

## Colour Recognition Pen Technology in Dental Technique and Dental Laboratories

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**Abstract :** Recognition of the color spectrum of the teeth plays a significant role in the dental laboratories to produce dentures. Since there are various types and colours of teeth for each patient, there is a need to specify the exact and the most suitable colour to produce a denture. Usually, dentists utilize pallets to identify the color that suits a patient based on the color of the adjacent teeth. Consistent with this, there can be human errors by dentists to recognize the optimum colour for the patient, and it can be annoying for the patient. According to the statistics, there are some claims from the patients that they are not satisfied by the colour of their dentures after the installation of the denture in their mouths. This problem emanates from the lack of sufficient accuracy during the colour recognition process of denture production. The colour recognition pen (CRP) is a technology to distinguish the colour spectrum of the intended teeth with the highest accuracy. CRP is equipped with a sensor that is capable to read and analyse a wide range of spectrums. It is also connected to a database that contains all the spectrum ranges, which exist in the market. The database is editable and updatable based on market requirements. Another advantage of this invention can be mentioned as saving time for the patients since there is no need to redo the denture production in case of failure on the first try.

**Keywords :** colour recognition pen, colour spectrum, dental laboratory, denture

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