

CELLS, SOCIETIES, RESEARCH GROUPS

IIT Kharagpur has a plethora of cells, societies, and research groups to keep the students engaged and enhance the bonding of the Kgp community. It is a stage for students to work together and learn the importance of team spirit. As a part of various student bodies, the students form the face of the institute at various levels and bring laurels to IIT Kharagpur.

For the growth and advancement of the institute, the cells work under the leadership and supervision of various Deans under the office.

The societies work for the students and try to keep the kgp community alive by organizing various events and competitions. They work towards the betterment of the community.

Research groups are busy innovating new things, brainstorming on new ideas, and keeping alive the technical spirit of IIT Kharagpur. They do exceptional work in the field of research and solve various real-life problems using technology.

RESEARCH GROUPS



Aerial Robotics Kharagpur (ARK) has won the First place in iMAV 2019 Competition held in Madrid, Spain



AERIAL ROBOTICS KHARAGPUR (ARK)

- Aerial Robotics Kharagpur, often abbreviated to ARK, is one of IIT Kharagpur's newest projects towards robotics research. It is a research group under Technology Students' Gymkhana.
- The research group aims to drive the state of art of aerial robotics forward by focusing on sponsored research projects and participating in international competitions like IARC.
- ARK Team is divided into two sections-Software Team, Controls Team, Hardware Team.
- ARK involves and organizes various events throughout the year, such as International Aerial Robotics Competition(IARC), International Micro Air Vehicle Competition (IMAV), Agricultural Robotics, Telekyb, Indoor management using drones.

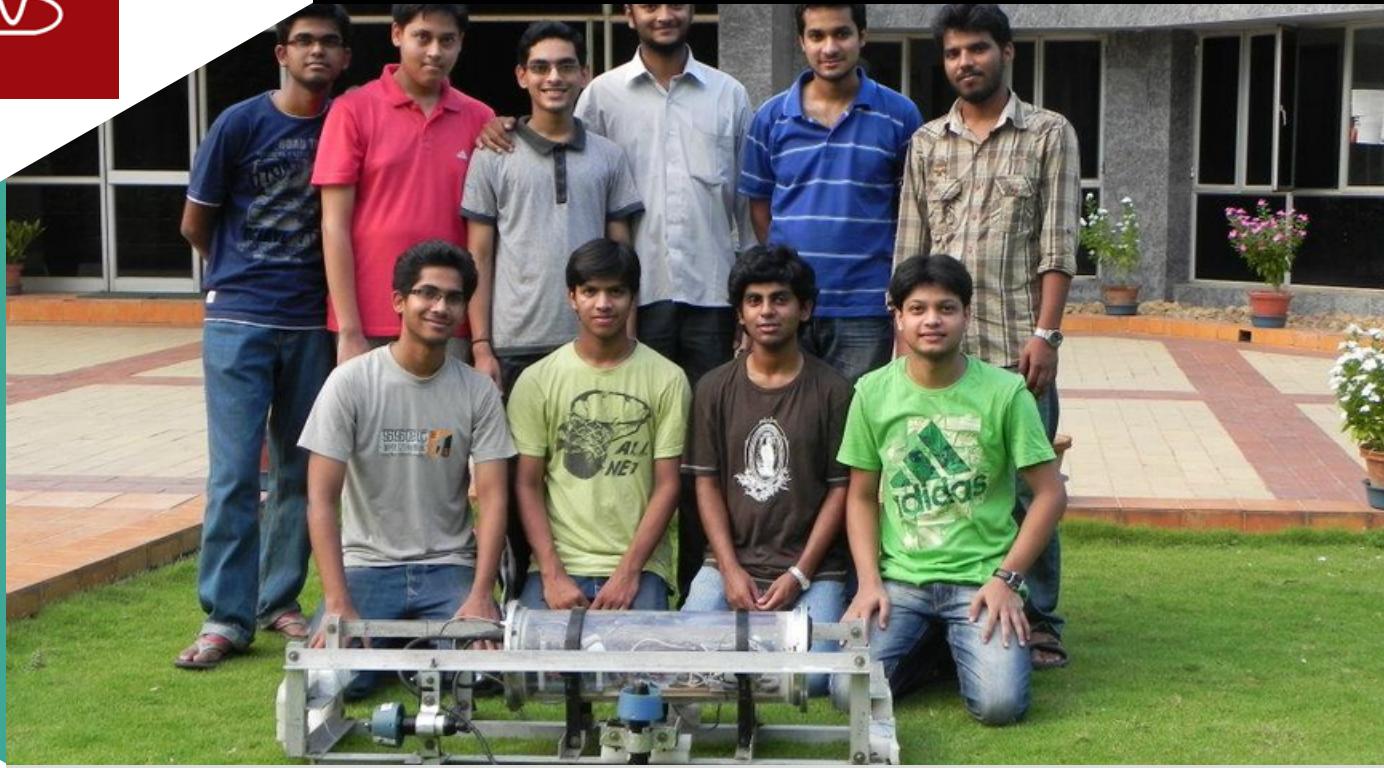
ARK Facebook Page - [ARK](#)



AUTONOMOUS GROUND VEHICLE RESEARCH GROUP (AGV)

- The Autonomous Ground Vehicle Research Group (AGV) is a multidisciplinary research group working under the Centre of Excellence for Robotics Research, IIT Kharagpur.
- The group's primary focus is, developing a fully autonomous vehicle, capable of driving itself.
- With initial funding from STEP (Science and Technology Entrepreneurs Park) and SRIC (Sponsored Research and Industrial Consultancy Cell of IIT KGP), the group has also been supported by industry standards such as SolidWorks, VectorNav Solutions, and Clearpath Robotics.
- AGV has also participated in various international competitions like the Intelligent Ground Vehicle Competition (IGVC), Indy Autonomous Challenge, ML Reproducibility Challenge, University Rover Challenge, IROS-RSJ Navigation & Manipulation Challenge and has managed to keep the KGP spirit high.

AGV Facebook Page - [AGV](#)



AUTONOMOUS UNDERWATER VEHICLE TEAM

- The IIT Kharagpur Autonomous Underwater Vehicle Team (Team AUV) is a student group working in the field of autonomous underwater robotics. The team designs and builds fully autonomous underwater robots for research and competitive purposes.
- Being a part of Team AUV, the team members apply their conceptual understanding and creativity in multiple dimensions of engineering.

AUV Facebook Page - [AUV](#)



Kharagpur RoboSoccer Students' Group (KRSSG) in the Goalie skills Challenge of the 3D Soccer Simulation League at RoboCup 2018, held in Montreal, Canada.



KRSSG

- Kharagpur Robosoccer Students' Group, often abbreviated to KRSSG, is one of IIT Kharagpur's first endeavors in robotics research. It is a research group sponsored by SRIC as part of the Centre for Excellence in Robotics.
- The research group aims to make autonomous soccer-playing robots and participate in international competitions like Robocup and FIRA Roboworld Cup. Undergraduate students from all departments and years are a part of this team.
- KRSSG Team is divided into four sections- AI Team, Embedded Electronics, Mechanical Design, Management.
- KRSSG organizes various events throughout the year, such as RoboCup Small Size League, Robocup 3D Humanoid Simulation league, FIRA Microsoft, FIRA Simurosot, Humanoid Robotics, Code-o-Soccer.

KRSSG Facebook Page - [KRSSG](#)



SWARM ROBOTICS IIT KHARAGPUR

- Swarm Robotics IIT KGP, is one of IIT Kharagpur's newest projects towards robotics research. It is a research group sponsored by SRIC as part of the Centre for Excellence in Robotics.
- The goal of this research group is to develop a software architecture that can implement swarm models on all sorts of terrestrial and aerial robots, design algorithms for co-operated motion between robots like self-organization of robotic chain formations, and design bot structures that can interact and link with each other physically to create bigger sub-structures.
- The team is divided into sub-teams as AI, Software, and Mechatronics teams.