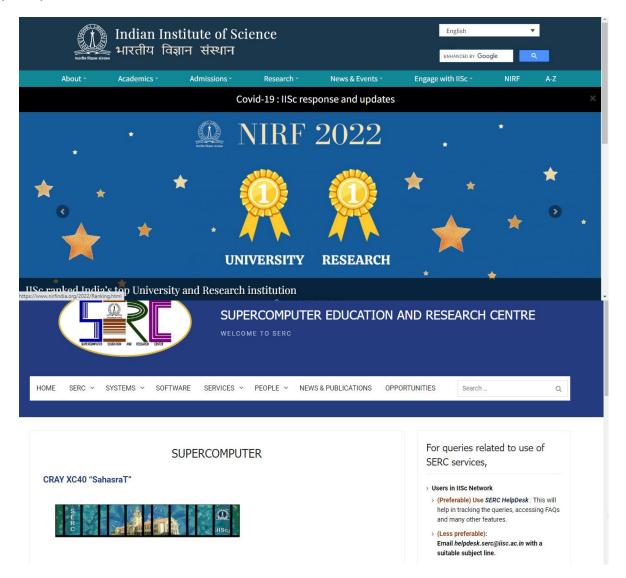# Collaboration with Indian Institute of Science (I.I.Sc.) Bangalore.

The faculty members of the college are collaborating with the country's premier research institutions for the usage of laboratories/computing facilities for their own research projects.

One of the faculty members of our college, V Satya Prakash, Asst Prof of Physics, has collaborated with India's premier research institution IISc, which is **India's No 1** as per **NIRF 2022** rankings. This collaboration is reached in the year 2019-20 to do his research work on **conductivity of electrolyte materials**. As a part of this collaboration, he accessed **Sahasra T Cray XC 40,** country's **first Peta Flops Super Computer,** at Super Computing Education and Research Centre**(SERC), Indian Institute of Science (IISc),** Bangalore. This super computer used by him is the fourth **fastest super computer** in **India** and **it ranks 327**th position in the **world (2019).**

On Wed, 1 Jan 2020 at 15:26, Aditya Krishna Swamy <adityaks@iisc.ac.in> wrote:

Dear Prof. Satyaprakash,

Greetings and best wishes for the new year 2020!

We have activated your account on SahasraT. Please find the instructions to access SERC network and SahasraT attached with this email. Also attached is a template job script.
For all technical support, you may write to supercomputing.serc@iisc.ac.in with a copy to my email address.

Thanks,
Aditya

On Wed, 4 Dec 2019 at 12:51, Aditya Krishna Swamy <adityaks@iisc.ac.in> wrote:

Dear Prof. Satya Prakash,

I'm glad to update you that SERC has approved your proposal subject to the following requirements:
1. Existing software version (6.1) maybe used. If a version update is made in future, we will inform and provide you access to the same.
2. Jobs need to use a minimum of 256 cores on SahasraT CPU.

Kindly let me know if your proposed jobs will be able to meet these requirements. If yes, you may go ahead and send us the signed Agreement form (link below) and DD and we will inform you on how to access our systems.
http://www.serc.iisc.ac.in/serc_web_new/wp-content/uploads/2019/12/UsageAgreementForm-1.pdf

Let me know if you have any questions.

Thanks,
Aditya

On Fri, 8 Nov 2019 at 15:40, Satyaprakash Vpet <satyaprakashvpet@yahoo.in> wrote:

Sir,
   I am very grateful to you for your quick response.
   The following are the details of using Sahasra T Cray XC 40 CPU:
   1) **Quantum Espresso 6.3** version I am using currently.**If installing this version is possible,it is OK.Otherwise Espresso 6.1 is also OK.**
   2)Total core hours required are **15x45x24 =16200 core hours**(15 jobs each of taking 24 cores and 45 hours)
   3)Number of **parallel runs** is **2** and typical **size of each run** is **24 cores per job**
    Thanking you Sir

                                                                    Yours faithfully

                                                                    V Satya Prakash
                                                                    Asst Prof of Physics
                                                                    Tara Govt Degree&PG

College(Autonomous)

                                                                    Sangareddy,Telangana,
                                                                    India-502001.