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The polymerase chain reaction is a process of increasing or enlarging extremely small amounts of DNA so that they can be seen or can be used in various scientific processes. PCR is generally used in various branches of biology, food science, and forensic science, environmental science and many more. There are several techniques used in medical and biological research, which includes diagnosis of hereditary diseases, identification of fingerprints, and to detect infectious diseases.

DNA forensics relies heavily on PCR. PCR is considered as one of the most suitable DNA testing methods. This is basically used to classify the DNA of a person by using extremely small samples. How is this possible? This is possible because the device will increase the size of DNA that will somehow be visible to the eyes of the person performing the tests. This process is perfect for legal investigations and crimes. This is because there are fewer samples and other techniques would not be able to detect DNA other than this technique. There are several cases of crimes that are solved using the process of polymerase chain reaction.

There are instruments and machines that are being used in the entire process of increasing small amounts of DNA so that they can be visible. These machines can be of various types and they vary according to their usage. They perform different types of functions. For instance, instruments like Gas chromatography (GC) is used to split and examine compounds that can be vaporized without decomposing.

This machine contains several components such as carrier gas line, gas flow controller, column, detector and data interface. Apart from these, there are machines such as thermal cycler that is used in to increase the size of the segments of DNA. You might have noticed that there are impurities and elements in air that can be disastrous to the samples on which different types of experiments are being performed. So it becomes impossible to remove impurities, so this is where laminar flow is used, as these enclosures prevent the samples from coming in touch with the impurities that are found inside the laboratory.

PCR lab equipments are one of the needed machines that are mandatory for any laboratory, as it is important to maintain the veracity and safety of the laboratory in which the scientists are working for. And moreover, it is important to understand the importance of such equipments; as if these are not present the scientists wonâ€™t be able to get the desired results.

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Rodsi Bhatia is a great author. She writes article for Laboratory and Educational Science Instruments. You can also find information about cooling equipments, PCR Equipment, a Laminar airflow and a Clean Work Station.

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