

DAFTAR PUSTAKA

- Abdel-Ghani, N.T., dan El-Chaghaby, G.A., 2014, Biosorption for Metal Ions Removal from Aqueous Solutions: A Review of Recent Studies, *Int. J. Latest. Res. Sci. Technol.*, 3(1): 24-42
- Adamson, A.W., 1990, *Physical Chemistry of Surface*, 5th ed, Toronto: John Wiley and Sons Inc.
- Bi, Z., Liao, W., dan Qi, L., 2003, Wettability Alteration by CTAB Adsorption at Surface of SiO₂ Film or Silica Gel Powder and Mimic Oil Recovery, *Appl., Surf. Sci.*, 221: 25-31
- Blaney, L., 2007, Magnetite (Fe₃O₄): Properties, Synthesis, and Applications, *Lehigh Rev.*, 15: 32-81
- Bowman, R.S., 2003, Applications of Surfactant-Modified Zeolites to Environmental Remediation, *J. Microporous and Mesoporous Mater.*, 61(1): 45-56.
- Bryleva, E.Y., Vodolazkaya, N.A., Petrossyan, N.O.M, Samokhina, L.V., dan Matveevskaya, N.A., 2007, Interfacial Properties of Cetyltrimmonium Bromide-coated SiO₂ nanoparticles in aqueous media as studied by using different indicator dyes, *J. Colloid interface. Sci.*, 316: 712-722.
- Firda, A.N., 2016, Pemanfaatan Abu Vulkanik Sebagai Bahan Adsorben Termomodifikasi Setiltrimetilamonium Bromida dan Aplikasinya untuk Adsorpsi Anion Cr(IV), *Tesis*, Kimia, Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Gadjah Mada, Yogyakarta.
- Guo, Shuangzhen., Pengpeng Jiao, Zhigang Dan, Ning Duan, Guanyi Chen, dan Jian Zhang, 2017, Preparation of L-arginine Modified Magnetic Adsorbent by One-Step Method for Removal of Zn(II) and Cd(II) from Aqueous Solution, *J. Chem. Eng.*, 317: 999-1011.
- Ho, Y.S., dan McKay, G., 1999, Pseudo-Second Order Model for Sorption Process, *Process BioChem.*, 34: 451-465.
- Huang, Y., P. Chiueh, C.Shih, S. Lo, L. Sun, Y. Zhong dan C. Qiu, 2015, Microwave Pyrolysis of Rice Straw to Produce Biochar as An Adsorbent for CO₂ Capture, *Energy*, 84: 75-82
- Jie Li, Shouwei Zhang, Changlun Chen, Guixia Zhao, Xin Yang, Jiaying Li, dan Xiangke Wang, 2012, Removal of Cu(II) and Fulvic Acid by Graphene Oxide Nanosheets Decorated with Fe₃O₄ Nanoparticles, *ACS Appl., Mater. Interfaces*, 4: 4991-5000.

- Kexin Li, Zhenxing Zeng, Jingjing Xiong, Liushui Yan, Huiqin Guo, Shufen Liu, Yuhua Dai, dan Tong Chen, 2015, Fabrication of Mesoporous Fe₃O₄@SiO₂@CTAB-SiO₂ Magnetic microspheres with a Core/Shell Structure and Their Efficient Adsorption Performance for the Removal of Trace PFOS from Water, *J. Colloids and Surf. A: Physicochem. Eng. Asp.*, 465: 113-123.
- Lestari, N.D., 2016, Pengaruh Disolusi Abu Vulkanik Gunung Kelud dengan Larutan Na₂EDTA Terhadap Kemampuan Adsorpsinya pada Ion Pb(II), *Skripsi*, Kimia, Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Gadjah Mada, Yogyakarta.
- Li, Shunxing., Wenjie Liang, Fengying Zheng, Haifeng Zhou, Xiaofeng Lin, dan Jiabai Cai, 2015, Lysine Surface Modified Fe₃O₄@SiO₂@TiO₂ Microspheres-Based Preconcentration and Photocatalysis for in Situ Selective Determination of Nanomolar Dissolved Organic and Inorganic Phosphorous in Seawater, *Sensors and Actuators B*, 224: 48-54.
- Li, Xiaofang., Qingzhong Xue, Tiantian Wu, Yakang Jin, dan Cuicui Ling, 2015, Oil Detachment from Silica Surface Modified by Carboxy Group in Aqueous Cetyltriethylammonium Bromide Solution, *Appl. Surf. Sci.*, 353: 1103-1111
- Mahesh, K. R. Vishnu H. N., Narasimha M.B., E. Kumaraswamy, N. Raghavendra, R. Sridhar, M. Krishna, Niranjana P., Ratna P., dan B. S. Sherigara, 2011, Synthesis and Characterization of Organomodified Na-MMT Using Cation and Anion Surfactants, *Front. Chem. China.*, 6(2): 153–158.
- Mahmood, M.E. dan Al-Koofee, D.A.F., 2013, Effect of Temperature Changes on Critical Micelle Concentration for Tween Series Surfactant, *Glob. J. Sci. Front. Res. Chem.*, 13: 1-7.
- Mascolo, M.C., Pei, Y., dan Ring, T.A., 2013, Room Temperature Co-Precipitation Synthesis of Magnetite Nanoparticles in a Large pH Window with Different Base, *Materials (Basel)*, 6: 5549-5567.
- Mourhly, A., Khachani, M., El Hamidi, A., Kacimi, M., Halim, M., dan Arsalane, S., 2015, The Synthesis and Characterization of Low-Cost Mesoporous Silica SiO₂ from Local Pumice Rock, *Nanomater. Nanotechnol.*, 5: 1.
- Muhammad, N., Pair, J., Smith, M.D., dan Wheatley, A.D., 1998, Adsorption of Heavy Metal in Slow Sand Filters, *Proceedings of the 24th WEOC international Conference on Water Supply and Sanitation*, Durban, South Africa.

- Na Li, Facile Preparation of Magnetic Mesoporous MnFe₂O₄@SiO₂-CTAB Composites for Cr(VI) Adsorption and Reduction, 2017, *Environ. Pollut.*, 220: 1376-1385.
- Nuryono, N., Rosiati, N., Rusdiarso, B., Sakti, S.C., dan Tanaka, S., 2014, Coating of Magnetite with Mercapto Modified Rice Hull Ash Silica in A One-Pot Process, *Springerplus*, 3: 515.
- Oscik, J., 1982, *Adsorption, Ellis Horwood Limited*, England.
- Songkroah, C., Nakbanpote, W., dan Thiravetyan, P., 2004, Recovery of Silver Thiosilphate Complexs with Chitin, *Process Biochem*, 39: 1553-1559.
- Taffarel, S.R., dan Rubio, J., 2010, Adsorption of Sodium Dodecyl Benzene Sulfonate from Aqueous Solution Using A Modified Natural Zeolite with CTAB Carbon, *Miner. Eng.*, 23: 771-779
- Ta, T.K.H., Trinh, M.T., Long N.V., Nguyen, T.T.M., Nguyen, T.L.T., Thuoc, T., Phan, B.T., Mott, D., Maenoso, S., Van, H.T., dan Le, V.H., 2016, Synthesis and Surface Functionalization of Fe₃O₄-SiO₂ Core Shell Nanoparticles with 3-Glycidoxpropyltrimethoxsilane and 1,1'-Carbonyldiimidazole for Bio-Applications, *Colloids Surf. A Physicochem. Eng. Asp.*, 504: 376-383
- Tao, Q., Zhang, Y., Zhang, X., Yuan, P., dan He, H., 2006, Synthesis and Characterization of Layered Double Hydroxides with a High Aspect Ratio, *J., Solid State Chem*, 179: 708-715.
- Teja, A.S., dan Koh, P-Y., 2009, Synthesis, Properties and Applications of Magnetic Iron Oxide Nanoparticles, *Progress in Crystal Growth and Characterization of Materials*, 55: 22-45.
- Velegol, S.B., Fleming, B.D., Biggs, S., Wanless, E.J., dan Tilton, R.D., 2000, Counterion Effects on Hexadecyltrimethylammonium Surfactant Adsorption and Self-Assembly on Silica, *Langmuir*, 16: 2548-2556.
- Wang, Li-Cong, Xin-jiong Ni, Yu-Hua Cao, dan Guang-qun Cao, Adsorption Behaviour of Bisphenol A on CTAB-modified Graphite, *Appl. Surf. Sci.*, 428: 165-170
- Wahyuni, E.T., Triyono, S., dan Suherman, 2012, Penentuan Komposisi Kimia Abu Vulkanik dari Erupsi Gunung Merapi, *J. Lingk.*, 19: 150-159
- Widayatno, Tri., Linggar T. Gupita, Senja Imaswati, dan Pahlawati Novitasari, 2016, Recovery Logam Perak dari Limbah Cair Bekas Pencucian Foto Rontgen: Karakterisasi Elektrokimia, *Simposium Nasional RAPI XV, ISSN*, 1412-9612.

- Widodo, A., 2015, Abu Vulkanik Gunung Kelud Sebagai Sumber SiO₂ pada Preparasi Fotokatalis TiO₂/SiO₂ dan Uji aktifitasnya untuk Fotoreduksi Cr(VI), *Tesis*, Kimia, Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Gadjah Mada, Yogyakarta.
- Yanping Liu, Mallorie Tourbin, Sébastien Lachaize, Pascal Guiraud, 2013, Silica Nanoparticles Separation From Water: Aggregation by Cetyl Trimethyl Ammonium Bromide (CTAB), *J.chemosphere*, 92: 681-687.
- Yuanita, E., 2017, Adsorpsi Ion Cr(VI) Menggunakan *Core-Shell* Fe₃O₄@SiO₂/C₁₆H₃₃N⁺(CH₃)₃ dengan Abu Vulkanik Gunung Kelud Sebagai Sumber Silika, *Tesis*, Kimia, Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Gadjah Mada, Yogyakarta.
- Zamhari, Taufik, 2009, Kajian Efek Memori Mg/Al *Hydrotalcite* dan Aplikasinya Sebagai Adsorben Ion Kompleks Perak Tiosulfat (Ag(S₂O₃)₂)⁻³, *Tesis*, Kimia, Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Gadjah Mada, Yogyakarta.
- Zhao, X., Shi, Y., Wang, T., Cai, Y., dan Jiang, G., 2008, Preparation of Silica-Magnetite Nanoparticle Mixed Hemimicelle Sorbents for Extraction of Several Typical Phenolic Compounds from Enviromental Water Samples, *J. Chromatogr. A.*, 1188: 140-147.