

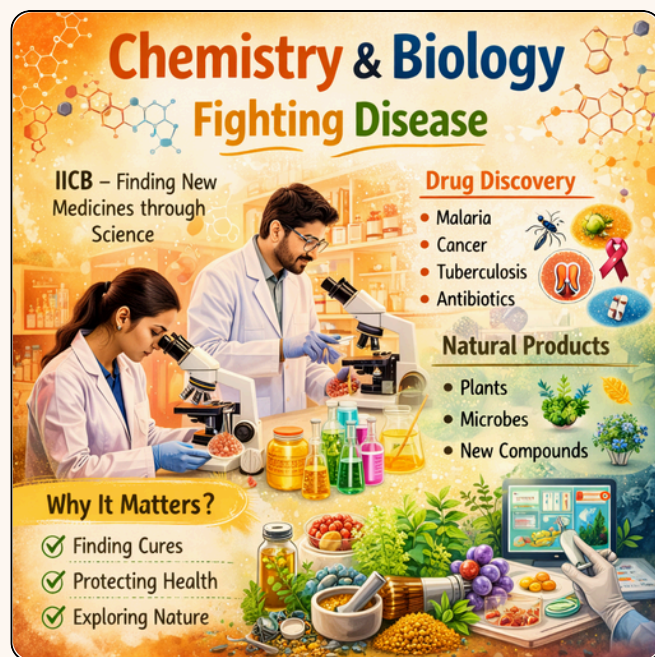
IICB - Indian Institute of Chemical Biology

Have you ever wondered how new medicines are discovered? How do scientists identify chemicals that can fight diseases? Researchers at the **CSIR-Indian Institute of Chemical Biology (IICB)** work on answering these questions by combining **chemistry and biology** to understand diseases and develop new treatments.

Located in **Kolkata**, IICB is a research institute under the **Council of Scientific and Industrial Research (CSIR)**. The institute focuses on studying how **chemical molecules interact with living systems**. This field, known as **chemical biology**, helps scientists discover drugs and understand how diseases affect the human body.

Scientists at IICB study several important diseases, including **malaria, tuberculosis, and cancer**. By understanding how these diseases work at the molecular level, researchers can design chemical compounds that may help stop or slow down these illnesses. Many of the institute's projects focus on **drug discovery**, where scientists test thousands of molecules to find those that can become effective medicines.

IICB also works on **natural product research**, studying chemicals found in plants and microorganisms. Many medicines used today originally came from natural sources, and scientists at IICB continue to explore nature to discover new compounds that could become future drugs.



Activity Idea for Teachers

Teachers can introduce students to the idea of **chemicals in everyday life** through a simple classroom discussion and observation activity. Ask students to list substances they use daily such as soap, medicines, spices, or disinfectants and identify the role of chemicals in each.

Teachers can guide students to discuss questions like:

- How do chemicals help fight germs?
- Why do medicines work inside our bodies?
- Can plants also contain useful chemicals?

This activity helps students understand that **chemistry and biology work together** in many aspects of life. It also shows how institutes like IICB are using science to discover medicines and improve human health.