

Press release

Empowering Future Scientists: Bioinformatics Training for Bioscience Students

Commemorating 50 Years of Sikkim's Statehood, the **Bioinformatics Centre**, Biotechnology Division, **Sikkim State Council of Science and Technology**, under the **Department of Science and Technology**, has launched a series of *Bioinformatics Education Programmes (BEP)*. The initiative began today, **14th May 2025**, at **Bariakhop Government Senior Secondary School**, Soreng District.

In 2025, **ten prominent bioscience schools** across the state have been selected for this programme. These include:

1. Bariakhop Government Senior Secondary School, Soreng District
2. Hee Gyathang Senior Secondary School, Dzongu, North Sikkim
3. Paljor Namgyal Girls' Senior Secondary School, Gangtok
4. Kewzing Government Senior Secondary School, South Sikkim
5. Tashi Namgyal Academy, Gangtok
6. Singtam Government Senior Secondary School, East Sikkim
7. Mangalbarey Government Senior Secondary School, West Sikkim
8. Holy Cross Senior Secondary School, Gangtok
9. Chujachen Government Senior Secondary School, Pakyong
10. Samdong Government Senior Secondary School, East Sikkim

Bioinformatics is a cutting-edge, interdisciplinary field in biological sciences that integrates **biology, computer science, and mathematics**. It enables *in silico* research—such as drug design and molecular modeling—without the use of experimental animals, making research more ethical and resource-efficient. Given its growing significance in all domains of biological research, the programme aims to cultivate **Bioinformatics awareness and literacy** among bioscience students. Participants are being introduced to the **fundamentals of bioinformatics**, along with **hands-on sessions** on genome database analysis and interpretation. After the computational session, bioscience students engaged enthusiastically in group assignments focused on generating nucleotide file formats and identifying unknown gene sequences using bioinformatics tools.

The students were also briefed about the ongoing research and development activities at the **Bioinformatics Centre, Vigyan Bhawan**, including advanced research projects and internship opportunities. The centre has hosted researchers from prestigious global institutions, including **Ghent University, Belgium**, as part of its international internship program. Today, it stands as one of the **leading Bioinformatics Centres in India**, offering advanced tools, knowledge, and collaborative research opportunities.

The programme is being conducted under the **supervision of Dr. Sandeep Tambe, Principal Secretary and Shri. Dhiren Shrestha, Secretary, Department of Science and Technology**, and is led by **Dr. Laydong Lepcha**, Assistant Scientific Officer, Bioinformatics Centre, Biotechnology Division.

Notably, the *Bioinformatics Education Programme* received the **North East India Award in 2023**, held in Guwahati, Assam, in recognition of its impactful contribution to science research and education in the region.



Bioinformatics Education Programme at Bariakhop Senior Secondary School, Soreng