ME061L	Swarandeeep		100/-	9147
48	IT	Aqua Launch	B22IT076	Srija		100/-	9148
49	Mechanical	Mech Genius	B23ME081L	Ch.Venkat		100/-	9149
50	Mechanical	Mech Genius		B.Varun	7337098444	100/-	9150
51	ECE	Crafting The Cosmos		Sidheeshwar	7013263005	600/-	191&9501
52	Mechanical	Mech Genius	B21ME036	K.Aravind	9160390600	100/-	9502
53	Mechanical	Crafting The Cosmos	B24ME029	Ch.Harshavardhan	7995342566	600/-	9503
54	Mechanical	Rush Bots	B24ME014	P.Harshavardhan	9704009583	100/-	9504
55	Mechanical	Crafting The Cosmos	B24ME012	Kavya	609190608	600/-	9505
56	Mechanical	Crafting The Cosmos	B24ME042	T.Nandhini	6304189473	600/-	9506
57	Mechanical	3D-Visionaries	B21ME031	N.Veera Sai Teja	9951523946	100/-	9507
58	Mechanical	Crafting The Cosmos	B24ME026	I.Jeevan Kumar	9381177970	600/-	9508
59	Mechanical	3D-Visionaries	B21ME011	G.Abhilash		100/-	9509
60	Mechanical	Cracken Egg	B23ME062L	B.Sai Charan		100/-	9510
61	Mechanical	Crafting The Cosmos	B24ME044	M.Sharvan	8977455760	600/-	9511
62	Mechanical	Cracken Egg	B23ME068L	M.Asresh		100/-	9512

63	Mechanical	Crafting The Cosmos	B24ME048	B.Ashish Vishnu	7993019149	600/-	9513
64	Mechanical	Cracken Egg	B23ME070L	P.Ravi Teja		100/-	9514
65	Mechanical	Cracken Egg	B23ME077L	M.Prajwal		100/-	9515
66	Mechanical	Cracken Egg	B23ME072L	M.Sai Ram		100/-	9516
67	CSD	Crafting The Cosmos	24641A6701	Afifa Tazeen	7382373601	600/-	9517
68		Cracken Egg	B24IN054	Sahidullah Syed		100/-	9518
69	Mechanical	Aqua Launch		Bhavya Sree	7989453129	100/-	9519
70	Mechanical	Aqua Launch		J.Ruthvik		100/-	9520
71	CSM	Visionary Pitch	24641A664	G.Supradeepthi	8074189512	100/-	9521
72	Mechanical	Aqua Launch		V.Vivek		100/-	9522
73	CSE	Crafting The Cosmos		B.Shiva Priya	9393099778	600/-	9523
74	ECE	Cracken Egg	B21EC163	Saifullad Syed		100/-	9524
75	ECE	Cracken Egg	B21EC174	Saif		100/-	9525
76	ECI	Cracken Egg	B21CI095	Abdul Kalam		100/-	9526
77	Mechanical	Mech Genius	B23ME078L	B.Deekshitha		100/-	9527
78	Mechanical	Mech Genius	B21ME057	S.Ravalika		100/-	9528
79	Mechanical	Mech Genius	B22ME142L	Challa Nishal Reddy	9844534056	100/-	9529
80	Mechanical	Mech Genius	B21ME058	T.Akshay Kumar	7036808302	100/-	9530
81	Mechanical	Mech Genius	B22ME139L	R.Sravani	7337034211	100/-	9531
82	Mechanical	Mech Genius	B21ME033	P.Anusri	7569894773	100/-	9532
83	Mechanical	Aqua Launch		B.Pragath		100/-	9533
84	Mechanical	Aqua Launch		N.Santhosh		100/-	9534
85	Mechanical	Aqua Launch		K.Srilekha		100/-	9535
86	Mechanical	Aqua Launch	B23ME027	D.Bhumika	8333941500	100/-	9536
87	CSN	Visionary Pitch	B23AI104	Rohini	9390661549	100/-	9537
88	Mechanical	3-D Visionaries	B22ME131L	M. Suhas Chandra	9391906277	100/-	9538