

# NAAC REACCREDITATED 'A -GRADE' SEVADAL MAHILA MAHAVIDYALAYA Sakkardara Square, Umrer Road, Nagpur

### **Report of Workshop on**

'Molecular Biology & Immunology'



Jointly Organized By

# Department of Microbiology And Hi-Media Laboratories Private Limited, Mumbai

Academic Session: 2017-2018

Date of organizing Workshop	18 <sup>th</sup> & 19 <sup>th</sup> December 2017
Name of the Department	Microbiology & Biotechnology, Sevadal
	Mahila Mahavidyalaya, Nagpur
Academic Session	2017-2018
Number of students Participated	66

### Report of Workshop on Molecular Biology, Immunology and PCR

#### Aims and Objective of the Workshop:

To address a growing need to make students well acquainted and comfortable with the tools of molecular biology, it is very important for Microbiology and Biotechnology professionals and students to gain fundamental knowledge of molecular biology and immunological techniques. Therefore to accomplish professional and academic developments of students, Department of Microbiology and Biotechnology, Sevadal Mahila Mahavidyalaya, Nagpur organized two days workshop for hands-on training in Molecular Biology & Immunology in collaboration with Hi-Media Laboratories Private Limited, Mumbai on 18<sup>th</sup> and 19<sup>th</sup> December 2017. The objective of the training programme through organizing workshop is to give exposure to the students to concept, skills and tools of molecular biology and immunological techniques by a technical expert from Hi-Media Laboratories Pvt. Ltd. Mumbai.

#### Glimpses of the Activities undertaken in the Workshop:

Workshop on hands-on training in Molecular Biology & Immunology was offered over a period of two days and was organized so that comprehensive background lectures coupled with extensive hands-on experience were provided to the students and new staff members as well. The workshop was divided into several modules such as techniques such as isolation of genomic and plasmid DNA, restriction digestion of DNA, Agarose gel electrophoresis, Polymerase chain reaction (PCR), single radial immunoelectrophoresis, preparation of different types of buffers used in molecular biology. Each module was taught by an expertise in the area covered in the workshop. Each module began with a lecture that introduced the technique in describing both the uses and applications of that particular technique. The lectures were followed by a laboratory session during which students followed protocols that were carefully designed to learn the objective of the techniques. Throughout these laboratory sessions, students were given an importance of proper technique of handling different apparatus and equipments like micropipettes, cold micro centrifuges, gel electrophoresis units, uv-transilluminator etc, preparation of standard buffer solutions and accuracy in weighing of chemicals and pipetting of solutions.

In these workshop 66 students of B. Sc. SEM V Microbiology and Biotechnology participated and undergone training in the basic techniques of Molecular biology, Immunology and PCR. Hands on training on techniques such as isolation of genomic and plasmid DNA, restriction digestion of DNA, Agarose gel electrophoresis, PCR, single radial Immuno-diffusion electrophoresis, preparation of different types of buffers used in molecular biology were given to the students. Students were provided with the participation certificates after successful completion of the workshop.

Students should be geared up the technically sound knowhow for more avenues in the field of Microbiology and Bio-technology' said Mr. Singh, Marketing Manager, Hi-Media Laboratories, and Mumbai. He was speaking as the Chief Guest at the inaugural function of Two Days Workshop on Molecular Biology, Immunology and PCR (Polymerase Chain Reaction). Further in his address he said that in the era of globalization students should get well equipped with latest knowledge and technical skill in highly sophisticated experiments on Genomic and Plasmid DNA isolation, Restriction and Digestion procedures of bacterial DNA and various critical reactions of antigen and antibodies to diagnose the various known and unknown diseases of humans.

Mr. Swapnil Tank, Product Executive, assisted to the students for technical knowhow of the complexity of reactions occurs in the analysis of DNA and Antigen-Antibody Reactions and Polymerase Chain Reactions of DNA.

Hon'ble Prof. Pravin Charde, Principal, Sevadal Mahila Mahavidyalaya, Nagpur presided over the function, in his presidential address Hon'ble Dr. Pravin Charde, Principal, expressed his happiness over the hands on training and workshop. He particularly reiterated that every student participant take advantage of varieties of experiments which would be very useful in their further higher studies and also to get the jobs in their future life.

Dr. Prabhakar Bhandari, Head Department of Microbiology and Biotechnology, in his welcome address, said that the hands on training and workshop on Molecular Biology and Immunology would be very beneficial for the students for their higher studies. Throughout the workshop students have studied to many experiments which usually only conducted in the hi-tech and innovative established laboratories.

Hon'ble Shri Sanjayji Shende, President, Sevadal Education Society, Nagpur has always encourages to conduct such training and workshop for the benefit of students and his best wishes are always with us.

The workshop was concluded in high note with valedictory function where workshop certificates issued by Multi-National Company with ISO 9001-2008 and internationally recognized by WHO-GMP and CE were distributed to the participant students. These certificates would prove very helpful to the students in securing hiend jobs in the field of Microbiology and Biotechnology.

Mrs. S. R. Nimbarte, Dr. (Mrs.) K. V. Dubey, Ms. Mili Thakkar, Mr. Rahul Bhende, Ms. Kanchan Mohod and non teaching staff of the department of Micro-Biology and Bio-Technology took every hardship for the grand success of the hands on training and workshop.



Hon'ble Prof. Pravin Charde, Principal, Sevadal Mahila Mahavidyalaya, Nagpur being welcomed by the student during the inaugural function of the workshop on Molecular Biology, Immunology & PCR held on 18<sup>th</sup> & 19<sup>th</sup> December 2017



Hon'ble Prof. Pravin Charde, Principal, Sevadal Mahila Mahavidyalaya, Nagpur giving his Presidential address during the inaugural function of the workshop on Molecular Biology, Immunology & PCR



Dr. Prabhakar Bhandari, Head Department of Microbiology and Biotechnology, welcomed the student and introduced the students about the importance of organizing workshop on Molecular Biology, Immunology & PCR



Mr. Swapnil Tank, Technical expert from Hi-Media Laboratories Pvt. Led Mumbai being felicitated by the student.



Mr. Swapnil Tank, Technical expert from Hi-Media Laboratories Pvt. Led Mumbai explaining significance of hands on training to the students .



Mr. Singh, Marketing manager from Hi-Media Laboratories Pvt. Led Mumbai Chief Guest of the workshop on Molecular Biology, Immunology and PCR giving Certificate to the student after successful completion of the workshop



Certificate Distribution Ceremony at the hands of Hon'ble Principal, and Faculty members after successful completion of the workshop on Molecular Biology, Immunology & PCR organized by Department of Microbiology, Sevadal Mahila Mahavidyalaya, and Nagpur.



Press Note of the workshop on Molecular Biology, Immunology & PCR organized by Department of Microbiology, Sevadal Mahila Mahavidyalaya, Nagpur was published in The Hitavada City Line News daily.