

Mar Baselios College of Engineering and Technology (Autonomous)
ASSISTIVE TECHNOLOGY GROUP REPORT

July 2022 - June 2023

1. I-YwD (Innovation by Youth with Disabilities) Cohort 3 Selection Camp venue at MBCET: 12th and 13th of May 2023

MBCET hosted the I-YwD team for the online I-YwD (Innovation by Youth with Disabilities) Cohort 3 Selection Camp on 12th and 13th of May 2023. The sessions included orientation, online activities and discussions in breakout rooms for young entrepreneurs with disabilities. Indian Sign Language (ISL) translator, Ms. Bhavana U B, helped the team to communicate in real time with persons having hearing impairment. Project coordinators, Ms. Daisy Sebastian, Ms. Sari P Vishwanath, Ms. Anjali Gopan and Mr. Avaneesh M and interns, Ms. Archa Krishnan S and Ms. Jisha M, were involved in conducting the various sessions. Prof. Raju K. Gopal and Mr. Jith from the ITMS team ensured smooth conduct of the online sessions that were held in Faraday Hall. Faculty coordinator: Dr. Lani Rachel Mathew, Asst. Professor (ECE)



2. Assistive Technology Internship 2023: 17 April - 28 April 2023

Coordinators: Ms. Amritha BJ, Dr. Alice Thomas

The Assistive Technology Internship 2023, was organized by the Assistive Technology (AT) group at Mar Baselios College of Engineering and Technology (MBCET) in association with the Biomedical Research Group (Department of

Electronics and Communication Engineering, MBCET), Catalyst (AICTE-sponsored club), and IEEE EMBS SBC MBCET, from 17th – 28th of April 2023. The program was sponsored by the AICTE SPICES Sponsored Club. A total of 21 students (17 students from the department of ECE and 4 from the department of CSE), successfully completed the internship program.

Faculty coordinators: **Ms. Amritha B.J.**, Assistant Professor, Dept. of ECE, and **Dr. Alice Thomas**, Assistant Professor, Dept. of CE mentored by **Dr. M.J. Jayashree** (Head, Assistive Technology Group | IQAC Coordinator, MBCET) and **Dr. Lani Rachel Mathew** (Faculty Advisor, IEEE EMBS Student Branch Chapter)



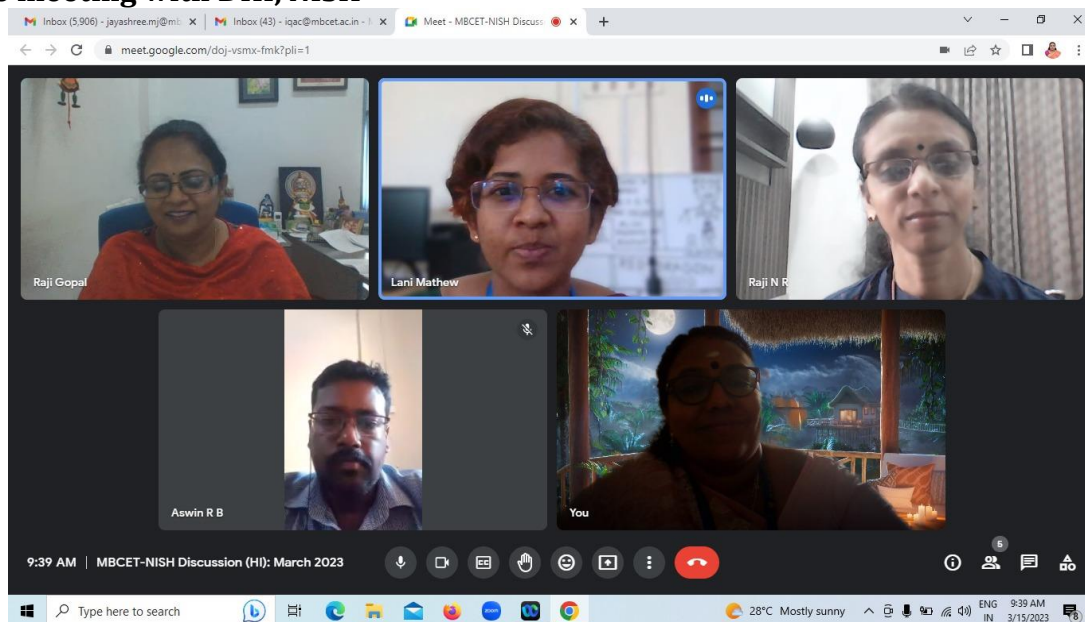
3. Visit to NISH

Dr. Shalu George K., Associate Professor, EED and Ms. Soumya A V., Assistant Professor, EED, along with a group of students of S8 EE visited the National Institute of Speech and Hearing (NISH) on 01 March 2023, as part of the discussion of their project entitled “Smart Ergonomic Office Chair”.

27 March 2023: Students visited and discussed their project with Mr. Amith of NISH.

Link🔗: <https://forms.gle/9xWcXEEzoy7puW9u7>

4. Online meeting with DHI, NISH



Ms. Raji Gopal, Coordinator-Degree(HI) & Faculty-HEFP, and Ms. Raji NR, In-charge, Computer Science, NISH, joined the call. From MBCET, Dr. M.J.Jayashree (ECE), Dr. Lani Mathew (ECE) and Ms. Jisha Jose (CSE) and Mr. Aswin RB (EEE) joined. They discussed various possibilities of collaboration between MBCET and NISH-DHI (Degree-Hearing Impaired), with respect to joint projects, faculty exchange programs, etc.

NISH offers a four year BSc Computer Science (HI) program under the Kerala University. The 1st year is a foundation course covering basics of English language, Mathematics, soft skills, etc., followed by the 3 year BSc.CS(HI) course. They will share the syllabus of the BSc.CS(HI) program. A tentative plan may be sent from both sides after internal discussions based on the academic calendars, so that mutually feasible dates may be decided upon. They also mentioned that before any collaborative program, a Sensitization program involving ice-breaking sessions and ISL (Indian Sign Language) classes, would be needed to break communication barriers between students with and without hearing impairment. The meeting ended at 9:45 am.

5. Mentor Sensitization Program: I-YwD Cohort at NISH



The following faculty members from MBCET attended the session on 24 February 2023: Ms. Amritha B. J. (ECE), Dr Alice Thomas (CED), Ms. Soumya A. V. (EEE), Dr. Nidhi M. B. (MED), Dr. Shalu George K. (EEE)

The morning session started with experiencing the blind where some of us could experience using a white cane blindfolded. Tiffany Brar ma'am, Balaraman Sir along with their other two team members shared their experiences and all. The participants realized that nothing is impossible for them, be it playing chess or using a smart phone, etc.

This was followed by a session with the deaf students in the institute, where faculty members could interact with them, and later on played some games using sign language. The program concluded with an experience sharing session by Ashla ma'am of Palliative India, a wheelchair user.

6. Delegation to TCS

Dr. Lani Rachel Mathew, Asst. Professor, ECED, was part of the delegation from APJAKTU to Tata Consultancy Services (TCS), Trivandrum, on 15th February 2023, to discuss possibilities of promotion of assistive technology related activities in the engineering community. Mr. Robin Tommy, TCS Trivandrum, was the organizer of the program which aimed at the promotion of Assistive Technology (AT) among the engineering community.

Date: 15 Feb 2023

Time: 11.30am

Location: TCS Delivery Centre, Technopark, Trivandrum



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Excerpt from FB page of APJAKTU: Dr. Ciza Thomas, Hon. Vice Chancellor visited TCS Trivandrum campus and held discussions with the leadership at TCS led by Mr. Dinesh Thampi, Centre Head, TCS Trivandrum. Hon. Vice Chancellor interacted with functional heads at TCS for suggestions for the upcoming curriculum revision and also outlined the industry engagement and industry electives implemented by the university for M.Tech students. Hon. Vice Chancellor also visited Rapid Labs of TCS, working exclusively on projects in the Assistive Technologies domain. The meeting was also attended by Dr. Vinu Thomas, Dean Academics, Dr. Gopakumar, Coordinator IQAC, Mr. Arun Alex, Coordinator, Industry Attachment Cell at KTU, Dr. Suneesh S.S, HoD Mechanical Engineering, College of Engineering, Trivandrum and Dr. Lani Rachel Mathew, Asst. Professor, Mar Baselios College of Engineering and Technology. Mr. Robin Tomy, Head, Rapid Labs & Research & Innovations TCS also handed over a book authored by himself, Ajithkumar Manaparmbil, Robotics Engineer, German Aerospace Centre, Rinu Michael, AI Engineer, TCS Amsterdam, titled "Building Smart Robots Using ROS" to Hon. Vice-Chancellor.

7. Inauguration of Placement drive of Acsia for differently abled engineering students:

Acsia Technologies, one of the world's leading companies specialising in automotive software, launching a placement drive of Acsia exclusively for differently abled engineering final year students across all colleges in Kerala. Their launch ceremony was held on Tuesday, January 24, 2023, at 11 :00 am at Visvesvaraya Hall in Mar Baselios College of Engineering & Technology. Dr. Ciza Thomas, Hon. Vice Chancellor, APJ Abdul Kalam Technological University will inaugurate the Programme in the presence of Dr. Suja K. Kunnath, Principal,

Academic Programs, National Institute of Speech & Hearing and Dr. Shalij P. R. - Dean Research, APJ Abdul Kalam Technological University.
Coordinator: Ms. Soumya AV, Asst. Professor, EEE



8. Assistive Technology Conclave

Mr. Arun JS and Dr. Lani Rachel Mathew (Asst. Professors, ECED) attended the Assistive technology Conclave at the NISH campus on 31st August 2022. The conclave aimed at promoting Assistive Technology engagement among

students and faculty from diverse fields.



9. MoU with National Institute of Speech and Hearing under the scheme Innovation by Youth with Disabilities (I-YwD)

The College has signed an MoU with National Institute of Speech and Hearing under the scheme Innovation by Youth with Disabilities (I-YwD) on 25 July 2022. MBCET is one of the 15 colleges selected for the scheme which was jointly mooted by NISH and APJ Abdul Kalam Technological University and supported by KDISC.



10. Program Committee: Empower 2022

Dr. Lani Rachel Mathew has been included in the Program Committee of Empower 2022 wef 1st April 2022. The conference will be conducted in IIT Madras Research Park from October 13-15