Since antiquity, fabrics have been dyed with extracts from minerals, plants, and animals. In fact, dyeing historically was a secretive art form; the most beautiful and exotic pigments reserved were for those who had the status to wear them. In the dye industry in 2008, much, but not all has changed, and not even where you might expect it to. In Japan, dye workers are at higher risk of tumors. And in the United States, deaths amongst factory workers from several cancers, cerebrovascular disease, and lung disease are significantly higher – 40 times higher, for some diseases – than in the general population. Almost every industrial dye process involves a solution of a dye in water, in which the fabrics are dipped or washed. After dying a batch of fabric, it's cheaper to dump the used water – dye effluent – than to clean and re-use the water in the factory. So dye factories across the world are dumping millions of tons of dye effluent into rivers. However, research is emerging that examines the short and long term effects of potential skin absorption of dye and finishing chemicals through clothing. Responsible dye manufactures are investigating ways to treat their dye effluent with organic materials and bacteria, rather than chemical treatments, and improve dye manufacture and processing to minimize hazardous chemicals used. Toxic chemicals from dyes also create severe environmental havoc in form of air, water & soil pollution. Large amounts of water are used to flush conventional synthetic dyes from garments and then this waste water must be treated to remove the heavy metals and other toxic chemicals before it can be returned to water systems, sewers and rivers. The interest in natural dyes is growing and these dyes are being perceived to provide an environment-friendly dyed fabrics and garments. The natural dyes developed naturally and can be used for dyeing all types of natural fibers such as cotton, wool, silk, bamboo, hemp etc. the cotton fibers are dyed with different natural dyes to get these seven basic shades, such as blue, magenta, brown, yellow, linen and dark grey.

Biography

Chetan Prajapati completed diploma engineering in Electronics from Gujarat & works as a Sr. Electrical Engineer in Ascent Yarn Pvt. Ltd who was also involved in the manufacturing of fabric before and also he worked at Bharat Vijay Mill which is textile division of Sintex Industries Ltd.

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