287n Effects of Preparation Condition on Morphology of Fine Nickel Particle

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Fine nickel particle in the order of 0.1 micron m in size has been prepared by wet chemical reduction of nickel sulfate with sodium hydroxide and hydrazine. The preparation was carried out under stirring and static conditions at a constant temperature, Nickel particles of 0.3-1.0 micron m in size were obtained by changing the concentration of nickel sulfate, sodium hydroxide and hydrazine with the stirring method. SEM photos showed that these particles were agglomerate and composed of primary nickel particles smaller than 0.05micron m. The static method, by which nickel hydroxide was generated from nickel sulfate, was promptly reduced by hydrazine, and successfully produced nickel particles of 0.1 micron m with a sharp size distribution.