UNIVERSITAS
GADJAH MADA

NANOFIBER ALGINAT/POLIETILEN OKSIDA/TRITON X-100 SEBAGAI ADSORBEN CO2
FARYDA VERONICA, Dr.rer.nat. Adhitasari Suratman,M.Si; Dr. Suyanta, M.Si
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

DAFTAR PUSTAKA

Ahmed, F.E., 2015, A Review on Electrospinning for Membrane Fabrication: Challenges and Applications, *Desalination*, 356, 15-30.

Alhamid, M.I., Nassrudin, Senoadi, Perdana, M.B., and Ratiko, 2015, Effect of Methane Gas Flow Rate on Adsorption Capacity and Temperature Distribution of Activated Carbon, *Int. J. Technol.*, 4, 584-593.

Angammana, C.J., 2011, A Study of the Effect of Solution and Process Parameters on the Electrospinning Process and Nanofibre Morphology, *Thesis*, Canada.

Apriyanti, E., 2011, Adsorpsi CO_2 menggunakan Zeolit Sintetis 4A: Aplikasi pada Pemurnian Produk Biogas, *Tesis*, Program Pascasarjana UNDIP, Semarang.

Araujo, E.S., Nascimento, M.L., and Oliveira, H.P., 2013, Influence of Triton X-100 on PVA Fibres Production by the Electrospinning Technique, *Fibres Text. East. Eur.*, 21, 39-43.

Astuti, D.N., 2016, Nanofiber Alginat/Poli(vinil alkohol) (PVA) untuk Adsorpsi CO_2, *Skripsi*, Jurusan Kimia FMIPA UGM, Yogyakarta.

Aykut, Y., Pourdeyhimi, B., and Khan, S.A., 2013, Effects of Surfactants on the Microstructures of Electrospun Polyacrylonitrile Nanofibers and Their Carbonized Analogs, *J. Appl. Polym. Sci.*, 3726-3735.

Baunsele, A.B., 2015, Sintesis Nanofiber Polivinil Alkohol/Kitosan/Iota-Karaginan Sebagai Adsorben Pb(II) dan Cu(II), *Tesis*, Departemen Kimia FMIPA UGM, Yogyakarta.

Bhattarai, N., Li, Z., Edmondson, D., and Zhang, M., 2006, Alginate-Based Nanofibrous Scaffolds: Structural, Mechanical, and Biological Properties, *Adv. Mater.*, 18, 1463-1467.

Bikshapathi, M., Sharma, A., Sharma, A., and Verma, N., 2011, Preparation of Carbon Molecular Sieves from Carbon Micro and Nanofibers for Sequestration of CO_2, *Chem. Eng. Res. Des.*, 89, 1737-1746.

Bonino, C.A., Krebs, M.D., Saquing, C.D., and Jeong, S. I., 2011, Electrospinning Alginate-Based Nanofibers: From Blends to Crosslinked Low Molecular Weight Alginate-Only Systems, *Carbohyd. Polym.*, 111-119.

Callendar, G.S., 1938, The Artificial Production of Carbon Dioxide and Its Influence on Temperature, *Q. J. R. Meteorol. Soc.*, 223-240.

UNIVERSITAS
GADJAH MADA
NANOFIBER ALGINAT/POLIETILEN OKSIDA/TRITON X-100 SEBAGAI ADSORBEN CO2
FARYDA VERONICA, Dr.rer.nat. Adhitasari Suratman,M.Si; Dr. Suyanta, M.Si
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Caykara, T., Demirci, S., Eroglu, M.S., and Guven, O., 2005, Poly(ethylene oxide) and its blends with sodium alginate, *Polymer*, 46, 10750-10757.

Chen, Z., Deng, S., Wei, H., Wang, B., Huang, J., and Yu, G., 2013, Polyethylenimine-Impregnated Resin for High CO_2 Adsorption: An Efficient Adsorbent for CO_2 Capture from Simulated Flue Gas and Ambient Air, *ACS Appl. Mater. Interfaces*, 5, 6937-6945.

Chowdhury, M., and Stylios, G., 2010, Effect of Experimental Parameters on the Morphology of Electrospun Nylon 6 fibres, *IJBAS-IJENS*, 10, 70-78.

Cramariuc, B., Cramariuc, R., Scarlet, R., Manea, L.R., Lupu, I.G., and Cramariuc, O., 2013, Fiber diameter in electrospinning process, *J. Electrostat.*, 71, 189-198.

Daemi, H., and Barikani, M., 2012, Synthesis and characterization of calcium alginate nanoparticles, sodium homopolymannuronate salt and its calcium nanoparticles, *Sci. Iran.*, 6, 2023–2028.

Gebald, C., Wurzbacher J., A., Tingaut, P., Zimmermann, T., and Steinfeld, A., 2011, Amine-Based Nanofibrillated Cellulose As Adsorbent for CO_2 Capture from Air, *Environ. Sci. Technol.*, 45, 9101-9108.

Gorte, R.W., 2009, U.S. *Tree Planting for Carbon Sequestration*, Congresional Research Service.

Guo, B., Chang, L., and Xie, K., 2006, Adsorption of Carbon Dioxide on Activated Carbon, *JNGC*, 15, 223-229.

Hansen, J., Johnson, D., Lacis, A., Lebedeff, S., Lee, P., and Russel G., 1981, Climate Impact of Increasing Atmospheric Carbon Dioxide, *Science*, 213, 957-966.

Ho, Y.S., 2004, Citation Review of Lagergren Kinetic Rate Equation on Adsorption Reaction, *Scientometric*, 59, 171-177.

Ho, Y.S., and McKay, G., 2006, Second-Order Kinetic Model for Sorption of Cadnium onto Tree Fern: a Comparison of Linear and Non-Linear Methods, *Water Res.*, 40, 199-125.

Hong, S.-M., Kim, S.H., Jeong, B.G., Jo, S.M., and Lee, K.B., 2014, Development of Porous Carbon Nanofibers from Electrospun Polyvinylidene Fluoride for CO_2 Capture, *RCS Adv.*, 4, 58956-58963.

Huang, Z.-M., Zhang, Y.-Z., Kotaki, M., and Ramakrishna, S., 2003, A Review on Polymer Nanofibers by Electrospinning and Their Applications in Nanocomposites, *Compos. Sci. Technol.*, 63, 2223-2253.

UNIVERSITAS
GADJAH MADA
NANOFIBER ALGINAT/POLIETILEN OKSIDA/TRITON X-100 SEBAGAI ADSORBEN CO2
FARYDA VERONICA, Dr.rer.nat. Adhitasari Suratman,M.Si; Dr. Suyanta, M.Si
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Ioan, B., and Amelitta, L., 2015, Carbon Dioxide-Significant Emission Sources and Decreasing Solutions, *Procedia – Social and Behavioral Sciences*, 180, 1122-1128.

Jonathan, R., 2016, Komposit Nanofiber PVA/Alginat/Zeolit sebagai Adsorben CO_2, *Skripsi*, Departemen Kimia FMIPA UGM, Yogyakarta.

Kazarian, S.G., Vincent, M.F., Bright, F.V., Liotta, C.L. and Eckert, C.A., 1996, Specific Intermolecular Interaction of Carbon Dioxide with Polymers, *J. Am. Chem.*, 118, 1729-1736.

Ko, F.K., and Wan, Y., 2014, *Introduction to Nanofiber Materials*, Cambridge University Press, Cambridgeshire.

Kong, Y., Jin, L., and Qiu, J., 2013, Synthesis, Characterization, and CO_2 Capture Study of Micro-Nano Carbonaceous Composites, *Sci. Total Environ.*, 463-464, 192-198.

Lin, Y.-F., Ye, Q., Hsu, S.-H., and Chung, T.-W., 2016, Reusable Fluorocarbon-Modified Electrospun PDMS/PVDF Nanofibrous Membranes with Excellent CO_2 Absorption Performance, *Chem. Eng. J.*, 284, 888-895.

Lindzen, R.S., 1997, Can Increasing Carbon Dioxide Cause Climate Change?, *Proc. Natl. Acad. Sci. USA*, 94, 8335-8342.

Liu, Y., Hu, J., Ma, X., Liu, J., and Lin, Y.S., 2016, Mechanism of CO_2 Adsorption on Mg/DOBDC with Elevated CO_2 Loading, *Fuel*, 181, 340-346.

Lu, J.-W., Zhu, Y.-L., Guo, Z.-X., Hu, P., and Yu, J., 2006, Electrospinning of Sodium Alginate with Poly(ethylene oxide), *Polymer*, 47, 8026-8031.

McHugh, D.J., 1987, *Production and utilization of products from commercial seaweeds*, Food and Agriculture Organization of the United Nations, Rome.

Nan, D., Liu, J., and Ma, W., 2015, Electrospun Phenolic Resin-Based Carbon Ultrafine Fibers with Abundant Ultra-Small Micropores for CO_2 Adsorption, *Chem. Eng. J.*, 276, 44-50.

Oliver, J.G.J., Maenhout, G.J., Muntean, M., and Peters, J.A.H.W., 2015, *Trends in Global CO2 Emissions: 2015 Report*, PBL Netherlands Environmental Assessment Agency, The Hague.

Paneva, D., Ignatova, M., Manolova, N., and Rashkov, I., 2009, *Novel Chitosan-Containing Micro-and Nanofibrous Materials by Electrospinning: Preparation and Biomedical Application, Nanofibers Fabrication, Performance, and Applications*, Nova Science Publisher, New York.

UNIVERSITAS
GADJAH MADA
NANOFIBER ALGINAT/POLIETILEN OKSIDA/TRITON X-100 SEBAGAI ADSORBEN CO2
FARYDA VERONICA, Dr.rer.nat. Adhitasari Suratman,M.Si; Dr. Suyanta, M.Si
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Panthi, G., Park, M., Kim, H.-Y., and Park, S.-J., 2015, Electrospun Polymeric Nanofibers Encapsulated with Nanostructured Materials and Their Applications: A Review, *J. Ind. Eng. Chem.*, 24, 1-13.

Pelipenko, J., Kocbek, P., and Kristl, J., 2015, Critical Attributes of Nanofibers: Preparation, Drug Loading, and Tissue Regeneration, *Int. J. Pharm.*, 484, 57-74.

Pham, Q.P., Sharma, U., and Mikos, A.G., 2006, Electrospinning of Polymeric Nanofibers for Tissue Engineering Applications: A Review, *Tissue Eng.*, 12, 1197-1211.

Ramakrishna, S., Fujihara, K., Teo, W.-E., Lim, T.-C., and Ma, Z., 2005, An *Introduction to Electrospinning and Nanofibers*, World Scientific, Singapore.

Saleh, M., Tiwari, J. N., Kemp, K. C., Yousuf, M., and Kim, K. S., 2013, Highly Selective and Stable Carbon Dioxide Uptake in Polyindole-Derived Microporous Carbon Materials, *Environ. Sci. Technol.*, 47, 5467-5473.

Saquing, C.D., Tang, C., Monian, B., Bonino, C.A., Manasco, J.L., Alsberg, E., and Khan, S.A., 2013, Alginate-Polyethylene Oxide Blend Nanofibers and the Role of the Carrier Polymer in Electrospinning, *Ind. Eng. Chem. Res.*, 52, 8692-8704.

Siriwardane, R.V., Shen, M.-S., and Fiher, E.P., 2005, Adsorption of CO_2 on Zeolites at Moderate Temperatures, *Energ. Fuel.*, 19, 1153-1159.

Sunar, S.M., 2015, Pengukuran Kadar Natrium Alginat dari Alga Cokelat Spesies Sargassum sp. sebagai Bahan Dasar Pembuatan Bahan Cetak Kedokteran Gigi, *Skripsi*, Fakultas Kedokteran Gigi, Universitas Hasanudiin.

Tans, P., 2017, CO_2 *Expressed as a Mole Fraction in Dry Air*, NOAA/ESRL, www.esrl.noaa.gov/gmd/ccgg/trends/, diakses pada 12 Januari 2017

Terashima, T., Kawabe, M., Miyabara, Y., Yoda, H., and Samawoto, Mi., 2013, *Polymeric Pseudo-Crown Ether for Cation Recognition via Cation Template-Assisted Cyclopolymerization*, Nature Communications.

Tsurayya, N., 2016, Nanofiber Alginat-Pektin-Polivinil Alkohol sebagai Adsorben CO_2, *Tesis*, Departemen Kimia FMIPA UGM, Yogyakarta.

Vargas, D.P., Giraldo, L., and Moreno-Pirajan, J.C., 2012, CO_2 Adsorption on Activated Carbon Honeycomb-Monoliths: A Comparison of Langmuir and Toth Models, *Int. J. Mol. Sci.*, 13, 8388-8397.

Vigorito, A., Gou, Q., Calabrese, C., Melandri, S., Maris, A., and Caminati, W., 2015, How CO_2 Interact with Carboxylic Acids: A Rotational Study of Formic Acid-CO_2, *Chem. Phys. Chem.*, 16, 2961-2967.

UNIVERSITAS
GADJAH MADA
NANOFIBER ALGINAT/POLIETILEN OKSIDA/TRITON X-100 SEBAGAI ADSORBEN CO2
FARYDA VERONICA, Dr.rer.nat. Adhitasari Suratman,M.Si; Dr. Suyanta, M.Si
Universitas Gadjah Mada, 2017 | Diunduh dari http://etd.repository.ugm.ac.id/

Wang, X., and Li, B., 2014, *Electrospun Nanofibrous Sorbents and Membranes for Carbon Dioxide Capture, Electrospun Nanofibers for Energy end Environmental Applications*, Springer, Heidelberg.

Wickramaratne, N.P., Xu, J., Wang, M., Zhu, L., Dai, L., and Jaroniec, M., 2014, Nitrogen Enriched Porous Carbon Spheres: Attractive Materials for Supercapacitor Electrodes and CO_2 Adsorption, *Chem. Mater.*, 26, 2820-2828.

Yaqun, S., Zhi, W., Chenxin, Z., Jixiao, W., and Shichang, W., 2013, A Novel Membrane Prepared from Sodium Alginate Cross-linked with Sodium Tartrate for CO_2 Capture, *Separ. Sci. Eng.*, 10, 1098-1105.

Yuan, B., Wu, X., Chen, Y., Huang, J., Luo, H., and Deng, S., 2013, Adsorption of CO_2, CH_4, and N_2 on Ordered Mesoporous Carbon: Approach for Greenhouse Gases Capture and Biogas Upgrading, *Environ. Sci. Technol.*

Zhao, G., Aziz, B., and Hedin, N., 2010, Carbon Dioxide Adsorption on Mesoporous Silica Surfaces Containing Amine-Like Motifs, *Appl. Energ.*, 87, 2907-2913.

Zheng, J.-Y., Zhuang, M.-F., Yu, Z.-J., Zheng, G.-F., Zhao, Y., Wang, H., Sun, D.-H., 2014, The Effect of Surfactants on the Diameter and Morphology of Electrospun Ultrafine Nanofiber, *J. Nanomater.*

Ziabari, M., Mottaghitalab, V., and Haghi, A.K., 2009, *A Novel Approach for Analysis of Processing Parameters in Electrospinning of Nanofibers*, *Nanofibers: Fabrication, Performance, and Applications*, Nova Science Publishers, New York.