

## DAFTAR PUSTAKA

- Ahmed, S., Ali, A., & Sheikh, J., 2018, International Journal of Biological Macromolecules A review on chitosan centred scaffolds and their applications in tissue engineering, *International Journal of Biological Macromolecules*, 116, 849–862
- Ahuja, A., Khar, R.K. and Ali, J., 1997, Mucoadhesive drug delivery systems, *Drug Development and industrial pharmacy*, 23(5), pp.489-515.
- Ajayan, P. dan Ebbesen, T., 1997, Nanometre-size Tubes of Carbon. *Rep. Prog. Phys.*, 60, 1025–1062
- Ajmal M., Rao RAK., Ahmad R., dan Ahmad J., 2000, Adsorption studies on Citrus reticulate (fruit peel of orange):removal and recovery of Ni (II) from electroplating wastewater. *J Hazard Mater* 79:117–131
- Anand P, Kunnumakkara AB, Newman RA, Aggarwal BB., 2007, Bioavailability of curcumin: problems and promises. *J. Mol Pharm*;4:807–18.
- Atkins, PW., 1990, *Kimia Fisika edisi ke IV*, Erlangga, Jakarta
- Ayawei, N., Ebelegi, A. N. dan Wankasi, D. (2017) “Modelling and Interpretation of Adsorption Isotherms,” *Journal of Chemistry*,
- Bambagioni, V., C. Bianchini, A. Marchionni, J. Filippi, F. Vizza, J. Teddy, P. Serp, dan M. Zhiani, 2009, Pd and Pt–Ru anode electrocatalysts supported on multi-walled carbon nanotubes and their use in passive and active direct alcohol fuel cells with an anion-exchange membrane (alcohol=methanol, ethanol, glycerol), *Journal of Power Sources*, Volume 190, Issue 2.
- Bianco, A., Kostarelos, K., dan Prato, M., 2005, Applications of carbon nanotubes in drug delivery, *Current opinion in chemical biology*, 96, 674-9
- Birch ME, Ruda-Eberenz TA, Chai M, Andrews R, Hatfield RL., 2013, Properties that influence the specific surface areas of carbon nanotubes and nanofibers, *Ann Occup Hyg*. 57(9):1148-66.
- Byl O, Liu J, Yates JT Jr., 2005, Etching of carbon nanotubes by ozone—a surface area study. *Langmuir*, 21:4200–4.
- C. A. Capozzi, R. A. Condrate, dan L. D. Dye, 1994, Hapannowicz, vibrational spectral/structural changes from the hydrolysis/polycondensation of methyl-modified silicates IV. IR spectral comparisons from the tetramethoxysilane/methyltrimethoxysilane/diethoxydimethylsilane system, *Materials Letters*, vol. 18, no. 5, pp. 349–352.

- C. González-Gaitán, R. Ruiz-Rosas, H. Nishihara, T. Kyotani, E. Morallón, D. Cazorla-Amorós, 2016, Successful functionalization of superporous zeolite templated carbon using aminobenzene acids and electrochemical methods, *Carbon*.
- Carson, L., C. K-Brown, M. Stewart, A. Oki, G. Regisford, Z. Luo, dan V. I. Bakhmutov, 2009, Synthesis and characterization of chitosan-carbon nanotube composites, *Materials Letters*, Volume 63, Issues 6–7, Pages 617-620.
- Chakraborty S, Chattopadhyay J, Peng H., 2006, Surface area measurement of functionalized singlewalled carbon nanotubes. *J Phys Chem B.*; 110:24812–5.
- Chen, Z., Pierre, D., He, H., Tan, S., Pham-Huy, C., Hong, H. Huang, J., 2011, Adsorption Behavior of Epirubicin Hydrochloride on Carboxylated Carbon Nanotubes, *Int. J. Pharm.*, 28 (405), 153–161.
- Cheng, Q, S. Debnath, E. Gregan, dan H. J. Byrne, 2010, Ultrasound-Assisted SWNTs Dispersion: Effects of Sonication Parameters and Solvent Properties, *The Journal of Physical Chemistry C* 114 (19), 8821-8827
- Cirillo, G., Hampel, S., Spizzirri, U.G., Parisi, O.I., Picci, N. dan Iemma, F., 2014. Carbon nanotubes hybrid hydrogels in drug delivery: a perspective review, *BioMed research international*
- Cramer, C., 2004, *Essentials of Computational Chemistry Theories and Models*, John Wiley and Sons, Chichester
- Datsyuk V, Kalyva M, Papagelis K, Parthenios J, Tasis D, Siokou A, Kallitsis I, Galiotis C., 2008, Chemical oxidation of multiwalled carbon nanotubes, *Carbon* 46:833–840
- Gallo, M., Favila, Alejandra, Glossman-Mitnik, dan Daniel, 2007, DFT Studies of Functionalized Carbon Nanotubes and Fullerenes as Nanovectors for Drug Delivery of Antitubercular Compounds, *Chemical Physics Letters*, 447, 105-109.
- Ganji, M. dan Bakhshandeh, A., 2011, Functionalized single-walled carbon nanotubes interacting with glycine amino acid: DFT study, *Physica B-condensed Matter - PHYSICA B.*, 406. 4453-4459.
- Gotovac S, Song L, Kanoh H, Kaneko K., 2007, Assembly structure control of single wall carbon nanotubes with liquid phase naphthalene adsorption, *Colloids Surf A Physicochem Eng Asp* 300:117–121.
- Guo, M., Wang, J., Wang, C., Strong, P.J., Jiang, P., Ok, Y.S. and Wang, H., 2019, Carbon nanotube-grafted chitosan and its adsorption capacity for phenol in aqueous solution, *Science of The Total Environment*, 682, pp.340-347.
- Gupta, V.K., Agarwal, S., Sadegh, H., Ali, G.A.M., Bharti, A.K., dan Hamdy, A.S., 2017. Facile route synthesis of novel graphene oxide- $\beta$ -cyclodextrin nanocomposite and its application as adsorbent for removal of toxic bisphenol A from the aqueous phase. *J. Mol. Liq.* doi:10.1016/j.molliq.2017.04.113

- Habibizadeh, M., Rostamizadeh, K., Dalali, N., & Ramazani, A., 2017, Preparation and characterization of PEGylated multiwall carbon nanotubes as covalently conjugated and non-covalent drug carrier: A comparative study, *Materials Science and Engineering C*, 74, 1–9.
- Heister E, Neves V, Lamprecht C, Silva SRP, Coley HM, dan MacFadden J, 2012 Drug loading, dispersion stability, and therapeutic efficacy in targeted drug delivery with carbon nanotubes, *Carbon* 50:622–632
- Hemraj-Benny T, Badosz TJ, Wong SS., 2008, Effect of ozonolysis on the pore structure, surface chemistry, and bundling of single-walled carbon nanotubes, *J Colloid Interface Sci.* 317:375–82.
- Ho, L.T.M., 2018, Characterization of multi-walled carbon nanotubes functionalized by a mixture of HNO<sub>3</sub>/H<sub>2</sub>SO<sub>4</sub>, *Diamond and Related Materials*, Volume 89, Pages 43-51
- Hutson, N.D., and R.T. Yang . \_\_Adsorption. *J. Colloid Interf Sci.* (2000), pp 189
- Iijima, S., 1991, Synthesis of Carbon Nanotubes, *Nature*, 354, 56-58.
- Jensen, F., 2007, *Introduction to Computational Chemistry*, John Wiley and Son, Chichester
- Jonuarti, R., M. Rifqi., Triati Dewi K.W., dan Suprijadi., 2017 Stability and electronic properties of defective single walled carbon nanotubes (CNTs), *AIP Conference Proceedings*, 1801.
- Kariim, I., Abdulkareem, A.S. and Abubakre, O.K., 2020. Development and characterization of MWCNTs from activated carbon as adsorbent for metronidazole and levofloxacin sorption from pharmaceutical wastewater: Kinetics, isotherms and thermodynamic studie, *Scientific African*, 7, p.e00242
- Körner, J., Reiche, C.F., Ghunaim, R., Fuge, R., Hampel, S., Büchner, B., dan Muehl, T., 2017, Magnetic properties of individual CO<sub>2</sub>FeGa Heusler nanoparticles studied at room temperature by a highly sensitive co-resonant cantilever sensor, *Scientific Reports*.
- Kurwadkar, S., Hoang, T.V., Malwade, K., Kanel, S.R., Harper, W.F. and Struckhoff, G., 2019. Application of carbon nanotubes for removal of emerging contaminants of concern in engineered water and wastewater treatment systems. *Nanotechnology for Environmental Engineering*, 4(1), p.12.
- Lacerda, L., Bianco A, Prato M, Kostarelos K, 2006, Carbon nanotubes as nanomedicines: from toxicology to pharmacology, *Adv Drug Deliv Rev* 58(14):1460–1470.
- Leach, A., 2001, *Molecular Modelling Principles and Applications*, Prentice Hall, Harlow
- Li Y, Wang S, Luan Z., 2003, Adsorption of cadmium(II) from aqueous solution by surface oxidized carbon nanotubes, *Carbon*, 41:1057–62

Liu Z, Tabakman S, Welsher K, dan Dai H., 2009, Carbon Nanotubes in Biology and Medicine: In vitro and in vivo Detection, Imaging and Drug Delivery, *Nano Res.* 2(2):85–120.

Mahani, N, 2017, A First-Principles Study on Interaction between Carbon Nanotubes (10,10) and Gallates Derivatives as Vehicles for Drug Delivery, *Physical Chemistry Research*, 5(2), pp. 367-375.

Malek, S.K., Gabris, M.A., Jume, B.H., Baradaran, R., Aziz, M., Abd Karim, K.J.B. and Nodeh, H.R., 2019, Adsorption and in vitro release study of curcumin form polyethyleneglycol functionalized multi walled carbon nanotube: kinetic and isotherm study, *DARU Journal of Pharmaceutical Sciences*, 27(1), pp.9-20.

Mirzaei, M. dan O. Gulseren, 2015, DFT studies of CNT–functionalized uracil-acetate hybrids, *Physica E: Low-dimensional Systems and Nanostructures*, Volume 73

Mirzaei, M., Harismah, K., Jafari, E., 2018, Functionalization of (n, 0) CNTs (n = 3–16) by uracil: DFT studies. *Eur. Phys. J. B* 91, 14

Naseh M, Khodadadi A, Mortazavi Y, 2009, Functionalization of carbon nanotubes using nitric acid oxidation and DBD plasma, *Int J Chem Biol Eng*; 37:177–9.

Nitayaphat, W., Jintakosol, T., 2015, Removal of silver(I) from aqueous solutions by chitosan/bamboo charcoal composite beads. *J. Clean. Prod.* 87: 850–855. doi:10.1016/j.jclepro.2014.10.003

Paratala B.S., Sitharaman B., 2011, Carbon Nanotubes in Regenerative Medicine. di dalam Klingeler R., Sim R. (eds) *Carbon Nanotubes for Biomedical Applications, Carbon Nanostructures*, Springer, Berlin, Heidelberg

Pigney A, Laurent C, dan Flahaut E., 2001, Specific surface area of carbon nanotubes and bundles of carbon nanotubes. *Carbon.* 39:507–14

Poole, C.P., and F.J. Owens., 2003, *Introduction to Nanotechnology*, John Wiley and Sons, New York.

Pranowo, H. D., 2011, *Pengantar Kimia Komputasi*, Lubuk Agung, Bandung

Ramachandran, K. I., Deepa, G., and Namboori, K., 2008, *Computational Chemistry and Molecular Modeling*, Springer, Berlin

Rawat, M.D., Singh, and S. Saraf., 2006, Nanocarriers: Promising Vehicle for Bioactive Drugs, *Biol. Pharm. Bull*, 29.

Robles, J., López, M. & Alonso, J., 2011, Modeling of the functionalization of single-wall carbon nanotubes towards its solubilization in an aqueous medium. *Eur. Phys. J. D* 61, 381–388.

Saifullah, Suprpto, dan Iriawan, 2007, Optimasi Kombinasi Matriks *Hydroxypropyl Methylcellulose* dan *Xanthan Gum* untuk Formula Tablet Kaptopril Lepas Lambat dengan Sistem *Floating*. *Jurnal Universitas Muhammadiyah Surakarta*. Surakarta.

Sengel, C.T. dan Alptruk., 2018, *Carbon Nanotubes for Drug Delivery In Nanoconjugate Nanocarriers for Drug Delivery*, CRC Press., US.

Sengel-Turk, C. T., dan Alptruk, O., 2017, Carbon Nanotubes for Drug Delivery. *Drug Delivery Approaches and Nanosystems*, 348–386.

Shabanzadeh E, Bashiz R T., 2015, SWNTs and MWNTs (M=2) for Nano Drug Delivery: Temperature and Solvent effect, *Orient J Chem.*, 31(4)

Shishodia S., Singh T., Chaturvedi M.M., 2006, *Modulation of transcription factor by curcumin in The molecular targets and therapeutic uses of curcumin in health and disease*, Springer., Jerman

Sohn, S. and Kim, D., 2005. Modification of *Langmuir* isotherm in solution systems—definition and utilization of concentration dependent factor, *Chemosphere*, 58(1), pp.115-123.

Sutriyo, Rachmat H. dan Rosalina, M., 2008, Pengembangan Sediaan dengan Pelepasan dimodifikasi mengandung Furosemid sebagai Model Zat Aktif menggunakan Sistem Mukoadhesif, *Majalah Ilmu Kefarmasian*, Vol. V, No. 1, April, 01 – 08.

Tenorio, F., dan Juvencio, 2000, On the stability and reactivity of C–Si heterofullerenes, *International Journal of Quantum Chemistry*. 80. 220 - 226.

Tong, J.M., Wu, Z.S., Sun, X.F., Xu, X.L., dan C. Li, 2008, Adsorption kinetics of  $\beta$ -carotene and chlorophyll from model oil solutions onto acid activated bentonite, *Chin. J. Chem. Eng.* 16: 270–276.

Trzaskowski, B., Raissi, H., Jalbout, A., Li, Xin-Hua, 2006, Experimental and theoretical Investigation of the IR spectra and thermochemistry of four isomers of 2-N,N-dimethylaminecyclohexyl 1-N',N'-dimethylcarbamate. *Eclética Química*. 31. 53-62.

Wei Xue dan Pengfei Li, 2011, Dielectrophoretic deposition and alignment of carbon nanotubes, in: *Carbon Nanotubes-Synthesis, Characterization, Applications*, InTech.

Wong, B.S., Yoong, S.L., Jagusiak, A., Panczyk, T., Ho, H.K., Ang, W.H. dan Pastorin, G., 2013. Carbon nanotubes for delivery of small molecule drugs. *Advanced drug delivery reviews*, 65(15), pp.1964-2015

Xie, Xiaofeng., Gao, Lian., 2007, Characterization of a Manganese Dioxide/Carbon Nanotube Composite Fabricated Using an In Situ Coating Method, *Carbon*, 45 (12), 2365-2373.

Ye J, Liu X, Cui H, 2005, Electrochemical oxidation of multi-walled carbon nanotubes and its application to electrochemical double layer capacitors, *Electrochem Commun.*; 7:249–55

Zawawi, N.A., Majid, Z.A. & Rashid, N.A.A., 2017, Adsorption and desorption of curcumin by poly(vinyl) alcohol-multiwalled carbon nanotubes (PVA-MWCNT), *Colloid Polym Sci* **295**, 1925–1936