บรรณานุกรม

บรรณานุกรม

[1] วิกิพีเดีย. (ม.ป.ป.). **นาโนเทคโนโลยี.** สืบค้นเมื่อ 12 กุมภาพันธ์ 2552, จาก http://th.wikipedia.org/wiki

[2] Pankhurst, Q. A., Connolly, J., Jones, S. K. and Dobson, J. (2003). Applications of magnetic nanoparticles in biomedicine. **J. Phys. D: Appl. Phys.**, 36, 167-174.

[3] Hatch, G. P. and Stelter, R. E. (2001). Design considerations for devices and particles used for biological high-gradient magnetic separation (HGMS) systems. **J. Magn. Magn. Mater.**, 225, 262-276.

[4] Harris, L. A., Goff, J. D., Carmichael, A. Y., Riffle, J. S., Harburn, J. J., St. Pierre, T. G. and Saunders, M. (2003). Magnetite nanoparticle dispersions stabilized with triblock copolymers. **Chem. Mater.**, 15, 1367-1377.

[5] Goetze, T., Gansau, C., Buske, N., Roeder, M., Gornert, P. and Bahr, M. (2002). Biocompatible magnetic core/shell nanoparticles. **J. Magn. Magn. Mater.**, 252, 399-402.

[6] Jun, Y. W., Huh, Y. M., Choi, J. S., Lee, J. H., Huh, Y. M., Jun, Y. W., Seo, J. W., Jang, J. T. and Song, H. T. (2005). Nanoscale size effect of magnetic nanocrystals and their utilization for cancer diagnosis via magnetic resonance imaging. **J. Am. Chem. Soc.**, 127, 5732-5739.

[7] Hong, J., Xu, D. and Yu, J. (2007). Chemical vapour deposition of single walled carbon nanotubes freely suspended over nanotube supports. **Nanotechnol.**, 18, 135608-135614.

[8] Pardoe, H., Chua-anusorn, W., St Pierre, T. G. and Dobson, Jon. (2001). Structural and magnetic properties of nanoscale iron oxide particles synthesized in the presence of dextran or polyvinyl alcohol. **J. Magn. Magn. Mater.**, 225, 41-45.

[9] Mohapatra, S., Mallick, S. K., Maiti, T. K. and Pramanik, P. (2007). Synthesis of highly stable folic acid conjugated magnetite nanoparticles for targeting cancer cells. **Nanotechnol.**, 18, 385102-385109.

[10] Zhang, J. L., Srivastava, R. S. and Misra, R. D. (2007). Core-shell magnetite nanoparticles surface encapsulated with smart stimuli-responsive polymer : Synthesis, characterization, and LCST of viable drug-targeting delivery system. **Langmuir**, 23, 6342-6347.

[11] Rosensweig, R. E. (2002). Heating magnetic fluid with alternating magnetic field. **J. Magn. Magn. Mater.**, 252, 370-378.

[12] Issels, R. D. (2008). Hyperthermia adds to chemotherapy. **Eur. J. Cancer**, 44, 2546-2554.

[13] Schwertmann, U. and Cornell, R. M. (2000). **Iron Oxides in the laboratory : Preparation and Characterization** (2nd ed.). Weinheim: Wiley-VCH.

[14] วิกิพีเดีย. (ม.ป.ป.). **lodestone.** สืบค้นเมื่อ 20 กุมภาพันธ์ 2552, จาก http://en.wikipedia.org/wiki/lodestone

[15] วิกิพีเดีย. (ม.ป.ป.). **magnetite.** สืบค้นเมื่อ 24 กุมภาพันธ์ 2552, จาก http://en.wikipedia.org/wiki/magnetite

[16] Liong, S. (2005). **A multifunctional approach to development, fabrication, and characterization of Fe_3O_4 composites.** Georgia: School of Materials Science and Engineering.

[17] Smit, J. and Wijn, H. P. J. (1959). **Ferrites**. Eindhoven: John Wiley and Sons.

[18] Cullity, B. D. (1972). **Introduction to magnetic materials**. USA and Canada: Addison-Wesley.

[19] ณัฐพันธุ์ ศุภกา. (ม.ป.ป.). **สมบัติทางแม่เหล็ก**. สืบค้นเมื่อ 2 มีนาคม 2552, จาก http://www.vcharkarn.com/varticle/324

[20] Rutnakornpituk, M. (2008). **Magnetism and magnetic materials**. Phitsanulok: Naresuan University.

[21] Institute for Rock Magnetism. (n.d.). **Hysteresis.** Retrieved March 2, 2009, from http://www.irm.umn.edu/hg2m/hg2m_b/hg2m_b.html

[22] Matijevic, E. and Sapieszko, R. S. (2000). **Forced hydrolysis in homogeneous solutions.** New York: Marcel Dekker.

[23] Tartaj, P. M., Morales, D. P., Veintemillas-Verdaguer, S., Gonzalez-Carreno, T. and Serna, C. J. (2003). The preparation of magnetic nanoparticles for applications in Biomedicine. **J. Phys. D: Appl. Phys.**, 36, 182-197.

[24] Massart, R. (1981). Preparation of aqueous magnetic liquids in alkaline and acidic Media. **IEEE Trans. on Magnetics**, 17, 1247-1248.

[25] Kang, Y. S., Risbud, S. J., Rabolt, F. and Stroeve, P. (1996). Synthesis and characterization of nanometer-size Fe_3O_4 and γ—Fe_2O_3 particles. **Chem. Mater.**, 8, 2209-2211.

[26] Gee, S. H., Hong, Y. K., Erickson, D. W., Park, M. H. and Sur, J. C. (2003). Synthesis and aging effect of spherical magnetite (Fe_3O_4) nanoparticles for biosensor applications. **J. Appl. Phys.**, 93, 7560-7562.

[27] Lee, Y., Lee, J., Bae, C. J., Park, J. G., Noh, H. J., Park, J. H. and Hyeon, T. (2005). Large-scale synthesis of uniform and crystalline magnetiten using reverse micelles as nanoreactors under reflux conditions. **Adv. Func. Mater.**, 15, 503-509.

[28] Liu, Z. L., Wang, X., Yao, K. L., Du, G. H., Lu, Q. H., Ding, Z. H., et al. (2004). Synthesis of magnetite nanoparticles in W/O microemulsion. **J. Mater. Sci.**, 39, 2633-2636.

[29] Mikhaylova, M., Kim, D., Bobrysheva, K., Osmolowsky, N. M., Semenov, V., Tsakalakos, T., et al. (2004). Superparamagnetism of magnetite nanoparticles : Dependence on surface modification. **Langmuir**, 20, 2472-2477.

[30] Park, J. N., An, K., Hwang, Y., Park, J. G., Noh, H. J., Kim, J. Y., et al. (2004). Ultra-large-scale syntheses of monodisperse nanocrystals. **Nat. Mater.**, 3, 381-385.

[31] Sun, S. and Zeng, H. (2002). Size-controlled synthesis of magnetite nanoparticles. **J. Am. Chem. Soc.**, 124, 8204-8205.

[32] Woodward, R. C., Harris, J., St. Pierre, T. G., Saunders, M., Gilbert, E. P., Rutnakornpituk, M., et al. (2007). A comparison of method for the measurement of the particle-size distribution of magnetic nanoparticles. **J. Appl. Cryst.**, 40, 495-500.

[33] Cha, H. G., Kim, Y. H., Kim, C. W. and Kang, Y. S. (2007). Preparation of aqueous dispersion of colloidal α-Fe nanoparticle by phase transfer. **Chem. Mater.**, 126, 221-225.

[34] Zeng, H., Rice, P. M., Wang, S. X. and Sen, S. (2004). Shape-controlled synthesis and shape-induced texture of $MnFe_2O_4$ nanoparticles. **J. Am. Chem. Soc.**, 126, 11458-11459.

[35] Ozaki, M. (2000). **Formation of Magnetic Particles," in Fine Particles, T. Sugimoto.** New York: Marcel Dekker.

[36] Jolivet, J. P., Chaneac, C., Tronc, E. (2004). Iron oxide chemistry from molecular clusters to extended solid networks. **Chem. Commun.**, 5, 481-485.

[37] Kim, D. K., Mikhaylova, M., Zhang, Y. and Muhammed, M. (2003). Protective coating of superparamagnetic iron oxide nanoparticles. **Chem. Mater.**, 15, 1617-1627.

[38] Morales, M. P., Veintemillas-Verdaguer, S., Montero, M., Serna, C. J., Roig, A., Casas, L., Martınez, B. and Sadiumenge, F. (1999). Surface and internal spin canting in γ-Fe_2O_3 nanoparticles. **Chem. Mater.**, 11, 3058-3063.

[39] Schwarzer, H. C., Peukert, W. (2004). Ailoring particle size through nanoparticle precipitation. **Chem. Eng. Commun.**, 191, 580-584.

[40] Babes, L., Denizot, B.,Tanguy, G., Jeune, J. J., Jallet, P. (2009). Synthesis of iron oxide nanoparticles used as MRI Contrast Agents : A parametric study. **J. Colloid Interface Sci.**, 212, 474-480.

[41] Hamley, I. W. (2000). **Introduction to soft matter**. West Sussex: John Wiley and Sons.

[42] Pileni, M. P. (1993). Reverse micelles as microreactors. **J. Phys. Chem.**, 97, 6961-6973.

[43] Vidal-Vidal, J., Rivas, J. and Lopez-Quintela, M. A. (2006). Synthesis of monodisperse maghemite nanoparticles by the microemulsion method. **Colloids Surf., A**, 288, 44-49.

[44] Lopez-Perez, J. A., Lopez-Quintela, M. A., Mira, J., Rivas, J. and Charles, S. W. (1997). Advances in the preparation of magnetic nanoparticles by the microemulsion method. **J. Phys. Chem. B,** 101, 8045-8049.

[45] Hong, C. Y., Jang, I. J., Horng, H. E., Hsu, C. J., Dao, Y. D. and Yang, H. C. (1997). Ordered structures in Fe_3O_4 kerosene-based ferrofluids. **J. Appl. Phys.**, 81, 4275-4277.

[46] Sun, S. and Zeng, H. (2002). Size-controlled synthesis of magnetite nanoparticles. **J. Am. Chem. Soc.**, 124, 8204-8205.

[47] Tamura, H. and Matijevic, E. (1982). Precipitation of cobalt ferrites. **J. Colloid Interface Sci.**, 90, 100-109.

[48] Sato, S., Murakata, T., Yanagi, H., Miyasaka, F. and Iwaya, S. (1994). Hydrothermal synthesis and characterization of $La_2M_2O_7$ (M= Ti, Zr) powders. **J. Mater. Sci.**, 29, 5657-5661.

[49] Woo, K., Hong, J. and Ahn, J. P. (2005). Synthesis and surface modification of hydrophobic magnetite to processible magnetite silica-propylamine. **J. Magn. Magn. Mater.**, 293, 177-181.

[50] Sun, S., Zeng, H., Robinson, D. B., Raoux, S., Rice, P. M., Wang, S. X. and Li, G. (2004). Monodisperse MFe_2O_4 (M = Fe, Co, Mn) Nanoparticles. **J. Am. Chem. Soc.**, 126, 273-278.

[51] Gubin, S. P., Koksharov, Y. A., Khomutov, G. B. and Yurkov, G. Y. (2005). Magnetic nanoparticles : Preparation, structure and properties. **Russ. Chem. Rev.**, 74, 489-520.

[52] Jana, N. R., Chen, Y. and Peng, X. (2004). Size and shape-controlled magnetic (Cr, Mn, Fe, Co, Ni) oxide nanocrystals via a simple and general approach. **Chem. Mater.**, 16, 3931-3935.

[53] Park, J., An, K., Hwang, Y., Park, J. G., Noh, H. J., Kim, J. Y., Park, J. H., Hwang, N. M. and Hyeron, J. H. (2008). Magnetic iron oxide nanoparticles. **Nat. Mater.**, 108, 2103-2106.

[54] Li, Z., Choi, C. J., You, J. H., Kim, B. and Zhang, Z. D. (2004). Nanocrystalline α-Fe and ε-Fe_3N particles prepared by chemical vapor condensation process. **J. Magn. Magn. Mater.**, 283, 8-12.

[55] Li, Z., Chen, H., Bao, H. B. and Gao, M. Y. (2004). One-pot reaction to synthesize water-soluble magnetite nanocrystals. **Chem. Mater.**, 16, 1391-1394.

[56] Li, Z., Sun, Q. and Gao, M. Y. (2004). Preparation of water-soluble magnetite nanocrystals from hydrated ferric salts in 2-pyrrolidone : Mechanism leading to Fe_3O_4. **Angew. Chem.**, 44, 123-127.

[57] Wan, J., Cai, W., Feng, J., Meng, X. and Liu, E. (2007). Structural organization of poly(vinyl alcohol) hydrogels obtained by freezing and thawing techniques : A SANS study. **J. Mater. Chem.**, 17, 1188-1193.

[58] Hu, F., Wei, Li., Zhou, Z., Ran, Y., Li, Z. and Gao, M. Y. (2006). Preparation of biocompatible magnetite nanocrystals for In vivo magnetic resonance detection of cancer. **Adv. Mater.**, 18, 2553–2556.

[59] Li, Z., Wei, L., Gao, M. Y. and Lei, H. (2005). One-pot reaction to synthesize biocompatible magnetite nanoparticles. **Adv. Mater.**, 17, 1001–1005.

[60] Jun, Y. W., Huh, Y. M., Choi, J. S., Lee, J. H., Song, H. T., Kim, S., et al. (2005). Nanoscale size effect of magnetic nanocrystals and their utilization for cancer diagnosis via magnetic resonance imaging. **J. Am. Chem. Soc.**, 127 (16), 5732-5737.

[61] Simeonidisa, K. S., Mourdikoudisa, M., Moullab, I., Tsiaoussisa, C., Martinez-Boubetaa, M., Angelakerisa, C., et al. (2007). Controlled synthesis and phase characterization of Fe-based nanoparticles obtained by thermal decomposition. **J. Magn. Magn. Mater.**, 316, e1-e4.

[62] Kyoungja, W., Jangwon, H., Sungmoon, C., Hae-Weon, L. A., Jae-Pyoung, S., Chul, K., et al. (2004). Easy synthesis and magnetic properties of iron oxide nanoparticles. **Chem. Mater.**, 16, 2814-2818.

[63] Jin, X., Chenjie, X., Zhichuan, X., Yanglong, H. L., Kaylie, Y., Wang, S. X., Pourmand, N., et al. (2006). Linking hydrophilic macromolecules to monodisperse magnetite (Fe_3O_4) nanoparticles via trichloro-s-triazine. **Chem. Mater.**, 18, 5401-5403.

[64] Pei, W., Kumadaa, H., Natusmea, T., Saitoa, H. and Shio, S. I. (2007). Study on magnetite nanoparticles synthesized by chemical method. **J. Magn. Magn. Mater.**, 310, 2375-2377.

[65] Wikipedia. (n.d.). **Atom Transfer Radical Polymerization.** Retrieved March 3, 2009, from http://www.chem.cmu.edu/.../maty/about/research/01

[66] Marutani, E., Yamamoto, S., Ninjbadgar, T., Tsujii, Y., Fukuda, T. and Takeshi, M. T. (2004). Surface-initiated atom transfer radical polymerization of methyl methacrylate on magnetite nanoparticles. **Polymer**, 45, 2231-2237.

[67] Zhou, Y., Wang, S., Ding, B. and Yang, Z. (2007). Modification of magnetite nanoparticles via surface-initiated atom transfer radical polymerization (ATRP). **Chem. Eng. J.**, 138, 578-585.

[68] Fan, Q. L., Neoh, K. G. and Kang, E. T. (2007). Solvent-free atom transfer radical polymerization for the preparation of poly(poly(ethyleneglycol) monomethacrylate)-grafted Fe_3O_4 nanoparticles : Synthesis, characterization and cellular uptake. **Biomaterial**, 28, 5426-5433.

[69] Tzitzios, V. K., Petridis, D., Zafiropoulou, I., Hadjipanayis, G. and Niarchos, D. (2005). Synthesis and characterization of $L1_0$ FePt nanoparticles from Pt–Fe_3O_4 core-shell nanoparticles. **J. Magn. Magn. Mater.**, 294, e95-e99.

[70] Je´ze´quel, D., Guenot, J., Jouini, N. and Fie´vet, F. (1995). Submicrometer zinc oxide particles : Elaboration in polyol medium and morphological characteristics. **J. Mater. Res.**, 10, 77-82.

[71] Fie´vet, F., Lagier, J. P., Blin, B., Beaudoin, B. and Figlarz, M. (1989). Homogeneous and heterogeneous nucleations in the polyol process for the preparation of micron and submicron size metal particles. **Solid State Ionics**, 32-33,198-205.

[72] Pileni, M. P. (1993). Feature article reverse micellesas microreactor. **J. Phys. Chem.**, 97, 6961-6973.

[73] Wei, C. and Jiaqi, W. (2007). Facile synthesis of superparamagnetic magnetite nanoparticles in liquid polyols. **J. colloid and interface.**, 305, 366–370.

[74] Sra, A. K., Ewers, T. D. and Schaak, R. E. (2005). Direct solution synthesis of intermetallic AuCu and $AuCu_3$ nanocrystals and nanowire networks. **Chem. Mater.**, 17, 758-762.

[75] Joseyphus, R. J., Kodama, D., Matsumoto, T., Sato, Y., Jeyadevan, B. and Tohji, K. (2007). Role of polyol in the synthesis of Fe particles. **J. Magn. Magn. Mater.**, 310, 2393-2396.

[76] Merikhi, J., Jungk, H. O. and Feldmann, C. (2000). Sub-micrometer $CoAl_2O_4$ pigment particles synthesis and preparation of coatings. **J. Mater. Chem.**, 10, 1311-1314.

[77] Derjaguin, B. V. and Landau, L. (1941). Acta Physicochim. **URSS**, 14, 633-636.

[78] Vincent, B., Edwards, J., Emment, S. and Jones, A. (1986). Depletion flocculation in dispersions of sterically-stabilised particles ("soft spheres"). **Colloids Surf.**, 18, 261-265.

[79] **Ferrofluid**. (n.d.). Retrieved March 3, 2009, from http://www.eng.yale.edu/.../Ferrofluid_background

[80] Napper, D. H. (1970). Flocculation studies of sterically stabilized dispersions. **J. Colloid Interface Sci.**, 32, 106-110.

[81] Fritz, G., Schadler, V., Willenbacher, N. and Wagner, N. (2002). Electrosteric stabilization of colloidal dispersions. **Langmuir**, 18, 6381-6387.

[82] Ortega-Vinusea, J. L., Martin-Rodrigez, A. and Hidalgo-Alvarez, R. (1996). Colloidal stability of polymer colloids with different interfacial properties : Mechanisms. **J. Colloid Interface Sci.**, 184, 259-262.

[83] Kobayashi, M., Skarba, M., Galletto, P., Cakara, D. and Borbovec, M. (2005). Effects of heat treatment on the aggregation and charging of Stöber-type silica. **J. Colloid Interface Sci.**, 292, 139-144.

[84] Yu, W., Zhang, T., Zhang, J., Qiao, Xiaojing., Yang, Li. and Liu, Y. (2004). The synthesis of octahedral nanoparticles of magnetite. **Mater. Lett.**, 60, 2998-3001.

[85] Sahoo, Y., Pizem, H., Fried, T., Golodnitsky, D., Burstein, L., Sukenik, C. N., et al. (2001). Alkyl phosphonate/phosphate coating on magnetite nanoparticles: A comparison with fatty acids. **Langmuir**, 17, 7907-7915.

[86] Sahoo, Y., Goodarzi, A., Swihart, M. T., Ohulchanskyy, T. Y., Kaur, N., Furlani, E. P. and Prasad, P. N. (2005). Aqueous ferrofluid of magnetite nanoparticles : Fluorescence labeling and magnetophoretic control. **J. Phys. Chem. B**, 109, 3879-3884.

[87] Wagner, S., Schnorr, J., Pilgrimm, H., Hamm, B. and Taupitz, M. (2002). In vitro characterization of two different ultrasmall iron oxide particles for magnetic resonance cell tracking. **Invest. Radiol.**, 37, 482-488.

[88] Taupitz, M., Wagner, S., Schnorr, J., Kravec, I., Pilgrimm, H., Bergmann-Fritsch, H., et al. (2004). Comparison of the iron oxide-based blood-pool contrast medium VSOP-C184 with gadopentetate dimeglumine for first-pass magnetic resonance angiography of the aorta and aenal arteries in pigs. **Invest. Radiol.**, 39, 546-553.

[89] Bee, A., Massart, R. and Neveu, S. (1995). Synthesis of very fine maghemite particles. **J. Magn. Magn. Mater.**, 149, 6-10.

[90] Krishnamurti, G. S. R. and Huang, P. M. (1991). The influence of citrate on the Kinetics of Fe (II) oxidation and the formation of iron oxyhydroxides. **Clays Clay Miner**, 39, 28-34.

[91] Huang, P. M. and Wang, M. K. (1997). **In advances in Geoecology.** Canada: Ottawa International Development Centre.

[92] Liu, C. and Huang, P. M. (1995). Influ-ence of citric acid on the hydrolytic reactions of aluminum. **Soil Sci. Soc. Am. J.**, 63, 65-68.

[93] L, Y., Paris, C., Serfaty, J. M., Weinmann, P., Lecouvey, M. and Motte, L. (2008). Bis-phosphonates–ultra small superparamagnetic iron oxide nanoparticles : A platform towards diagnosis and therapy. **Chem. Commun.**, 10, 2553-2555.

[94] Massart, R., Roger, J. and Cabuil, V. (1994). New trends in chemistry of magnetic colloids : Polar and non polar magnetic fluids, emulsions, capsules and vesicles. **Braz. J. Phys.**, 25, 133-141.

[95] Yee, C., Kataby, G., Ulman, G., Prozorov, T., White, H., King, A., et al. (1999). Self-assembled monolayers of alkanesulfonic and -phosphonic acids on amorphous iron oxide nanoparticles. **Langmuir**, 15, 7111-7114.

[96] Horak, D., Babic, M., Mackova, H. and Benes, M. J. (2007). Preparation and properties of magnetic nano and microsized particles for biological and environmental separations. **J. Separate Sci.**, 30, 1751–1772.

[97] Laurent, S., Forge, D., Port, M., Roch, A., Robic, C., Elst, L. V. and Muller, R. N. (2008). Magnetic iron oxide nanoparticles : Synthesis, stabilization, vectorization, physico chemical characterizations, and biological applications. **Chem. Rev.**, 108, 2064-2110.

[98] Alcala, M. D. (2006). Synthesis based on the wet impregnation method and characterization of iron and iron oxide-silica nanocomposites. **Solid State Ionics**, 177, 955-960.

[99] Santra, S., Tapec, R., Theodoropoulou, N., Dobson, J., Hebard, A. and Tan W. (2001). Synthesis and characterization of silica-coated iron oxide nanoparticles in microemulsion : The effect of nonionic surfactants. **Langmuir**, 17, 2900–2906.

[100] Sun, Y., Duan, L., Guo, Z., D. M. Y., Ma, M., Xu, L., Zhang, Y. and Gu, N. (2005). An improved way to prepare superparamagnetic magnetite-silica core-shell nanoparticles for possible biological application. **J. Magn. Magn. Mater.**, 285, 65-68.

[101] Stober, W., Fink, A. and Bohn, E. (1968). Controlled growth of monodisperse silica spheres in the micron size range. **J. Colloid Interface Sci.**, 26, 62-66.

[102] Im, S. H., Herricks, T., Lee, Y. T. and Xia, Y. (2005). Synthesis and characterization of monodisperse silica colloidsloaded with superparamagnetic iron oxide nanoparticles. **Chem. Phys. Lett.**, 40, 19-23.

[103] Butterworth, M. D., Bell, S. A., Armes, S. P. and Simpson, A. W. (1996). Synthesis and characterization of polypyrrole–magnetite–silica particles. **J.Colloid Interface Sci.**, 183, 91-95.

[104] Liu, X., Xing, J., Guan, Y., Shan, G. and Liu, H. (2004). Synthesis of amino-silane modified superparamagnetic silica supports and their use for protein immobilization. **Colloids Surf. A**, 238, 127-131.

[105] O'Brien, K. W. (2003). **Synthesis of functionalized poly(dimethylsiloxane) and the preparation of magnetite nanoparticle complexes and dispersions**. Virginia: Blacksburg.

[106] Philipse, A. P., Bruggen, M. P. B. and Pathmamanoharan, C. (1994). Magnetic silica dispersions : Preparation and stability of surface-modified silica particles with a magnetic core. **Langmuir**, 10, 92-96.

[107] Yang, H. H., Zhang, S. Q., Chen, X. L., Zhuang, Z. X., Xu, J. G. and Wang, X. R. (2004). Magnetite-containing spherical silica nanoparticles for biocatalysis and bioseparations. **Anal. Chem.**, 76, 1316-1319.

[108] Liu, X., Ma, Z., Xing, Jianmin. and Liu, H. (2001). Preparation and characterization of amino–silane modified superparamagnetic silica nanospheres. **J. Magn. Magn. Mater.**, 270, 1-6.

[109] Wang, L., Luo, J., M. Maye, M., Fan, Q., Rendeng, Q., Engelhard, M. H., et al.(2005). Iron oxide–gold core–shell nanoparticles and thin film assembly. **J. Mater. Chem.**, 15. 1821-1832.

[110] Lyon, J. L., Fleming, D. A., Stone, B., Schiffer, P. and Willians, M. E. (2004). Synthesis of Fe oxide core/Au shell nanoparticles by Iterative hydroxylamine seeding. **Nano. Lett.**, 4, 719-724.

[111] Kim, J. S., Kim, S. K., Cho, M. H. and Hyeon, T. (2006). Designed fabrication of multifunctional magnetic gold nanoshells and their application to magnetic resonance imaging and photothermal therapy. **Angew. Chem.**, 45, 7754-7758.

[112] Liu, S., Wei, X., Chu, M., Peng, J. and Xu, Y. (2006). Synthesis and characterization of iron oxide/polymer composite nanoparticles with pendent functional groups. **Colloids Surf., B**, 51, 101-106.

[113] Hafeli, U., Schutt, W., Teller, J. and Zbrorowski, M. (1997). **Scientific and clinical applications of magnetic carriers.** New York: Plenum Press.

[114] Xu, X. Q., Shen, H., Xu, J. R., Xu, J., Li, X. J. and Xiong, X. M. (2005). Core-shell structure and magnetic properties of magnetite magnetic fluids stabilized with dextran. **J. Appl. Surf. Sci.**, 252, 494-500.

[115] Paul, K. G., Frigo, T. B., Groman, J. Y. and Groman, E. V. (2004). Synthesis of ultrasmall superparamagnetic iron oxides using reduced polysaccharides. **Bioconjugate Chem.**, 15, 394-399.

[116] Pardoe, H., Chua-anusorn, W., St. Pierre, T. G. and Dobson, J. (2001). Structural and magnetic properties of nanoscale iron oxide particles synthesized in the presence of dextran or polyvinyl alcohol. **J. Magn. Magn. Mater.**, 225, 41-45.

[117] Lee, J., Isobe, T. and Senna, M. (1996). Preparation of ultrafine Fe_3O_4 particles by precipitation in the presence of PVA at high pH. **J. Colloid Interface Sci.**, 177, 490-494.

[118] Chastellain, M., Petri, A. and Hofmann, H. (2004). Particle size investigations of a multistep synthesis of PVA coated superparamagnetic nanoparticles. **J. Colloid Interface Sci.**, 278, 353-357.

[119] Kim, D. K., Zhang, Y., Kehr, J., Klason, T., Bjelke, B. and Muhammed, M. (2001). Characterization and MRI study of surfactant-coated superparamagnetic nanoparticles administered into the rat brain. **J. Magn. Magn. Mater.**, 225, 256-260.

[120] Paul, K. G., Frigo, T. B., Groman, J. Y. and Groman, E. V. (2004). Synthesis of ultrasmall superparamagnetic iron oxides using reduced polysaccharides. **Bioconjugate Chem.**, 15, 394-399.

[121] Kumagai, M., Imai, Y., Nakamura, T., Yamasaki, Y., Sekino, M., Ueno, S., et al. (2007). Iron hydroxide nanoparticles coated with poly(ethylene glycol)-poly(aspartic acid) block copolymer as novel magnetic resonance contrast agents for in vivo cancer imaging. **Colloids Surf. B: Biointerfaces,** 56, 174-181.

[122] Lin, C., Lee, C. F. and Chiu, W. Y. (2005). Preparation and properties of poly(acrylic acid) oligomer stabilized superparamagnetic ferrofluid. **J. Colloid Interface Sci.**, 291, 411-420.

[123] Scherer, C. and Figueiredo, N. (2005). Ferrofluids : Properties and applications. **Braz. J. of Phys.**, 35, 38-42.

[124] Raj, K. and Moskowitz, R. (1990). Commercial applications of ferrofluids. **J. Magn. Magn. Mater.**, 85, 233-237.

[125] Riyad Emeran. (n.d.). **Heat dissipation.** Retrieved March 5, 2009, from http://www.trustedreviews.com

[126] Alexiou, C., Schmid, R., Jurgons, R., Bergemann, C., Arnold, W. and Parak, F. G. (2002). **ferrofluid.** Heidelberg: Springer Berlin.

[127] Kohler, N., Sun, C., Fichtenholtz, A., Gunn, J., Fang, C. and Zhang, M. (2006). Methotrexate-immobilized poly(ethylene glycol) magnetic nanoparticles for MR Imaging and Drug Delivery. **Small**, 2, 785-792.

[128] Gallo, J. M., Varkonyi, P., Hassan, E. E. and Groothius, D. R. (1993). Targeting anticancer drugs to the brain:physiological pharmacokinetic model of oxantrazole following intraarterial administration to rat glioma. **J. Pharmacokinet. Biopharm.**, 21, 575-580.

[129] **hyperthermia**. (n.d.). Retrieved March 7, 2009, from http://www.balavi.com/webboard

[130] Jordan, A., Wust, P., Fahling, H., John, W., Hinz, A. and Felix, R. (2004). Description and characterization of the novel hyperthermia- and thermoablation-system MFH®300F for clinical magnetic fluid hyperthermia. **Med. Phys.**, 31, 1444-1451.

[131] Jordan, A., Schoz, R., Wust, P., Fahling, H. and Felix, R. (1999). Endocytosis of dextran and silan-coated magnetite nanoparticles and the effect of intracellular hyperthermia on human mammary carcinoma cells in vitro. **J. Magn.Magn. Mater.**, 210, 185-196.

[132] Hazle, J. D. (n.d.). **Nanoshells**. Retrieved March 7, 2009, from http://www.sema.go.th/node/3343

[133] **Magnetic resonance imaging.** (n.d.). Retrieved March 7, 2009, from http://manassanun-mo.blogspot.com

[134] Pankhurst, Q. A., Connolly, J., Jones, S. K. and Dobson, J. (2003). Applications of magnetic nanoparticles in biomedicine. **J. Phys. D: Appl. Phys.**, 36, 167-172.

[135] Pinna, N., Grancharov, S., Beato, P., Bonville, P., Antonietti, M. and Niederberger, M. (2005). Magnetite nanocrystals : Nonaqueous synthesis, characterization, and solubility. **Chem. Mater.**, 17, 3044-3049.

[136] **zeta potential.** (n.d.). Retrieved March 7, 2009, from www.answers.yahoo.com/question/index

[137] Wilson, K. S., Goff, J. D., Riffle, J. S., Harris, L. A. and St Pierre, T. G. (2005). Polydimethylsiloxane-magnetite nanoparticle complexes and dispersions in polysiloxane carrier fluids. **Polymers Adv. Tech.**, 16, 200–211.

[138] Fu, G. D., Phua, S. J., Kang, E. T. and Neoh, K. G. (2005). Tadpole-shaped amphiphilic block-graft copolymers prepared via consecutive atom transfer radical polymerizations. **Macromolecules,** 38, 2612-2619.

[139] **แปลงหน่วยองศา.** (ม.ป.ป.). สืบค้นเมื่อ 9 มีนาคม 2552, จาก www.thaimisc.com/freewebboard/php/