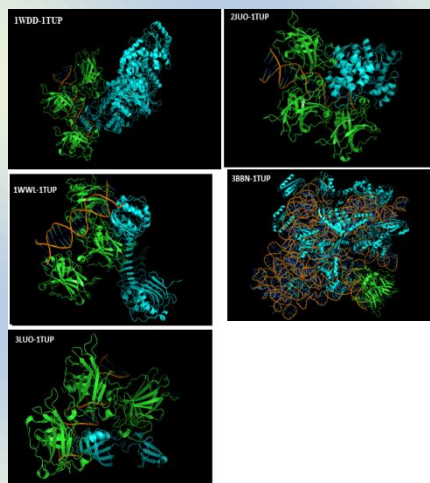
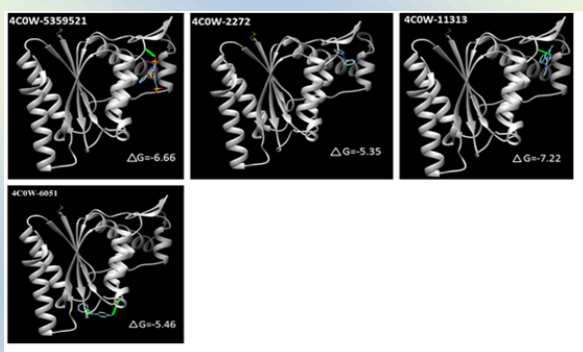


Background: Bioinformatics infrastructure facility at St. Edmund's College, Shillong was sanctioned in the year 2008 and it started functioning since 2009 under BTIS- NET Programme. The facility is located at the Biotechnology department of the college. Till date, the centre has supported 24 undergraduate research projects, 4 Master's degree research projects, 4 M. Tech projects pertaining to the needs of students. Every year large number of applications is received by the centre for research programs. Altogether, the centre has published 3 research papers in peer reviewed journals and 11 poster & oral presentations in different National seminars.



In the year 2013, the centre research paper has been accepted for oral presentations at the 2nd International Work-Conference on Bioinformatics and Biomedical Engineering, Granada, Spain in April 7th – 9th, 2014. Besides research, the centre is actively engaged in activities related to the undergraduate students of biological science of the college and also in motivational programmes for the higher secondary school students in Shillong and also in adjoining rural areas. The centre has organized 2 active Hands on Training workshop for faculty of the colleges, research scholars of the universities and many more, 16 Guest lectures on Bioinformatics & Biotechnology aspects which have been conducted to cater to the needs of undergraduate students. The centre has been a common hub of undergraduate students for E- books, online animations through DBT Portals for effective biology teaching learning process, ICT enabled technology implementation and many other activities related to the needs of undergraduate students.

This centre's facilities are used by the teachers of the colleges and also adjoining institutes for analysis of various bioinformatics software applications for their research work. The centre plays a crucial role in developing SOPs, Lab manuals, E-lectures series, developing student databases etc. for DBT STAR COLLEGE departments, Institutional Biotech Hubs and other sister departments. Presently, the centre is heavily engaged in developing a website and also an online virtual laboratory for the techniques involved in undergraduate teaching. The centre has also been instrumental in developing a Magazine "*Scientia Potentia Est*" for undergraduate students, a journal called *Ed Spectrum* for documenting many research activities of the undergraduate students and also the faculty of the different departments in the college.



Area of Research:

- Protein modeling, Phylogenetic analysis, Molecular Docking, MDS of anticancer compounds from Cyanobacteria, bioactive compounds from cyanobacteria, photosynthetic pigments during stress, antioxidant enzymes, dyes bioremediation, DNA – metal binding interaction.

Infrastructure facilities available in the Centre:

SN	Hardware	Quantity
1.	High end servers - HP Proliant ML350 G6	1
2.	Medium end (HP Proliant ML150 G5)	1
3.	Desktops - Compaq D×2480, Intel Dual Core2 Duo Processor, 2 GB RAM, 120 GB Hard Disk with TFT monitors.	10
4	Desktops – HP pavilion, i5 processor, 4GB RAM, HDD 750 GB with LED monitors.	5
5	Printer – colour – HP laserjet	1
6	Printer – Black – Cannon	1
7	Printer – Black – HP	1
8	Photocopier – Sharp AR5515 model	1
9	Scanner – HP	1
10	Modems	6
11	Fibre optic modems	2
12	Speaker	10
13	Webcam	10
14	Smart board (Spektron, Japan)	1
15	Projector – Sharp	1



SOFTWARES

Windows Server 2003, My SQL, Antivirus, SYSTAT 12 (2 License), Genius pro (1 License) Rasmol, Pymol, ClustalW, Mol Script, Bioedit, Clustal X, Autodock 4.2, Autodock Vina, PATCHDOCK, Amber, Hex 6, Modeller and Chromas.

Facilities

Computers for Web Browsing
Server Facility
Leased Line Internet Connectivity
Printing Facility
Scanning Facility
Photocopying Facility
Workstation Facility
Smart Board Facility
ICT enabled facility
Molecular Docking Facility
Bioinformatics on line tools



Any Queries Kindly Contact

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