SEM OF As-SYNTHESIZED NANO-CARBON USING DIFFERENT CATALYST (P207)

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Many methods have been developed for synthesizing carbon nanotubes (CNTs) since it was first discovered by Iijima in 1991. Arc discharge and chemical vapour deposition (CVD) are two of the many methods employed worldwide to synthesis CNTs rather than laser ablation method because of cost consideration. A modified arc discharge and low-cost simplified CVD methods have been developed in this work for the production of CNTs. For the arc discharge system, liquid nitrogen was used as a quenching medium replacing the complicated gas and cooling system, which are normally used in conventional method. In the CVD method, series of supported catalyst were studied. The effects of the catalyst applied in both developed methods on the growth of CNTs have been observed via scanning electron microscope (SEM).