Microstructure of FePt produced by cluster beam deposition (CBD)

by Mr Tan Chian Yang

Date: 9 March (Thursday)
Time: 12:30pm to 13:00 pm
Venue: LT 3

Abstract

FePt nanoparticle is a highly potential candidate for ultrahigh density magnetic recording material due to its high magnetocrystalline anisotropy ($K_u$). Cluster beam deposition offers fabrication of small and uniform FePt nanoparticles. The structures of the FePt nanoparticles were examined by various methods using transmission electron microscope (TEM). The microstructure is affected by thermodynamics and kinetics. The growing condition such as temperature, supersaturation, cooling rate and the growth mechanism/kinetics will determine the final structure.

Mr Tan Chian Yang graduated from School of Materials Engineering (Currently School of Materials Science and Engineering), Nanyang Technological University, in 2002. In 2003, he started his postgraduate study (master) on magnetic recording media in the Department of Material Science, NUS and attached in Data storage Institute under the supervision of Prof. Chow Gan Moog and Dr. Chen Jingsheng. Currently, he is working in Seagate Recording Media Operation plant.

Dr Xue Jun Min Host

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