

## DAFTAR PUSTAKA

- Adolf, R. O, A. Menzel, dan V. D. Taran, (2002), *Analysis of Conjugated Linoleic Acid Enriched Triacylglycerol Mixture by Isocratic Silver – Ion High Performance Liquid Chromatography*, J. Chrom. A, 953, 293 – 297.
- Albers, R, Van der Wielen, R.P.J., Brink, E.J., Hendriks, H.F.J., Taran, V.N.D., dan Mohede, I.C.M., 2003, *Effect of Cis-9, Trans-11 and Trans-10, Cis-12 Conjugated Linoleic Acid (CLA) Isomers on Immune Function in Health Men*. Eur. L. Clin. Nutr; 57, 595–6003.
- Allonso.L; E. P. Guesta dan S. E. Gillilang, (2003). *Production of Free Conjugated Linoleic Acid Isomers by Lactobacillus acidophilus casei of Human Intestinal Origin*; J. Dairy Sci 86: 1941 – 1946.
- Anonim, (2007), *Modul Kuliah Spektroskopi Fakultas Farmasi*. Universitas Sanata Dharma : Yogyakarta
- Bernas, A., N. Kumar, P. Maki-Arvela, N. V. Kulko'va, B. Holmbom, T. Salmi, dan D. Y. Murzin, (2003), *Isomerization of Linoleic Acid over Supported Metal Catalyst*, Appl. Catal., 245, 257-275.
- Blankson, H., Stakkestad, J.A., Fagertun, H., Thorn, E., Wadstein, J., dan Gudmundsen, O., (2002), J. Nutr., 130, 2943–2948.
- Brahmana, H. R. (1989). *Penentuan Komposisi Asam Lemak dari Bahan Alam dengan Cara Kromatografi Gas terhadap Metil Ester Asam Lemak dari Minyak Nabati*, Lembaga Penelitian USU : Medan.
- Cristie WW, Dopson G & Adlof RO. (2007). *A Practical Guide to The Isolation, Analysis and Identification of Conjugated Linoleic Acid*. Lipids 42: 1073 – 1025.
- Cristie WW. (1998). *Gas Chromatography–Mass Spectrometry Methods for Structural Analysis of Fatty Acid*. Lipids 33: 343 – 353.
- D. N. Bhowimick and A. N. Sarma. 1987. *Dehydration of Castor Oil*, Ind. Eng. Chem. Prod, Departement of Oil and Paint Technology, Kampur India.

- Damyanova, B. N, (2010), *Silver Ion Chromatografi And Lipids*, [http://lipidlibrary.aocs.org/Silver/bnd\\_rev/index1.htm](http://lipidlibrary.aocs.org/Silver/bnd_rev/index1.htm), 1, 1 – 7. Diakses 3 Januari 2015.
- David, W. L, A. A. Wierzbicki, dan C. J. Field, (1999), *Preparation of Conjugated Linoleic Acid from Safflower Oil*, JAOCS, 75, 137 – 142.
- Dobson, G, (1998), *Identification of Conjugated Linoleic Acid by GC-MS of 4-methyl 1,2,4-triazoline -3,5 – Dione Adducts*, JAOCS, 75, 137 – 142.
- Fatimah, Soja, (2013), *Spektroskopi, Dasar dan Karakterisasinya*. [http://file.upi.edu/Direktori/FPMIPA/JUR.\\_PEND.\\_KIMIA/196802161994022-SOJA\\_SITI\\_FATIMAH/praktikum\\_kimia\\_Anorganik/Spektroskopi\\_%28dasar\\_karakterisasi%29.pdf](http://file.upi.edu/Direktori/FPMIPA/JUR._PEND._KIMIA/196802161994022-SOJA_SITI_FATIMAH/praktikum_kimia_Anorganik/Spektroskopi_%28dasar_karakterisasi%29.pdf)
- Fessenden & Fessenden. (1986). *Kimia Organik. Jilid 2. Edisi Ketiga*. Erlangga : Jakarta.
- Filho, N. L.d., Gushikem, Y., dan Polito, W. L., (1995), *2 Mercaptobenzotiazole Clays as Matrix for Sorption and Preconcentration of some Heavy Metals from Aquoas Solution*, Anal Chem. Acta, 306, 167- 172
- Fowlis, Ian A., (1998). *Gas Chromatography Analytical Chemistry by Open Learning*. John Wiley & Sons Ltd: Chichester.
- Gangidi, R. R. dan A. Proctor, (2004), *Photochemical Production of Conjugated Linoleic Acid From Soybean Oil*, Lipids, 36:6, 577 - 585.
- Ginting, K., Ginting, M., dan Sihotang, H., (2003), *Dehidrasi Risinoleat Yang Terdapat Dalam Minyak Jarak (Ricinus Communis L) Menggunakan Molekuler Sieve Secara Refluks Dalam beberapa Pelarut Organik*, Lembaga Penelitian USU: Medan.
- Glascok, M.D., Neff, H., 2003. *Neutron activation analysis and provenance research in archaeology*. Measurement Science and Technology 14, 1516 – 1526.
- Gritter, R.J. et al (Penerjemah: Kosasih Padmawinata), (1991), *Pengantar kromatografi*, Edisi kedua, Penerbit ITB : Bandung.

- Guil Gurero, J. L., P. C. Madrid, dan E. El – Hassan, (2000),  *$\gamma$  - Linoleic Acid Purification from Seed Oil Sources by Argentonated Silika gel Chromatography Colomn*, J. Chrom. A, 694, 381 – 389.
- Handayani, T.I. dan Ariono, D., (2005), *Pembuatan Drying Oil Dari Minyak Jarak*; Lembaga Penelitian ITB : Bandung.
- Hidetaka, U, T. Suganuma, S. Negishi, S. Ueno, dan K. Sato, (2006), *A Novel Method for Solvent Fractination of Two CLA Isomers*, JAOCS, 83, 261 - 268.
- Ilmu Kimia, (2013). <http://www.ilmukimia.org/2013/05/kromatografi-kolom.html>. (Diakses pada April 2015)
- Ilmu Kimia, (2013). <http://www.ilmukimia.org/2013/07/spektroskopi-inframerah-ir.html> (Diakses pada April 2015)
- Ishizaki, K., (1998), *Porous Materials Process Technology and Application*, Kluwer Academic Publisers, Dordecht.
- James H. Clark, Duncan Macquarrie. *Handbook of Green Chemistry and Technology*. Blackwell Science Ltd : New York
- Jansen, K., (1992), *Zeolite Crystal Growth and The Structure on an Atomic Scale*, Disertasi, Deen Haag
- Joni, I Made. (2007). *Pengantar Biospektroskopi*. Universitas Padjajaran : Bandung.
- Kaim, W., dan Schwederski, B., (1994), *Bioanorganic Chem: Inorganic Elements in the Chemistry of Life in Introduction and Guide*, John Willey and Sons, Chichester.
- Ketaren, S. (1986), *Minyak dan Lemak Pangan*, Universitas Indonesia : Jakarta.
- Kondo, S., (1996), *Adsorption on New and Modified Inorganic Sorbent*, Elsevier Netherlands
- Kusumaningsih. T, Pranoto, Saryoso .R. (2006). *Bioteknologi 3 (1): 20-26, Mei 2006, ISSN: 0216-6887*. Jurusan Kimia Fmipa Universitas Sebelas Maret (UNS) : Surakarta 57126.
- Laidler, K J. 1987. *Chemical Kinetics*. Harper and Row : New York.

- Mahan, C. A., dan Helcombe, J. A., (1992), *Immobilization of Algae on Silica Gel and Their Characterization for Trace Metal Preconcentration*, Anal. Chem., 64: 1933- 1939
- March, Jerry. 1992. *Advanced organic chemistry: Reactions, mechanisms and structure, 4th edn*. Wiley : New York.
- Mawarni, R; (2006), *Asam Linoleat Terkonjugasi Penurun Timbunan Lemak, Pusat Kajian Makanan Dan Obat Tradisional*; Lembaga Penelitian UNDIP, Semarang.
- Mulhidin, (2011). [http:// mutiara-mulhidin.blogspot.com /p/ chemistry.html](http://mutiara-mulhidin.blogspot.com/p/chemistry.html). (Diakses pada April 2015)
- Mulja, (1995), *Analisis Instrumental, 90*, Airlangga University Press, Surabaya
- Muller, J, dan J. E. Delahoy, (2009), *CLA Implications for Animal Production and Human Health*: [www.das.psu.edu/temdairy](http://www.das.psu.edu/temdairy), 04, 1-4. Diakses 3 Januari 2015.
- Neff, W. E, R. O. Adlof, dan M. El-Agaimy, (1999), *Silver Ion High – Performance Chromatography of The Triacylglycerols of Crepis alpina Seed Oil*, JAOCS, 71:8, 853 – 860.
- O’Shea, A.M, Devery, R., Lawless, F., Koegh, K., dan Stanton, T., (2000), *Int. Dairy J.*, 10, 289–294.
- Oscik, J, (1982), *Adsorption*, New York. John Wiley & Sons
- Osick, J. (1982). *Adsorption. Ellis Hardwood, Ltd.Chicester.England*.
- Ozgul YS. (2005). *Determination of Conjugated Linoleic Acid Content of Selected Oil Seeds Grown in Turkey*. JAOCS 82: 893 – 898.
- Parodi, P.W. (1997). *Conjugated Linoleic Acid of Milk Fat*. J. Dairy Sci., 60, 1550–1553.
- Pavia, Donald L., Gary M. Lampman, George S. Kriz, Randall G. Engel, (2006). *Introduction to Organic Laboratory Techniques (4th Ed.)*. Thomson Brooks/Cole. pp. 797–817.
- Peterson, H. P, J. H. Bryan, dan T. A. Keevel, (1993), *A Kinetics Study of The Isomerisation of Eugenol*, J. Chem. Edu., 70:4, A96 – A98.

- Priest, W.G., dan Von Mikusch, J.D., (1997), *Composition and Analysis of Dehydrated Castor Oil*, Woburn Degreasing Company of New Jersey : New York.
- Pubchem. (2014). [http://pubchem.ncbi.nlm.nih.gov/compound/acetone\\_](http://pubchem.ncbi.nlm.nih.gov/compound/acetone_) (Diakses pada April 2015)
- Pubchem. (2014). [http://pubchem.ncbi.nlm.nih.gov/compound/acetonitrile\\_](http://pubchem.ncbi.nlm.nih.gov/compound/acetonitrile_) (Diakses pada April 2015)
- Pubchem. (2014). [http://pubchem.ncbi.nlm.nih.gov/compound/hexane\\_](http://pubchem.ncbi.nlm.nih.gov/compound/hexane_) (Diakses pada April 2015)
- Pubchem. (2014). <http://pubchem.ncbi.nlm.nih.gov/compound/Silica>. (Diakses pada April 2015)
- Pubchem. (2014). [http://pubchem.ncbi.nlm.nih.gov/compound/silvernitrate\\_](http://pubchem.ncbi.nlm.nih.gov/compound/silvernitrate_) (Diakses pada April 2015)
- Rincon, M. A. C, I. R. Garcia, dan J. L. Guil-Guerro, (2009), *Purification of GLA – Triglycerides from Evening Primrose Oil by Gravimetric Column Chromatography*, JAOCS, 86, 605 – 609.
- Rohman, A. (2009). *Kimia Farmasi Analisis*. Pusaka Pelajar : Yogyakarta.
- Sastrohamidjojo, H. (1985). *Kromatografi*. Penerbit Liberty : Yogyakarta.
- Sehat, N, J. K. G. Kramer, M. M. Mossoba, M. P. Yurawecz, J. A. G. Roach, K. Eulitz, K. M. Morehouse, dan Y. Ku, (1998), *Identification of Conjugated Linoleic Acid Isomers in Cheese by Gas Chromatography , Silver Ion High Performance Liquid Chromatography and Mass Spectral Reconstructed Ion Profiles Comparison of Chromatographic Elution Sequences*, Lipids, 33, 963 - 971.
- Seran, Emel. (2011). [https:// wanibesak.wordpress.com /2011/07/04/spektrofotometri- sinar-tampak- visible/](https://wanibesak.wordpress.com/2011/07/04/spektrofotometri-sinar-tampak-visible/). (Diakses pada April 2015)
- Sitorus M, Ibrahim S, Nurdin H & Darwis D. (2009). *Transformation of Ricinoleic of Castor Oil into Linoleic Acid (Omega-6) and Conjugated Linoleic Acid*. *Indonesian Journal of Chemistry* 9 (2) : 278 – 284).
- Sitorus, M. dan Purba, J., (2006), *Dehidrasi Risinoleat Minyak jarak (Castor Oil) Dan Karakterisasinya Sebagai Usaha Pengolahan Minyak Jarak Untuk*

- Konsumsi*, Laporan Penelitian Dosen Muda Lembaga Penelitian UNIMED, Medan ; Jurnal Riset Kimia; 3 (2): 139 – 144
- Sitorus, M; S. Ibrahim; H. Nurdin dan D. Darwis, (2011), *Isomerasi Linoleat Minyak Jarak hasil Dehidrasi menjadi Asam Linoleat Terkonjugasi dan Pemisahannya dengan Kromatografi Kolom Fasa Diam Silika gel Terimpregnasi Perak Nitrat*. Jurnal Matematika dan Sains 16 ; Inpress.
- Skoog, Douglas A., Donald M. West, F. James Holler. (1991). *Fundamental of Analytical Chemistry. Seventh Edition*. New York: Saunders College Publishing.
- Sujatmaka. 1992. *Prospek Pasar dan Budidaya Jarak*. Jakarta : PT. Penebar Swadaya.
- Sulastri, Siti dan S. Kristianingrum., (2010), Berbagai Macam Senyawa Silika : Sintesis, Karakterisasi dan Pemanfaatan, *Prosiding Seminar Nasional Penelitian, Pendidikan dan Penerapan MIPA UNY*, : 8.
- Sykes, Peter. 1989. *A guidebook to mechanism in organic chemistry*. Longman Group Ltd : England.
- Thompson, R., (2008), *Industrial Inorganic Chemicals: Production and Uses*, Royal Society Chemistry
- Velleneuve P, Lago R, Barouh N & Barea B, (2005), *Production of Conjugated Linoleic Acid Isomers by Dehydration and Isomerization of Castor Bean Oil*. JAOCS 82: 261 – 270.
- Wisnu, A.Y., (2003), *Asam Linoleat Terkonjugasi, Nutrien "Ajaib" Yang Sarat Manfaat*, Departemen Teknologi Pangan Universitas Wangsa Manggala, : Yogyakarta.
- Yazid, Estien, (2005), *Kimia Fisika untuk Paramedis*. Andi : Yogyakarta.
- Yuruwecz, M. P, K. M. Morehouse, (2001), *Silver-Ion HPLC of Conjugated Linoleic Acid Isomers*, *Eur. J. Lipid Sci. Tech.*, 103, 609 -613.