

## DAFTAR PUSTAKA

- Abdassah, M. (2017). Nanopartikel dengan gelasi ionik. *Jurnal Farmaka*, 15(1), 45–52.
- Agen, D. A. N. A. (2022). Pengaruh Pengembangan Self-Nanoemulsifying Drug Delivery System Terhadap Disolusi ., 5(1), 101–111.
- Andrade Santana, M. H. (2015). Self-Emulsifying Drug Delivery Systems (SEDDS) in Pharmaceutical Development. *Journal of Advanced Chemical Engineering*, 5(3). <https://doi.org/10.4172/2090-4568.1000130>
- Anisah, N., Ikhda, C., & Hamidah, N. (2021). Formulasi Dan Uji Mutu Fisik Ekstrak Kayu Manis ( *Cinnamomum Verum* ) Sebagai Body Scrub Antibakteri. 2007, 319–325.
- Apriliyani, B. K., Sani Ega Priani, & Aulia Fikri Hidayat. (2021). Rancangan Pengembangan Sediaan Nanospraygel in situ Mengandung Minyak Kulit Batang Kayu Manis (*Cinnamomum burmannii* (Nees & T. Nees) Blume) untuk Pengobatan Kandidiasis Oral. *Jurnal Riset Farmasi*, 1(1), 64–72. <https://doi.org/10.29313/jrf.v1i1.187>
- Aprilya, A., Rahmadevi, R., & Meirista, I. (2021). Formulasi Nanoemulsi dengan Bahan Dasar Minyak Ikan (*Oleum Iecoris Aselli*). *Jurnal Sains Dan Kesehatan*, 3(3), 370–375. <https://doi.org/10.25026/jsk.v3i3.309>
- Chung, E. J., Leon, L., & Rinaldi, C. (2019). Nanoparticles for biomedical applications: Fundamental concepts, biological interactions and clinical applications. In *Nanoparticles for Biomedical Applications: Fundamental Concepts, Biological Interactions and Clinical Applications*. <https://doi.org/10.1016/C2017-0-04750-X>
- Dachriyanus, D. (2017). Analisis Struktur Senyawa Organik Secara Spektroskopi. In *Analisis Struktur Senyawa Organik Secara Spektroskopi*. <https://doi.org/10.25077/car.3.1>
- Divya, N., & Vijaya Anand, A. (2015). In vitro antioxidant activity of ethanolic extract of *Terminalia catappa* leaves. *Asian Journal of Pharmaceutical and Clinical Research*, 8(5), 269–271.
- Handoyo Sahumena, M., Ryan Prasetya Putrawansya, L., Nafisah Tendri Adjeng, A., & Aswan, M. (2019). The Self-nanoemulsifying Drug Delivery System Formulation of Mefenamic Acid. *Asian Journal of Pharmaceutics*, 13(4), 287. <https://doi.org/https://dx.doi.org/10.22377/ajp.v13i04.3399>
- Her, C., Venier-Julienne, M.-C., & Roger, E. (2018). Improvement of Curcumin Bioavailability for Medical Applications. *Medicinal & Aromatic Plants*, 07(06). <https://doi.org/10.4172/2167-0412.1000326>
- Huliselan, Y. M., Runtuwene, M. R. J., & Wewengkang, D. S. (2015). Aktivitas Antioksidan Ekstrak Etanol, Etil Asetat, Dan N-Heksan Dari Daun Sesewanua (*Clerodendron squamatum* Vahl.). *Pharmacon*, 4(3), 155–163.

- Indratmoko, S., Nurmayadah, H., & Nurwahidah, A. T. (2019). Pengembangan Formula Krim Nanosqualene Cream Formula Development With Tween 80 and PEG 400 Combinations. *Borneo Journal of Phamascientech*, 03(02), 160–168.
- Journals, H., & Article, R. (2021). *A Review on Self Micro Emulsifying Drug Delivery System (SMEDDS)*. 1.
- Jusnita, N., & Syurya, W. (2019). *Karakterisasi Nanoemulsi Ekstrak Daun Kelor (Moringa oleifera Lamk .)*. 6(1), 16–24.
- Kanwal, T., Saifullah, S., Rehman, J. ur, Kawish, M., Razzak, A., Maharjan, R., Imran, M., Ali, I., Roome, T., Simjee, S. U., & Shah, M. R. (2021). Design of absorption enhancer containing self-nanoemulsifying drug delivery system (SNEDDS) for curcumin improved anti-cancer activity and oral bioavailability. *Journal of Molecular Liquids*, 324, 114774. <https://doi.org/10.1016/j.molliq.2020.114774>
- Kumar, M., Bishnoi, R. S., Shukla, A. K., & Jain, C. P. (2019). Techniques for formulation of nanoemulsion drug delivery system: A review. *Preventive Nutrition and Food Science*, 24(3), 225–234. <https://doi.org/10.3746/pnf.2019.24.3.225>
- Larasati, S. P., & Jusnita, N. (2020). Nanoemulsion Formulation Of Turmeric Extract (*Curcuma longa* L.) As an Antioxidant. *Journal Of Pharmaceutical and Sciences (JPS)*, 3(1), 33–41.
- Liu, C., Lv, L., Guo, W., Mo, L., Huang, Y., Li, G., & Huang, X. (2018). Self-Nanoemulsifying Drug Delivery System of Tetrandrine for Improved Bioavailability: Physicochemical Characterization and Pharmacokinetic Study. *BioMed Research International*, 2018. <https://doi.org/10.1155/2018/6763057>
- Maharani, A. I., Riskierdi, F., Febriani, I., Kurnia, K. A., Rahman, N. A., Ilahi, N. F., & Farma, S. A. (2021). Peran Antioksidan Alami Berbahan Dasar Pangan Lokal dalam Mencegah Efek Radikal Bebas. *Prosiding Seminar Nasional Bio*, 1(2), 390–399.
- Maharini, Rismarika, & Yusnelti. (2020). Pengaruh konsentrasi PEG 400 sebagai kosurfaktan pada formulasi nanoemulsi minyak kepayang. *Chempublish Journal*, 5(1), 1–14. <https://doi.org/10.22437/chp.v5i1.7604>
- Mareta, C. A. (2020). Efektifitas Pegagan (*Centella Asiatica*) sebagai Antioksidan. *Jurnal Medika Hutama*, 2(1), 390–394. <http://jurnalmedikahutama.com>
- Martien, R., Adhyatmika, Irianto, I. D. K., Farida, V., & Sari, D. P. (2012). Technology Developments Nanoparticles as Drug. *Majalah Farmaseutik*, 8(1), 133–144.
- Muhammad Nur Fauzi, Joko Santoso, & Aldi Budi Riyanta. (2021). Uji Kualitatif dan Uji Aktivitas Antioksidan Ekstrak Etanolik Buah Maja (*Aegle Marmelos* (L.)Correa) dengan Metode DPPH. *Jurnal Riset Farmasi*, 1(1), 1–8. <https://doi.org/10.29313/jrf.v1i1.25>

- Mulangri, D. A. K., Budiarti, A., & Saputri, E. N. (2017). Aktivitas Antioksidan Fraksi Dietileter Buah Mangga Arumanis (*Mangifera indica* L.) dengan Metode DPPH. *Jurnal Pharmascience*, 4(1). <https://doi.org/10.20527/jps.v4i1.5760>
- Noval, & Malahayati, S. (2016). Teknologi Penghantaran Obat Terkendali. *Pena Persada*, April, 5–24.
- Parwata, M. O. A. (2016). Antioksidan. *Kimia Terapan Program Pascasarjana Universitas Udayana*, April, 1–54.
- Phaniendra, A., Jestadi, D. B., & Periyasamy, L. (2015). Free Radicals: Properties, Sources, Targets, and Their Implication in Various Diseases. *Indian Journal of Clinical Biochemistry*, 30(1), 11–26. <https://doi.org/10.1007/s12291-014-0446-0>
- Priani, S. E. (2021). Kajian Pengembangan Sediaan Self Nanoemulsifying Drug Delivery System ( SNEDDS ) untuk Penghantaran Agen Antidiabetik Oral Diabetes mellitus adalah. *Jurnal Mandala Pharmacon Indonesia*, 7(2). <http://jurnal-pharmaconmw.com/jmpi/index.php/jmpi/article/view/86>
- Putri, A. I., Sundaryono, A., & Chandra, I. N. (2019). Karakterisasi Nanopartikel Kitosan Ekstrak Daun Ubijalar (*Ipomoea Batatas* L.) Menggunakan Metode Gelasi Ionik. *Alotrop*, 2(2). <https://doi.org/10.33369/atp.v2i2.7561>
- Qomariyah, L. (2021). Studi Hidrodinamika Pada Flame Spray Dryer ( Fsd ) Dengan Menggunakan Computational Fluid Dynamic Study of Hydrodynamic in Flame Spray Dryer ( Fsd ) Us- Ing Computational Fluid Dynamic ( Cfd ). *Seminar Nasional Teknik Kimia Soebardjo Brotohardjono XVII*, 1–4.
- Rahmat, D., & Salim, S. (2019). Uji Mukoadhesif Nanopartikel Crude Bromelin dari Perasan Bonggol Nanas Berbasis Hidroksi Propil Selulosa-Sisteamin. 4(Suppl 1), 113–118.
- Ramaswamy, S., Dwarampudi, L. P., Kadiyala, M., Kuppaswamy, G., Veera Venkata Satyanarayana Reddy, K., Kumar, C. K. A., & Paranjothy, M. (2017). Formulation and characterization of chitosan encapsulated phytoconstituents of curcumin and rutin nanoparticles. *International Journal of Biological Macromolecules*, 104, 1807–1812. <https://doi.org/10.1016/j.ijbiomac.2017.06.112>
- Raudhotul, S., Ifaya, M., Pusmarani, J., & Nurhikma, E. (2018). Uji Aktivitas Antioksidan Ekstrak Metanol Kulit Pisang Raja ( *Musa Paradisiaca sapientum* ) Dengan Metode DPPH ( 2 , 2-Difenil-1-Pikrilhidrazil ). 4(1).
- Rezkita, F., Wibawa, K. G. P., & Nugraha, A. P. (2020). Curcumin loaded chitosan nanoparticle for accelerating the post extraction wound healing in diabetes mellitus patient: A review. In *Research Journal of Pharmacy and Technology* (Vol. 13, Issue 2). <https://doi.org/10.5958/0974-360X.2020.00191.2>
- Sari, I. Y., & Putra, I. A. (2018). Uji aktivitas antioksidan daun akasia(*acacia auliculimoris*). *Sains,Fakultas Sains Dan Teknologi*, 2(1), 21–25.

- Sari, N. W., & Fajri, M. Y. (2018). Analisis Fitokimia dan Gugus Fungsi Dari Ekstrak Etanol Pisang Goroho Merah (*Musa Acuminata* (L)). *Indonesian Journal of Biotechnology and Biodiversity*, 2(1), 30–34.
- Savale, S. K. (2015). a Review - Self Nanoemulsifying Drug Delivery System (Snedds). *International Journal of Research in Pharmaceutical and Nano Sciences*, 4(6).
- Scuto, M. C., Mancuso, C., Tomasello, B., Ontario, M. L., Cavallaro, A., Frasca, F., Maiolino, L., Salinaro, A. T., Calabrese, E. J., & Calabrese, V. (2019). Curcumin, hormesis and the nervous system. In *Nutrients* (Vol. 11, Issue 10). <https://doi.org/10.3390/nu11102417>
- Shah, H., Jain, A., Laghate, G., & Prabhudesai, D. (2020). Pharmaceutical excipients. *Remington: The Science and Practice of Pharmacy*, 633–643. <https://doi.org/10.1016/B978-0-12-820007-0.00032-5>
- Singh, H., Nathani, S., Singh, N., Roy, P., Paul, S., Sohal, H. S., & Jain, S. K. (2019). Development and characterization of Solid-SNEDDS formulation of DHA using hydrophilic carrier with improved shelf life, oxidative stability and therapeutic activity. *Journal of Drug Delivery Science and Technology*, 54. <https://doi.org/10.1016/j.jddst.2019.101326>
- Singh, T. G., & Sharma, N. (2016a). Chapter 7. Nanobiomaterials in cosmetics: current status and future prospects. In *Nanobiomaterials in Galenic Formulations and Cosmetics*. Elsevier Inc. <https://doi.org/10.1016/B978-0-323-42868-2.00007-3>
- Singh, T. G., & Sharma, N. (2016b). Nanobiomaterials in cosmetics: Current status and future prospects. In *Nanobiomaterials in Galenic Formulations and Cosmetics: Applications of Nanobiomaterials*. <https://doi.org/10.1016/B978-0-323-42868-2.00007-3>
- Stephanie, D. A., Marfuatun, M., & Arifin, I. (2021). Synthesis and Characterization of Nata de Coco Based Edible film with the Addition of Cinnamon Oil. *CHEMICA: Jurnal Teknik Kimia*, 8(1), 8. <https://doi.org/10.26555/chemica.v8i1.17746>
- Suena, N. M. D. S., Suradnyana, I. G. M., & Juanita, R. A. (2021). Formulasi Dan Uji Aktivitas Antioksidan Granul Effervescent Dari Kombinasi Ekstrak Kunyit Putih (*Curcuma Zedoaria*) Dan Kunyit Kuning (*Curcuma longa* L.). *Jurnal Ilmiah Medicamento*, 7(1), 32–40. <https://doi.org/10.36733/medicamento.v7i1.1498>
- Suhendra, L., Wrasati, L. P., Pertanian, F. T., Udayana, U., & Bukit, K. (2020). Pengaruh Variasi Nilai *Hydrophylic-lipophylic balance* dan Suhu terhadap Karakteristik Sediaan Krim. 8(2), 189–199.
- Swain, S., Patra, C. N., & Rao, M. E. (2016). Self-emulsifying drug delivery systems. *Pharmaceutical Drug Delivery Systems and Vehicles*, 1–82.
- Syahbani, A., Aprilia, W., Wibowo, P., Farinda, A. A., & Abdillah, H. (2018). Kitosan Terhadap Karakterisasi Nanopartikel Kurkumin Dari Ekstrak

Temulawak ( *Curcuma xanthorrhiza*. *Pemakalah Paralel*, 604–610.

- Taurina, W., Sari, R., Hafinur, U. C., Wahdaningsih, S., & Isnindar. (2017). Optimasi Kecepatan Dan Lama Pengadukan Terhadap Ukuran Nanopartikel Kitosan-Ekstrak Etanol 70 % Kulit Jeruk Siam ( *Citrus Nobilis L . Var Microcarpa* ) Optimization Of Stirring Speed And Stirring Time Toward. *Traditional Medicine Journal*, 22(1), 17–19.
- Thakur, A., Walia, M. K., & Kumar, S. L. H. (2013). Pharmacophore Nanoemulsion In Enhancement Of Bioavailability Of Poorly. *Pharmacophore*, 4(1).
- Thermo, N. (2015). Introduction to FTIR Spectrometry. *Renewable and Sustainable Energy Reviews*, 50.
- Tomeh, M. A., Hadianamrei, R., & Zhao, X. (2019). A review of curcumin and its derivatives as anticancer agents. *International Journal of Molecular Sciences*, 20(5). <https://doi.org/10.3390/ijms20051033>
- Tyagi, P., Singh, M., Kumari, H., Kumari, A., & Mukhopadhyay, K. (2015). Bactericidal activity of curcumin I is associated with damaging of bacterial membrane. *PLoS ONE*, 10(3), 1–15. <https://doi.org/10.1371/journal.pone.0121313>
- Utami, T. M., Wulandari, W. T., & Tuslinah, L. (2022). Karakteristik Nanopartikel Kurkumin dengan Penambahan Eudragit Menggunakan Metode Gelasi Ionik. *Prosiding Seminar Nasional Diseminasi Hasil Penelitian Program Studi SI Farmasi*, 2(1), 244–250. <https://ejurnal.universitassbth.ac.id/index.php/PSNDP/article/view/986>
- Windy, Y. M. (n.d.). *Karakterisasi Dan Formulasi Nanopartikel Ekstrak Tanaman Bundung ( Actinoscirpus Grossus ) Dengan Variasi Konsentrasi Basis Kitosan Dan Na-Tpp Menggunakan Metode Gelasi Ionik Characterization And Formulation Of Nanoparticles Extract Of Bundung Plant ( Act.*
- Wirasti, Rahmatullah, S., Slamet, Permadi, Y. W., & Agmarina, S. N. (2021). Pengujian Karakter Nanopartikel Metode Gelasi Ionik Ekstrak dan Tablet Daun Afrika (*Vernonia amygdalina Del.*). *Jurnal Wiyata*, 8(2), 147–151.
- Yunilawati, R., Handayani, W., Rahmi, D., Aminah, A., & Imawan, C. (2021). Komposisi Kimia, Aktivitas Antibakteri, Dan Potensi Sebagai Kemasan Aktif Beberapa Minyak Atsiri Dari Tanaman Rempah Indonesia. *Jurnal Kimia Dan Kemasan*, 43(1), 12. <https://doi.org/10.24817/jkk.v43i1.6704>