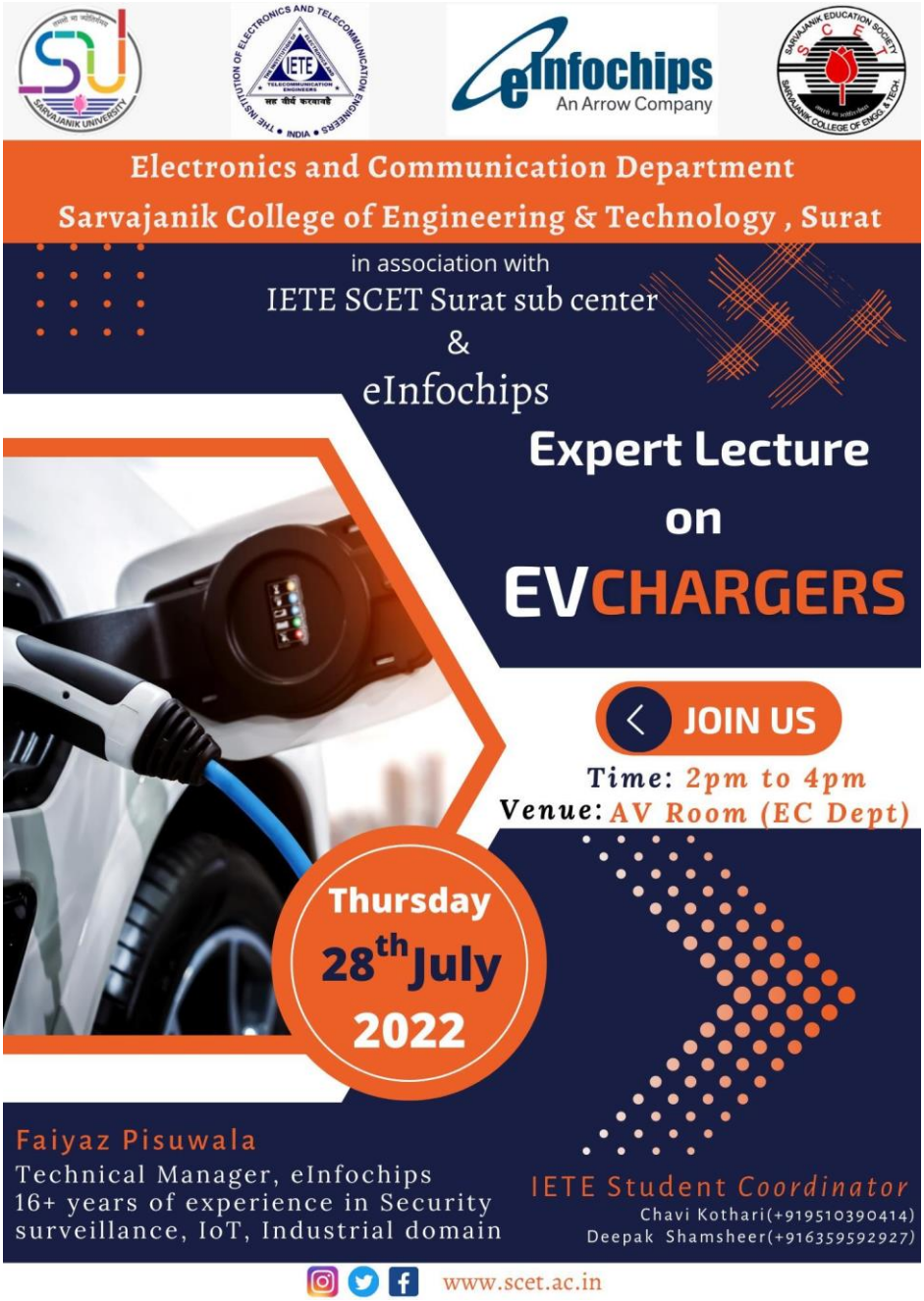
A Report on
EV Chargers

Organized by:
Electronics and Communication Engineering Department, Sarvajanik College of Engineering and Technology, Surat
In association with
IETE Surat sub center andeInfochips, Ahmedabad

Student Coordinator: Chavi Kothari and Deepak Shamsheer
Faculty Coordinator: Prof Sarosh Dastoor
Event Date: 28th July, 2022, **Time:** 2:00 PM to 4:30 PM
Venue: A/V Room, ECC Department, SCET
Participants: Students of BE IV, BE III Electronics and Communication Engineering Department and few from BE IV Electrical Engineering Department



Goal of the Expert Lecture:

Expert talk on EV Chargers was organized in association with IETE SCET Sub Center, eInfochips and as an initiative part of MoU signed between eInfochips and SCET for the purpose of Industrial Internship and Placement. The main objective includes industrial interaction and moulding of the budding technocrats with the industrial standard requirements, so that final Sem internship and placement in the company is fructified. Entire class of BE IV Sem 7, BE III Sem 5 of Electronics and Communication Engineering Department and few students of Electrical Engineering Department also grabbed the opportunity to participate in the session.

About the Industrial Experts:

1) **Mr. Faiyaz Pisuwala:** He is functioning as a Technical Manager at eInfochips with 17+ years of total experience in High Speed/Mixed signal Hardware design and development. He developed multiple products' hardware for industries and domains like Automotive, EV Charging, High Power Electronics, Security and Surveillance, Consumer, Medical, and IoT. He was awarded eI Rocks (once), Core Value Award (Twice) at eInfochips.
2) **Mr. Gaurang Mevada:** He is functioning as a Technical Leader at eInfochips with 13+ years of total experience in Signal Conditioning, Power Supply, Instrumentation Hardware design and development. He has developed various products' hardware for Industrial Automation like Signal Isolators, Signal Transmitters, Data loggers, Power Supplies and for Automotive EV Charger.

About the Expert Session

The session started at 2:00 PM with the welcome address and introduction of the experts, Mr Faiyaz and Mr Gaurang by the student coordinator, Chavi Kothari. Mr Gaurang provided an insight about the significance of EV Chargers. He added, future of smarter, reliable, and emission-free mobility, accessible by everyone, everywhere is the chief motto of EV and EV Chargers. He discussed about the different modes of operation of EV chargers in accordance with the standards of various countries. Both electric vehicles and plug-in hybrid electric vehicles require an EV charger to keep the battery full, just like any chargeable device or electronic. The working of EV charger in association with its complete internal circuit was discussed in the open forum. It was quite interesting to note the working of chargers with different supply voltages and with different power requirements.

Mr. Faiyaz made the environment live and interactive by asking several questions before the audience and motivated the practical dimension of Electronics, studied in the class room sessions. He explained, Every Charger won't necessarily Plug to Every EV, but Adaptors Are Available for it. He also discussed the working of controller, reverse current, protective mechanisms of charging and the action of voltage Divider network for tapping different voltages from the internal circuit.

The session lasted for about two hours, followed by discussion. There was a good interaction between the students and the industrial experts. Faculties present during the session, also interacted regarding the practicality, adaptability and final working of the EC chargers.

Mr Faiyaz Pisuwala was felicitated by HoD of Electronics and Communication Department, Prof Nehal Shah and Mr. Gaurang Mevada was felicitated by Dean Academics, Prof Niteen Patel.

Outcome of the Expert Session

The participants who attended the talk were overwhelmed with the practical approach shown regarding the principal and working of EV Chargers. The feedback included, to have one full day session with hands-on using some tools or design analysis of the EV Chargers. One feedback was to provide industrial training at the eInfochips campus. The expert speakers positively responded that there will be campus recruitment in the end of August 2022. Those student aspirants who will be able to crack the written test and Personal Interview will be provided with the full Eight Sem internship at the eInfochips campus and will also be recruited based on the performance. The students were quite motivated by the experts to work with the core Electronics domain in eInfochips, with two modes of recruitment viz. ASIC (Application Specific Integrated Circuits) and PES (Product Engineering Services). The gesture shown by the experts is highly appreciable. At 4:30 PM, all gathered for high-tea and then experts started their journey back to eInfochips, Ahmedabad.

Few glimpses of the program are shown in the form of snaps below.