

DETAILED REPORT AMUROVc

MTS AUV-ZHCET presents AMUROVc, a National level Remotely Operated Vehicle (ROV) Competition AMUROVc on 1st and 2nd April 2022 in collaboration with IEEE ZHCET. We've been given permission by the Marine Technology Society Headquarters in Washington and MTS India section in Chennai, we have also been granted permission from the honourable Vice Chancellor to host this event in the university's premises.

Teams from all over the country are participating in AMUROVc, so far 5 teams have confirmed their arrival- **Team AUV DTU from Delhi Technical University**, **Team BIT-MAL ROV from Bannari Amman Institute of Technology**, Team PLUZ ULTRAZ from Bannari Institute of Technology, **Team AUV Nirma from Institute of Technology, Nirma University**, **Team Hustlers from Aligarh Muslim University**. AMUROVc encourages students to be a part of one of the most unique opportunities offered in the ROV industry and Marine World. It helps them identify the hurdles faced in the ocean while helping them formulate a solution.

The competition will unfold in three stages, the first task was hosted on 1st April and the next two task on 2nd April at Yusuff Ali Aquatics Complex, AMU, Aligarh.

DAY 1:

- Inaugural Ceremony

Each team was provided a personal point of contact within the organising team-Shahab, Mohd. Anas, Asmer, who were responsible for their safe and easy stay during the course of time the event. Teams were picked up from their respective places of arrival and then brought to the MHRD Hostels for breakfast. They were then escorted to the Assembly Hall, ZHCET for the Inaugural Ceremony hosted by Madiha and Zain. They were given the welcome address by Prof. Muzammil, the ceremony was followed by the brief about the club MTS AUV-ZHET and IEEE STB by Prof. Saleem Anwar Khan and Dr. Rehan respectively; former Dean and acting Vice-Chancellor Prof. Pervez Mustajab had the honour of being the chief guest for the event. Concluding the inaugural ceremony Mr. Mohd. Zaid gave the Vote of Thanks and AMU Tarana followed by the National Anthem was played. All the attendees were then escorted to the New Hall for Hi-Tea.

- Technical specs check: The ROVs brought by the teams were first examined by the spec check team- Ifrah, Zahid, Drishti and Yash. These specifications were already provided by us during the time of registrations in a detailed rulebook
- Task 1 consisted of a comparably simple task-ROV maneuvering along a hexagon shaped path without touching the boundaries. The path was hexagon with an 80 cm gap between the outer and inner boundaries, made up of Poly Vinyl Chloride(PVC) Pipes. The total points awarded to a team for this task was 100.



- Cultural Night: Even after a long day of technical specification checks and task 1 of the competition, the teams were full of energy. The organisers devised a wonderful and unforgettable evening that served as the competition's main attraction. The CEC team performed with its great band and vocalists, which helped to relieve the squad's strain for the next day. This cultural night was then followed by a delicious supper with the organisers and faculty advisers of Aligarh Muslim University, where teams connected over AUVs and the challenges they experience when manufacturing them. All of the teams had a terrific time meeting new people and networking.

DAY 2:

- AMU Cultral Walk: Teams were taken for a brief walk after their breakfast, the visiting students were given a round about of the fraternity, they visited Stretchy Hall saw the foundation stones and had a brief glimpse into the history and culture deeply imbibed in the Aligarh Muslim University. Teams and their faculty incharges also went for a walk Maulana Azad Library, one of the oldest and largest libraries in India.

- Task 2 Vision and Control: The goal of the challenge was to find and capture a target amid two balloons at the pool's bottom, each with a different shape. If the ROV only wanders around the balloons with the prescribed shape, it will receive some points; however, if the ROV bursts/touches the balloon with the respective/assigned shape
- Task 3 Depth Control: This was focused on judging the depth control among the teams and to find and acquire a succession of balls in the target zone. The target zone is created by placing 20 balls at the surface of the arena, and a golden ball. The ROV aimed to gather as many floating balls as possible before returning to the destination point. This was deemed to be the toughest task among the teams as only two of them made till here Team Hustlers and Team PLUZ ULTRAZ.
- AMUROVc came to an end on 2nd April 2022 after the Valedictory Ceremony, winners were announced with **Team Hustlers and Team PLUZ ULTRAZ in the first position** winning cash prize of 25000 each. **The second position was bagged by Team BIT-MAL-ROV** with a cash prize of 10000. In addition to that, **Team DTU AUV was a special award from the judges called the Wonder-Sub Award** for their outstanding model. This competition has ignited a fire among all of us to keep improving and shine even brighter by the next AMUROVc!