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4.	Area of Technology (e.g. materials, health care, etc.): Materials
5.	Web link, if any:
6.	Description in 500 words: Multi-walled and Single-walled carbon nanotubes (MW & SWCNTs) were grown by using Natural precursor , agricultural waste, plant seeds, plant oils and ethanol can be used as a precursor by using chemical vapor deposition (ECVD) and growth parameters were optimized using the Taguchi optimization technique. Optimized parameters such as catalyst, precursor , temperature and carrier gas are found to be better for the qualitative and quantitative synthesis of CNTs . Morphological differences between MW and SWCNTs grown with different parameters are studied and discussed by atomic force microscope (AFM), Scanning electron microscope (SEM) Tunneling electron microscope (TEM), Raman spectra, TGA, XRD and FTIR characterization. The CNTs obtained by this method can be used for the applications study like Hydrogen adsorption/desorption ,Super capacitor, Li ion battery, n-type p-type semiconductor, solar cell and drug delivery etc
7.	Keywords: <i>Multi-walled, Single-walled carbon nanotubes, Taguchi optimization technique, Atomic Force Microscope, Natural sources oil seeds, agricultural waste, CNT Growth, Chemical vapor deposition techniques, Hydrogen adsorption/Desorption</i>