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Optical absorption spectroscopy of dry erase marker ink

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Optical absorption spectroscopy is a vital tool to understand the color and their optical properties of various organic molecules. The present work is to investigate the optical absorption spectroscopy of dry erase markers ink used for writing on whiteboards and glass surfaces. The various color inks are marked on a transparent microscope glass slide. The absorption spectrum from 200 nm to 1100 nm is recorded using ocean optics HR 2000+ spectrometer. The UV-VIS-NIR deuterium-tungsten-halogen light source was used as a light source for the measurement of absorption spectrum. The spectra were collected using ocean optics SpectraSuite software. The distinct features in the absorption peaks correspond to specific features of the dye molecules present in the ink. The absorption spectrum of various color was compared and analyzed. This technique has application in forensics where ink of various sources can be identified.

Biography

Prakash C. Sharma has completed his Ph.D. from one of the leading Asian Centers of Advanced Physics, Banaras University, India and postdoctoral studies from Sweden. He is currently working as Professor and Head, Physics, College of Arts & Sciences. He has more than 75 peer reviewed publications.

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