

# Industrial Visit to C-DAC

An industrial visit was organised by our ECE department on 19<sup>th</sup> March, 2019, Tuesday. We were taken to C-DAC (centre of development of advanced computing). It is a professionally managed company is an Autonomous Scientific Society of Department of Electronics and Information Technology (DeitY), Ministry of Communications and Information Technology, Government of India..

C-DAC provides several courses in the field of advanced computing and software development. Among these are the hpc (high performance computing) certification course C-DAC Certified HPC Professional Certification Programme (CCHPCP) Around 64 students from our department participated in the industrial visit. We left the college at 1:30 pm and reached the destination by 2:30 pm. Students were guided by Mrs.Divya senior person of the company. They took us to the place where supercomputers (param) were assembled. PARAM is a series of supercomputers designed and assembled by the Centre for Development of Advanced Computing (C-DAC) in bangalore, India. The latest machine in the series is the PARAM ISHAN. Parama means supreme in Sanskrit Language.

The system (super computers) was equipped with air conditions and maintained under 25 to 27 degree celcius for optimized running of the processors.

## Network Infrastructure

Computing node of PARAM are interconnected by a high-bandwidth ,low-latency interconnect network

- InfiniBand: 100Gbps
- Omni-path :100Gbps

Rules by the government of India has set a limit to power consumption to companies, hence it is was very important that these super computers do not consume more power and hence efficient coding and such factors were to be maintained.

In computing, floating point operations per second (FLOPS, flops or flop/s) is a measure of computer performance, useful in fields of scientific computations that require floating-point calculations. For such cases it is a more accurate measure than measuring instructions

per second. The similar term FLOP is often used for *floating-point operation*, for example as a unit of counting floating-point operations carried out by an algorithm or computer hardware.

They delighted us with Tea and biscuits while returning back. All together it was good exposure on supercomputing and supercomputers. We would like to thank our department for giving us this wonderful chance to get to know more about supercomputers.

