Report on ATL Training Program (1st Phase)

The training program was conducted on 26th June 2023 (Monday) from 11 AM onwards at the ATL Lab. Resource person was Mr. Anubhav Sardar. A brief report for the training program is given below: A training program was conducted by Mr. Anubhav Sardar on 26th June, 2023 from 11:15am - 2:00pm in the presence of Mrs. Jayasree Ghosh (TGT Science), Ms. Sreetapa Poddar (PGT physics), Mr. Shubham Chatterjee (PGT chemistry), Mr. Prasenjit Nandi (PGT Mathematics), Mr. Navonil Mal (PGT Biology), Mrs. Samprita Bose (TGT Science) and Mr. Debasis Rout (lab attendant).

The basic instrumentation pattern of any robotic device was discussed. Each such device includes three basic parts - an input (which senses the signal), a processor (which processes the signal into information) and an output (which provides the information as an output). The mechanistic approach about one processor system, - 'ARDUINO UNO board ' (with core processor AT-MEGA 328P) was discussed.AT stands for the company name 'ATmel'. MEGA stands for the version. 32 stands for the memory size, i.e., 32kb. 8 stands for the processing speed (8bit). Within this ARDUINO-UNO board, there is a series of powerports, which provides power supply to the breadboard (the ultimate power distributing unit to all other parts). Adjacent to the powerports, there is a series of ports, called digital input ports (which provides information into 'yes/no' pattern). Opposite to the powersports, there is a series of input ports (which provides information with a range of values). Within the powersport, the parts namely 'GND' are for supply of negative current, while those ports namely 3.3V, 5V, VCC etc. are for supply of positive current. In addition to the parts of processor, different parts and types of sensors were also taken into account. For each sensor board (the input device) includes 3 pins - one GND, one VCC and one DAT pin, which sends the data from sensor to processor. Different sensors, which were taken into account, are Temperature sensor (DST□11), Sound/Ultrasonic sensor, LDR sensor etc. The output devices, which were taken into account, are servomotor (rotates 180°) and LCD device. Lastly, the virtual coding of LDR device was taught with the help of Tinker CAD algorithm.

Photographs of the Training Program conducted on 26th June 2023

Report on ATL Training Program (2nd Phase)

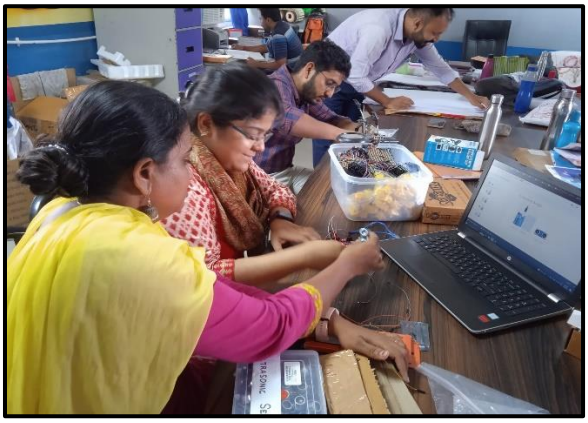
On 3rd July, 2023, there was the second phase of the training program for the ATL teachers under the guidance of Mr. Anubhav Sardar, held at the ATL lab of Air Force School Barrackpore from 11 am onwards.

In this session, different parts of Integrated circuit were explained along with the discussion cum training of soldering procedure. In addition, the experiment of distance measurement using ultrasonic sensor was demonstrated.

Photographs of the Training Program conducted on 3rd July 2023

Report on the 3rd Phase of ATL Training Program

The final phase of the training program was conducted on 10th July 2023 for the ATL teachers under the guidance of Mr. Anubhav Sardar, held at the ATL lab of Air Force School Barrackpore from 11 am onwards. The coding related activities were performed for the enlisted ATL devices. A report was prepared and was given to Mrs. Tripti Ghatak for further documentation.



Photographs of the Final Phase of Training Program, held on 3rd July, 2023