



DAFTAR PUSTAKA

- Akbari, S., & Nour, A. H., 2018, Emulsion types, stability mechanisms and rheology: A review, *International Journal of Innovative Research and Scientific Studies (IJRSS)*
- Alhajj, M. J., Montero, N., Yarce, C. J., & Salamanca, C. H., 2020, Lecithins from Vegetable, Land, and Marine Animal Sources and Their Potential Applications for Cosmetic, Food, and Pharmaceutical Sectors. *Cosmetics*, 7(4), 87. <https://doi.org/10.3390/cosmetics7040087>
- Akbas, E., Soyler, U. B., & Oztop, M. H., 2019, Physicochemical and Antimicrobial Properties of Oleoresin Capsicum Nanoemulsions Formulated with Lecithin and Sucrose Monopalmitate, *Applied Biochemistry and Biotechnology*, 188(1), 54–71. <https://doi.org/10.1007/s12010-018-2901-5>
- Andersen, F., 2001, Final Report on the Safety Assessment of Lecithin and Hydrogenated Lecithin, *International Journal of Toxicology*, 20 (1_suppl), 21–45, <https://doi.org/10.1080/109158101750300937>
- Bae, D.-H., Shin, J.-S., Shin, G.-S., Jin, F.-L., & Park, S.-J., 2009, Effect of Lecithin on Dermal Safety of Nanoemulsion Prepared from Hydrogenated Lecithin and Silicone Oil, *Bulletin of the Korean Chemical Society*, 30(4), 821–824. <https://doi.org/10.5012/bkcs.2009.30.4.821>
- Barel, A. O., Paye, M., & Maibach, H. I. (Ed.), 2009, *Handbook of cosmetic science and technology* (3rd ed), Informa Healthcare.
- Benson, H. A. E., & Watkinson, A. C. (Ed.), 2012, Topical and Transdermal w/o Delivery, Dalam *Topical and Transdermal Drug Delivery* (hlm. i–xv). John Wiley & Sons, Inc. <https://doi.org/10.1002/9781118140505.fmatter>
- Bot, F., Cossuta, D., & O'Mahony, J. A., 2021, Inter-relationships between composition, physicochemical properties and functionality of lecithin ingredients, *Trends in Food Science & Technology*, 111, 261–270. <https://doi.org/10.1016/j.tifs.2021.02.028>
- Budai, L., Kaszás, N., Gróf, P., Lenti, K., Maghami, K., Antal, I., Klebovich, I., Petrikovics, I., & Budai, M., 2013, Liposomes for Topical Use: A Physico-Chemical Comparison of Vesicles Prepared from Egg or Soy Lecithin, *Scientia Pharmaceutica*, 81(4), 1151–1166. <https://doi.org/10.3797/scipharm.1305-11>
- Bueschelberger, H.-G., Tirok, S., Stoffels, I., & Schoeppe, A., 2014, Lecithins. Dalam V. Norn (Ed.), *Emulsifiers in Food Technology* (hlm. 21–60). John Wiley & Sons, Ltd. <https://doi.org/10.1002/9781118921265.ch2>
- Chiplunkar, P. P., & Pratap, A. P., 2017, Ultrasound Assisted Synthesis of Hydroxylated Soybean Lecithin from Crude Soybean Lecithin as an Emulsifier, *Journal of Oleo Science*, 66(10), 1101–1108. <https://doi.org/10.5650/jos.ess17090>
- Costa, R., & Santos, L., 2017, Delivery Systems for Cosmetics—from Manufacturing to The Skin of Natural Antioxidants, *Powder Technology*, 322, 40.



- Dima, C., & Dima, S., 2018, Water-In-Oil-In-Water Double Emulsions Loaded with Chlorogenic Acid: Release Mechanisms And Oxidative Stability, *Journal of Microencapsulation*, 35(6), 584–599. <https://doi.org/10.1080/02652048.2018.1559246>
- Djiobie Tchienou, G. E., Tsatsop Tsague, R. K., Mbam Pega, T. F., Bama, V., Bamseck, A., Dongmo Sokeng, S., & Ngassoum, M. B., 2018, Multi-Response Optimization in the Formulation of a Topical Cream from Natural Ingredients, *Cosmetics*, 5(1), 7. <https://doi.org/10.3390/cosmetics5010007>
- Dragicevic, N., Krajsnik, D., Milic, J., Fahr, A., & Maibach, H., 2019, Development Of Hydrophilic Gels Containing Coenzyme Q10-Loaded Liposomes: Characterization, Stability And Rheology Measurements, *Drug Development and Industrial Pharmacy*, 45(1), 43–54. <https://doi.org/10.1080/03639045.2018.1515220>
- European Commission, 2021, CosIng. The European Commission Database with Information on Cosmetic Substances and Ingredient. <https://ec.europa.eu/growth/tools-databases/cosing/index.cfm?fuseaction=search.results> diakses pada 20 November 2020 pukul 21:35 WIB.
- Gallarate, M., Chirio, D., Trotta, M., & Eugenia Carlotti, M., 2006, Deformable Liposomes as Topical Formulations Containing α -Tocopherol, *Journal of Dispersion Science and Technology*, 27(5), 703–713. <https://doi.org/10.1080/01932690600662588>
- Gooch, J. W. (Ed.), 2007, Dispersion, degree of. Dalam *Encyclopedic Dictionary of Polymers* (hlm. 313–313). Springer. https://doi.org/10.1007/978-0-387-30160-0_378
- Górecki, M., Kurek-Górecka, A., Sosada, M., Pasker, B., Pajak, M., & Fraś, P., 2015, The Optimization of the Oiling Bath Cosmetic Composition Containing Rapeseed Phospholipids and Grapeseed Oil by the Full Factorial Design, *Cosmetics*, 2(2), 127–135. <https://doi.org/10.3390/cosmetics2020127>
- Gozali, D., Abdasah, M., Subghan, A., & Lathiefah, S. A., 2009, *Formulasi Krim Pelembab Wajah yang Mengandung Tabir Surya Nanopartikel Zink Oksida Salut Silikon*. *Jurnal Farmaka*, 7(1), 37-47.
- Guo, F., Lin, M., Gu, Y., Zhao, X., & Hu, G., 2015, Preparation Of PEG-Modified Proanthocyanidin Liposome and Its Application In Cosmetics, *European Food Research and Technology*, 240(5), 1013–1021. <https://doi.org/10.1007/s00217-014-2405-7>
- Hayase, M., 2017, Chapter 10—Introduction to Cosmetic Materials, Dalam K. Sakamoto, R. Y. Lochhead, H. I. Maibach, & Y. Yamashita (Ed.), *Cosmetic Science and Technology* (hlm. 149–154), Elsevier, <https://doi.org/10.1016/B978-0-12-802005-0.00010-0>
- Jarzębski, M., Fathordobady, F., Guo, Y., Xu, M., Singh, A., Kitts, D. D., Kowalczewski, P. Ł., Jeżowski, P., & Pratap Singh, A., 2019, Pea Protein for Hempseed Oil Nanoemulsion Stabilization, *Molecules*, 24(23), 4288. <https://doi.org/10.3390/molecules24234288>



- Jo, Y.-J., Karbstein, H. P., & Schaaf, U. S. van der., 2019, Collagen Peptide-Loaded W1/O Single Emulsions and W1/O/W2 Double Emulsions: Influence Of Collagen Peptide And Salt Concentration, Dispersed Phase Fraction and Type of Hydrophilic Emulsifier on Droplet Stability and Encapsulation Efficiency, *Food & Function*, 10(6), 3312–3323. <https://doi.org/10.1039/C8FO02467G>
- Joshi, A., Paratkar, S. G., & Thorat, B. N., 2006, Modification of Lecithin by Physical, Chemical and Enzymatic Methods, *European Journal of Lipid Science and Technology*, 108(4), 363–373. <https://doi.org/10.1002/ejlt.200600016>
- Kale, S. N., & Deore, S. L., 2017, Emulsion Micro Emulsion and Nano Emulsion: A Review, *Systematic Reviews in Pharmacy*, 8(1), 9. <https://doi.org/10.5530/srp.2017.1.8>
- Kaur, C. D., & Saraf, S., 2011, Topical Vesicular Formulations of Curcuma Longa Extract on Recuperating The Ultraviolet Radiation-Damaged Skin: Vesicular Herbal Formulations Improving Skin Propertie., *Journal of Cosmetic Dermatology*, 10(4), 260–265. <https://doi.org/10.1111/j.1473-2165.2011.00586.x>
- Komaiko, J., Sastrosubroto, A., & McClements, D. J., 2015, Formation of Oil-in-Water Emulsions from Natural Emulsifiers Using Spontaneous Emulsification: Sunflower Phospholipids, *Journal of Agricultural and Food Chemistry*. <https://doi.org/10.1021/acs.jafc.5b03824>
- Laouini, A., Jaafar-Maalej, C., Limayem-Blouza, I., Sfar, S., Charcosset, C., & Fessi, H., 2012, Preparation, Characterization and Applications of Liposomes: State of The Art, *J. Colloid Sci. Biotechnol.*, 1(2), 147–168. <https://doi.org/10.1166/jcsb.2012.1020>
- Le, N. T. T., Cao, V. D., Nguyen, T. N. Q., Le, T. T. H., Tran, T. T., & Hoang Thi, T. T., 2019, Soy Lecithin-Derived Liposomal Delivery Systems: Surface Modification and Current Applications, *International Journal of Molecular Sciences*, 20(19). <https://doi.org/10.3390/ijms20194706>
- Letyagina, A. S., Es'kova, E. V., & Pletnev, M. Y., 2014, Preparation of Stable Direct Emulsions Stabilized with a System of Phospholipid Emulsifiers, *Russian Journal of Applied Chemistry*, 87(4), 485–490. <https://doi.org/10.1134/S10704272140400156>
- Loo, C., Basri, M., Ismail, R., Lau, H., Tejo, B., Kanthimathi, M., Hassan, H., & Choo, Y., 2013, Effect of Compositions in Nanostructured Lipid Carriers (NLC) on Skin Hydration and Occlusion, *International Journal of Nanomedicine*, 8, 13–22. <https://doi.org/10.2147/IJN.S35648>
- Lukic, M., Pantelic, I., & Savic, S., 2016, An Overview of Novel Surfactants for Formulation of Cosmetics with Certain Emphasis on Acidic Active Substances, *Tenside Surfactants Detergents*, 53(1), 7–19, <https://doi.org/10.3139/113.110405>
- M. Kaci, A. Belhaffef, S. Meziane, G. Dostert, P. Menu, E. Velot, S. Desobry, & E. Arab-Tehrany., 2018, Nanoemulsions and Topical Creams for The Safe and Effective Delivery of Lipophilic Antioxidant Coenzyme Q10, *ScienceDirect*. <https://doi.org/10.1016/j.colsurfb.2018.04.010>



- Ma, P., Zeng, Q., Tai, K., He, X., Yao, Y., Hong, X., & Yuan, F., 2018, Development of Stable Curcumin Nanoemulsions: Effects of Emulsifier Type and Surfactant-To-Oil Ratios, *Journal of Food Science and Technology*, 55(9), 3485–3497. <https://doi.org/10.1007/s13197-018-3273-0>
- Maier, C., Zeeb, B., & Weiss, J., 2014, Investigations Into Aggregate Formation with Oppositely Charged Oil-In-Water Emulsions at Different Ph Values, *Colloids and Surfaces B: Biointerfaces*, 117, 368–375. <https://doi.org/10.1016/j.colsurfb.2014.03.012>
- Muhammad, M. T., & Khan, M. N., 2018, Eco-friendly, biodegradable natural surfactant (Acacia Concinna): An alternative to the synthetic surfactants. *Journal of Cleaner Production*, 188, 678–685. <https://doi.org/10.1016/j.jclepro.2018.04.016>
- Muntaha, S.-T., & Khan, M. N., 2015, Natural Surfactant Extracted from Sapindus Mukurossi as an Eco-Friendly Alternate to Synthetic Surfactant – a Dye Surfactant Interaction Study, *Journal of Cleaner Production*, 93, 145–150, <https://doi.org/10.1016/j.jclepro.2015.01.023>
- Nurahmanto, D., Mahrifah, I. R., Azis, R. F. N. I., & Rosyidi, V. A., 2017, Formulasi Sediaan Gel Dispersi Padat Ibuprofen: Studi Gelling Agent dan Senyawa Peningkat Penetrasi, *Jurnal Ilmiah Manuntung*, 3(1), 96. <https://doi.org/10.51352/jim.v3i1.97>
- Ozturk, B., Argin, S., Ozilgen, M., & McClements, D. J., 2014, Formation and Stabilization of Nanoemulsion-Based Vitamin E Delivery Systems Using Natural Surfactants: Quillaja Saponin and Lecithin, *Journal of Food Engineering*, 142, 57–63. <https://doi.org/10.1016/j.jfoodeng.2014.06.015>
- Pany, A., Klang, V., Peinhopf, C., Zecevic, A., Ruthofer, J., & Valenta, C., 2019, Hair Removal and Bioavailability of Chemicals: Effect of Physicochemical Properties of Drugs and Surfactants on Skin Permeation Ex Vivo, *International Journal of Pharmaceutics*, 567, 118477. <https://doi.org/10.1016/j.ijpharm.2019.118477>
- Palacios, L., & Wang, T., 2005, Egg yolk lecithin fractionation and characterization. *AOCS, Journal of the American Oil Chemists' Society*, 82, 571–578. <https://doi.org/10.1007/s11746-005-1111-4>
- Pardeike, J., Hommoss, A., & Müller, R. H., 2009, Lipid Nanoparticles (SLN, NLC) in Cosmetic and Pharmaceutical Dermal Products, *International Journal of Pharmaceutics*, 366(1), 170–184. <https://doi.org/10.1016/j.ijpharm.2008.10.003>
- Peraturan Badan Pengawas Obat dan Makanan Nomor 23 Tahun 2019 tentang Persyaratan Teknis Bahan Kosmetika, Pub. L. No. 23, 2.
- Pizzol, C. D., Filippin-Monteiro, F. B., Restrepo, J. A. S., Pittella, F., Silva, A. H., de Souza, P. A., de Campos, A. M., & Creczynski-Pasa, T. B., 2014, Influence of Surfactant and Lipid Type on the Physicochemical Properties and Biocompatibility of Solid Lipid Nanoparticles, *International Journal of Environmental Research and Public Health*, 11(8), 8581–8596. <https://doi.org/10.3390/ijerph110808581>



- Raymond C Rowe, Paul J Sheskey, dan Marian E Quinn., 2019. *Handbook of Pharmaceutical Excipients*. Sixth Edition.
- Rieger, M., 2017, *Surfactants in Cosmetics*, Routledge.
- Sahale, F. F., Metz, H., Wohlrab, J., & Neubert, R. H. H., 2013, Lecithin-Based Microemulsions for Targeted Delivery of Ceramide AP into the Stratum Corneum: Formulation, Characterizations, and In Vitro Release and Penetration Studies, *Pharmaceutical Research*, 30(2), 538–551. <https://doi.org/10.1007/s11095-012-0899-x>
- Salminen, H., Stübler, A.-S., & Weiss, J., 2020, Preparation, Characterization, and Physical Stability of Cocoa Butter and Tristearin Nanoparticles Containing B-Carotene, *European Food Research and Technology*, 246(3), 599–608. <https://doi.org/10.1007/s00217-020-03431-0>
- Setiadi, & Hidayah, N., 2018, The Effect of Papain Enzyme Dosage on the Modification of Egg-yolk Lecithin Emulsifier Product through Enzymatic Hydrolysis Reaction, *IJT Tech - International Journal of Technology*, <https://ijtech.eng.ui.ac.id/article/view/1073>
- Sonneville-Aubrun, O., Simonnet, J.-T., & L'Alloret, F., 2004, Nanoemulsions: a New Vehicle for Skincare Products, *Advances in Colloid and Interface Science*, 108–109, 145–149, <https://doi.org/10.1016/j.cis.2003.10.026>
- Sugiyati, R., & Djajadisastra, J., 2015, Formulasi dan Uji Penetrasi In Vitro Sediaan Gel Transfersom Mengandung Kofein sebagai Antiselulit, *Jurnal Ilmu Kefarmasian Indonesia*, 13, 6.
- Tabandeh, H., & Mortazavi, S. A., 2013, An Investigation into Some Effective Factors on Encapsulation Efficiency of Alpha-Tocopherol in MLVs and the Release Profile from the Corresponding Liposomal Gel, *Iranian Journal of Pharmaceutical Research : IJPR*, 12(Suppl), 21–30.
- van Hoogeveest, P., & Fahr, A., 2019, Phospholipids in Cosmetic Carriers, Dalam J. Cornier, C. M. Keck, & M. Van de Voorde (Ed.), *Nanocosmetics: From Ideas to Products* (hlm. 95–140), Springer International Publishing, https://doi.org/10.1007/978-3-030-16573-4_6
- van Nieuwenhuyzen, W., 2010, Lecithin and Other Phospholipids, *Surfactants from Renewable Resources*, 191–212. <https://doi.org/10.1002/9780470686607.ch10>
- van Nieuwenhuyzen, W., 2015, 9—Production and Utilization of Natural Phospholipids, Dalam M. U. Ahmad & X. Xu (Ed.), *Polar Lipids* (hlm. 245–276), Elsevier, <https://doi.org/10.1016/B978-1-63067-044-3.50013-3>
- van Nieuwenhuyzen, W., & Tomás, M. C., 2008, Update on Vegetable Lecithin and Phospholipid Technologies. *European Journal of Lipid Science and Technology*, 110(5), 472–486. <https://doi.org/10.1002/ejlt.200800041>
- Vater, C., Adamovic, A., Ruttensteiner, L., Steiner, K., Tajpara, P., Klang, V., Elbe-Bürger, A., Wirth, M., & Valenta, C., 2019, Cytotoxicity of Lecithin-Based Nanoemulsions on Human Skin Cells and Ex Vivo Skin Permeation: Comparison to Conventional Surfactant Types, *International Journal of Pharmaceutics*, 566, 383–390, <https://doi.org/10.1016/j.ijpharm.2019.05.078>



- Vater, C., Hlawaty, V., Werdenits, P., Cichoń, M. A., Klang, V., Elbe-Bürger, A., Wirth, M., & Valenta, C., 2020, Effects of Lecithin-Based Nanoemulsions on Skin: Short-Time Cytotoxicity MTT and Brdu Studies, Skin Penetration of Surfactants and Additives And The Delivery of Curcumin, *International Journal of Pharmaceutics*, 580, 119209. <https://doi.org/10.1016/j.ijpharm.2020.119209>
- Venkataramani, D., Tsulaia, A., & Amin, S., 2020, Fundamentals and Applications of Particle Stabilized Emulsions in Cosmetic Formulations, *Advances in Colloid and Interface Science*, 283, 102234, <https://doi.org/10.1016/j.cis.2020.102234>
- Wenck, H., & Wittern, K.-P., 2009, Cosmetics, *Technology Guide*, 450–453, https://doi.org/10.1007/978-3-540-88546-7_85
- Wilbur Johnson, J., Bergfeld, W. F., Belsito, D. V., Hill, R. A., Klaassen, C. D., Liebler, D. C., James G. Marks, J., Shank, R. C., Slaga, T. J., Snyder, P. W., Gill, L. J., & Heldreth, B., 2020, Safety Assessment of Lecithin and Other Phosphoglycerides as Used in Cosmetics, *International Journal of Toxicology*, <https://doi.org/10.1177/1091581820953123>
- Yanhendri, & Yenny, S. W., 2012, Berbagai Bentuk Sediaan Topikal dalam Dermatologi, *Cermin Dunia Kedokteran*, 39(6), 8.
- Zaidi, Z., & Lanigan, S. W., 2010, Skin: Structure and Function, Dalam S. W. Lanigan & Z. Zaidi, *Dermatology in Clinical Practice* (hlm. 1–15), Springer London, https://doi.org/10.1007/978-1-84882-862-9_1
- Zhou, H., Yue, Y., Liu, G., Li, Y., Zhang, J., Gong, Q., Yan, Z., & Duan, M., 2009, Preparation and Characterization of a Lecithin Nanoemulsion as a Topical Delivery System, *Nanoscale Research Letters*, 5(1), 224. <https://doi.org/10.1007/s11671-009-9469-5>