



Report
On
Three Days Hands-on-Training cum Workshop
On

Techniques in Biotechnology

18-20 April 2024

Jointly organized by

School of Studies in Biotechnology

&

Alumni Association of Biotechnology

in association with

Institute Innovation Council

School of Studies in Biotechnology and Alumni Association of Biotechnology in association with Institute Innovation Council, Pt. Ravishankar Shukla University, Raipur (C.G.) jointly organized a **Three days Hands-on-Training cum Workshop on “Techniques in Biotechnology”** between **18-20 April 2024** in **Seminar Hall, SoS in Biotechnology, Pt. Ravishankar Shukla University, Raipur (C.G.)**.

This program was dedicatedly organized for the UG and PG students and faculties of Mata Karma Girls College, Mahasamund, Seth PC Agrawal College, Nawapara, Rajim, Govt. NPG Science College, Raipur, and Govt. College, Kumhari.

Day 1: 18/04/2024

On **18 April 2024**, the inaugural event addressed by **Prof. Keshav Kant Sahu**, Head, SoS in Biotechnology, Pt. Ravishankar Shukla University, Raipur. He gave an overview of the workshop and Hands-on-training programme to the students and also briefed about the experiments and their protocols that are going to be conducted in training programme. After that, training session started with **quantitative estimation of different biochemicals like carbohydrates and proteins**.

There was a lecture in the next session on **“Optical properties and Spectroscopy of Nanomaterials: An Application for Designing Nanosensors”** by **Dr. Manmohan Lal Satnami**, SoS in Chemistry, Pt. Ravishankar Shukla University, Raipur. **Dr. Nagendra Kumar Chandrawanshi**, SoS in Biotechnology, Pt. Ravishankar Shukla University, welcomed Dr. Manmohan Lal Satnami with a sapling. He inspired the students by his lecture and said that **“not only lecturers or professors have great ideas or novel thoughts about research, anybody can have the ideas.”**

He also told that we should **“avoid fear of doing something new”** by giving an example of J.J. Thompson and his son. He gave a brief idea about the facilities available in the Chemistry department and also gave an overview of his lecture. He started his lecture with UV spectrophotometer, a very important technique, according to him. He discussed about making our own colorimeter at very low cost by using LDR (Light Depended Resistor) and said that every biotechnology student should replicate this instrument. He also said that **“if we have a plan and deep knowledge, we can make anything.”** Prof. Keshav Kant Sahu presented a certificate of gratitude and appreciation to Dr. Manmohan Lal Satnami. The first day of workshop and Hands-on-Training programme concluded with vote of thanks by Dr. Nagendra Kumar Chandrawanshi.

Day 2: 19/04/2024

The training session started with **reagent preparation** and **extraction of DNA** from animal tissue, mushroom and plant samples, followed by separation of proteins of **mungbean, Bovine Serum Albumin (BSA)** and **amylase** by **SDS-PAGE**. At 4 p.m., there was a lecture session on **SDS-PAGE and Electrophoresis** given by **Prof. Keshav Kant Sahu**.

Day 3: 20/04/2024

On **20 April 2024**, the concluding day started with method of **DNA separation** of muscle tissue, plant tissue and mushroom through **electrophoresis, gel documentation** and **its analysis**, followed by **quantitative estimation of the separated DNA, qualitative estimation of RNA through orcinol method**. After that **Polymerase Chain Reaction** was performed and programming of thermal cycler was done. At 3 pm, there was a lecture session on **Polymerase Chain Reaction** by **Ms Poulomi Bera**, Research Scholar of SoS in Biotechnology.

At 4 pm, the participants of the workshop gave feedback regarding their experience during the workshop. After that, certificates were distributed to all the participants of the workshop by the faculties of the department.

Prof. S.K. Jadhav spoke few words on the successful completion of the three days Hands-on- Training cum workshop and then vote of thanks was given by Dr. Nagendra Kumar Chandrawanshi. The workshop was concluded with the group photo of all the faculties and the participants.

[Glimpses of the 3-days Hands-on-Training cum Workshop](#)

