



DAFTAR PUSTAKA

- Agoes, G., 2012, *Sediaan Farmasi Likuida-Semisolida*, Edisi 7, 154-160, ITB, Bandung.
- Ali, S.M., & Yosipovitch, G., 2013, Skin pH: From Basic Science to Basic Skin Care, *Acta Derm Venereol*, **93**, 261-267.
- Allen, L. V., 2002, *The Art, Science, and technology of Pharmaceutical Compounding*, 301, 309, American Pharmaceutical Association, Washington DC.
- Anderson, M.J., Whitcomb, P.J., 1996, Optimize your process-optimization effects, *Chem. Eng. Prog.*, 92, 51–60.
- Anggraeni, Y., Hendradi, E., & Purwanti, T., 2012, Karakteristik Sediaan dan Pelepasan Natrium Diklofenak dalam Sistem Niosom dengan Basis Gel Carbomer 940, *PharmaScientia*, **1**(1), 1-10.
- Ansel, H.C., 1989, *Pengantar Bentuk Sediaan Farmasi*, diterjemahkan oleh Farida Ibrahim, Asmanizar, Iis Aisyah, Edisi Keempat, UI Press, Jakarta.
- Armstrong, N.A., & James, K.C., 1996, *Pharmaceutical Experimental Design and Interpretation*, 205-222, Taylor and Francis, London.
- Arumsari, K., 2015, Karakteristik Gelatin Kulit Ikan Tuna (*Thunnus albacores*) dan Aplikasinya untuk Nanoenkapsulasi Vitamin C, *Tesis*, Universitas Gadjah Mada.
- Ariyani, S.B., dan Supriyatna, N., 2013, Perbandingan Karbopol dan Karboksimetil Selulosa sebagai Pengental pada Pembuatan Bioetanol, *Gelbiopropal Industri*, **4**(2), 59-64.
- Azimi, B., Parviz, N., Mohammad, R., & Sharab, A., 2014, Producing Gelatin Nanoparticles as Delivery System for Bovine Serum Albumin, *Iranian Biomedical Journal.*, **18** (1), 34-40.
- Bakker, P., Van., D., Grooskens, V., & Wieringa, N., 1990, Dermatological Preparations for the Tropic, *Cip-Gegevers Koninklijke Bibliotheek*, 174-183.
- Balakrishnan, K.P., & Narayanasamy, N., 2011, Botanicals as Sunscreens: Their Role in the Prevention of Photoaging and Skin Care, *International Journal Research in Cosmetic Science*, **1**(1), 1-12.
- Balsam, M.S., & Sagarin, E., 1972, *Cosmetics: Science and Technology*, 2nd Ed., Volume 1-3, Interscience Publishers Inc., New York.
- Bolton, S., & Bon, C., 1997, *Pharmaceutical Statistic, Practical and Clinical Applications*, 3rd Edition, Marcell Dekker Inc., New York.
- Buchan B., Kay, G., Heneghan, A., Matthews, K.H., & Cairns, D., 2010, Gel Formulations for Treatment of the Ophthalmic Complications in Cystinosis, *Int. J. Pharm.*, **392**(1-2), 192-197.
- Burns, T., Breathnach, S., Cox, N., & Griffiths., C., 2013, *Rook's Textbook of Dermatology*, 8th Ed., Wiley-Blackwell Publishing, United Kingdom.
- Chang, J.H., Lee., K.C., & Choi, H.J., 2004, Radiographic Contrast Study of the Upper Gastrointestinal Tract of Eight Dogs Using Carboxymethyl-cellulose Mixed with a Low Concentration of Barium Sulphate, *Vet. Rec.*, **154**(7), 201-204.
- Chien, Y.W., 1992, Novel Drug Delivery System, 2nd ed., 173, Marcel Dekker Inc, New York.



- Chisvert, A., & Salvador, A., 2007, UV Filters in Sunscreens and Other Cosmetics, Regulatory Aspects and Analytical Methods, In A. Salvador & A. Chisvert Eds., *Analysis of Cosmetic Products*, Elsevier, 83-120.
- Cumpelik, B.M., 1972, Analytical Procedures and Evaluation of Sunscreen, *Journal of the Society of Cosmetic Chemists*, **23** (6), 333-345.
- DepKes RI, 1995, *Farmakope Indonesia*, Edisi Keempat, Kementerian Kesehatan Republik Indonesia, Jakarta.
- Dewi, R., Anwar, E., & Yunita, K.S., 2014, Uji Stabilitas Fisik Formula Krim yang Mengandung Ekstrak Kacang Kedelai (*Glycine max*), *Pharm. Sci. Res.*, **1**(3), 194-208.
- Donovan, M.D., & Flanagan, D.R., 1996, Bioavailability of Disperse Dosage Forms, cit. Liebermann, H.A., Lachman, L., Schwartz, J.B., *Pharmaceutical Dosage Forms: Disperse System*, 2nd Ed., **2**, 316, Marcell Dekker Inc., New York.
- Draelos, Z.D., & Thaman, L.A., 2006, Cosmetic Formulation of Skin Care Products, **75**, 135-137, 157-161, Taylor and Francis Group, New York.
- Erawati, T., Ratri, W., Hilmah, & Rosita, N., 2013, Pengaruh Formulasi Terhadap Efektivitas Anti Mikroba Ekstrak Etanol 70% Daun *Cassia alata Linn* pada *Candida albicans*, *Pharma Scientia*, **2** (1), 12-18.
- Eryanti, Y., Zamri, A., Jasril, dan Rahmita, 2010, Sintesis Turunan 2`-Hidroksikalkon melalui Kondensasi Claisen-Schmidt dan Uji Aktivitasnya sebagai Antimikroba, *J. Natur. Ind.*, **12**(2), 223-227.
- Faharvian, A.D., 2016, Optimasi Formula Gel Tetrahidropentagamavunon-0 (Thpgv-0) dengan Kombinasi Basis Karbomer dan CMC-Na Menggunakan Metode *Simplex Lattice Design*, Skripsi, Fakultas Farmasi UGM.
- Florence, A.T., and Attwood, D., 1998, *Physicochemical Principles of Pharmacy*, Edisi 3rd. MacMillan Press Ltd, Hounds mills
- Garg, A., Aggarwal, D., Garg, S., & Singla, A.K., 2002, *Spreading of Semisolid Formulations an Update*, <https://elibrary.ru/item.asp?id=6294411>, 27 Desember 2017.
- Goskonda, S.R., 2009, Triethanolamin, dalam Rowe, R.C., Shesky, P.J., & Owe, S.J., 2009, *Handbook of Pharmaceutical Excipient*, 6th Ed, Pharmaceutical Press. Inc, London.
- Helms, R.A., Quan, D.J., Herfindal, E.T., Gourley, D.R., 2008, *Textbook of Therapeutics: Drug and Disease Management*, 8th Ed., 221-222, Lippincott Williams & Wilkins, USA.
- James, W.D., Berger, T.G., and Elston, D.M., 2006, *Andrews' Diseases of the Skin: Clinical Dermatology*, 10th Edition, Elsevier Saunders, Philadelphia.
- Jansen, R., Osterwalder, U., Wang, S.Q., Burnett, M., Lim, H.W., 2013, Photoprotection Part II. Sunscreen: Development, Efficacy, and Controversies, *J. Am. Acad. Dermatol.*, **69**, 867.
- Jones, A.E., 2000, A Spectroscopic Study of Sunscreens, *Tesis*, Durham University, United Kingdom.
- Jones, D.S., Bruschi, M.L., Panzeri, H., Gremiao, M.P.D., Freits, O., & Lara, E.H.G., 2007, Semisolid Systems Containing Propolis For The Treatment of Periodontal Disease: In Vitro Release Kinetics, *Journal of Pharmaceutical Science*, **96** (8), 2074-2089.



- Juzeneine, A., & Moan, J., 2012, Beneficial Effects of UV Radiation Other Than Via Vitamin D Production, *Dermatoendocrinology*, **4** (2), 109-117.
- Kelessidis, V. C., Poulakakis, E., Chatzistamou, V., 2011, Use of Carbopol 980 and carboxymethyl cellulose polymers as rheology modifiers of sodium-bentonite water dispersions, *Applied Clay Science*, **54**(1), 63-69.
- Koswara, S., 2009, *Teknologi Pembuatan Permen*, Ebookpangan.com, diakses pada 27 Desember 2017.
- Kuncari, E.S., Iskandarsyah, dan Praptiwi, 2014, Evaluasi, uji stabilitas fisik dan sineresis sediaan gel yang mengandung minoksidil, apigenin, dan perasan herba seledri (*Apium graveolens L.*), *Buletin Penelitian Kesehatan*, **42**(4), 213-222.
- Lieberman, A. H., Rieger, M.M., dan Bunker S.G., 1998, *Pharmaceutical Dosage Forms: Disperse System*, 2 nd Ed., Revised and Expanded, 3, 265-267, 272-273, Marcell Dekker, Inc., New York.
- Latimer, G. (editor), 2012, *Official Methods of Analysis of AOAC International*, 19th Edition, AOAC International, Gaithersburg Md.
- Loden, M., 2009, *Hydrating Substance in Handbook of Cosmetic Science and Technology*, 3rd Edition, 107, Informa Healthcare USA, New York.
- Lund, W., 1994, *The Pharmaceutical Codex: Principles and Practice of Pharmaceutics*, 12th Edition, Pharmaceutical Press, London.
- Mandge, S., Singh, H.P., Gupta, S.D., & Morrthy, N.S.H.N., 2007, Synthesis and Characterization of Some Chalcone Derivatives, *Trends Appl. Sci. Res.*, **2**, 52-56.
- Mansur, J.S., Breder, M.N.R., Mansur, M.C.A., Azulay, R.D., 1986, Determination of Sun Protection Factor for Spectrophotometry, *An. Bras. Dermatol.* Rio de Janeiro, **61**, 121-124.
- Marchaban, Fudholi, A., Sulaiman, T.N.S., Mufrod, Martin, R., Bestari, A.N., 2016, *Seri Buku Petunjuk Praktikum Teknologi Farmasi: Teknologi Formulasi Sediaan Cair Semi Padat*, Laboratorium Teknologi Farmasi Fakultas Farmasi UGM, Yogyakarta.
- Martin, A.J, Swarbrick, dan Cammarata, A., 1993, *Farmasi Fisik*, Edisi Ketiga, Jilid kedua, UI Press, Jakarta.
- Martinez, R.M., Pinho-Ribeiro, F.A., Vale, D.L., Steffen, V.S., Vicentini, F.T.M.C., Vignoli, J.A., Baracat, M.M., Georgetti, S.R., Verri, W.A., Cassagrande, R., 2017, Trans-Chalcone Added in Topical Formulation Inhibits Skin Inflammation and Oxidative Stress in a Model of Ultraviolet B Radiation Skin Damage in Hairless Mice, *J. Photochem. Photobiol. B.*, **171**, 139-146.
- Michalun, M.V., & Dinardo, J.C., 2014, *MILADY Skin Care and Cosmetic Ingredients Dictionary*, 4th Ed., 86, Cengange Learning, USA.
- Mitsui, T., 1997, *New Cosmetics Science*, First Edition, Elsevier Science B.V., Amsterdam.
- Molnes, 2013, *Physical Properties of Gelatin Based on Solid Emulsion*, Norwegian University of Science and Technology.
- Niazi, S.K., 2009, *Handbook of Pharmaceutical Manufacturing Formulations*, 2nd Ed., Vol. 4: *Semisolid Products*, CRC Press, Boca Raton, FL.
- Oroh, E., dan Harun, E.S., 2001, Tabir Surya (Sunscreen), *Berkala Ilmu Penyakit Kulit & Kelamin*, **13**(1), 13.



- Patil, C.B., Mahajan, S.K., & Katti, S.A., 2009, Chalcone: A Versatile Molecule, *J. Pharm. Sci & Res.*, **1** (3), 11-12.
- Paye, M., Andre, O.B., & Howard, I.M., 2001, *Handbook of Cosmetic Science and Technology*, 220-226, Marcell Dekker Inc., New York.
- Peranginangin, R., 2007, *Teknologi Ekstraksi Gelatin secara Asam dari Kulit Ikan sebagai Bahan Pangan dan Farmasi*, Balai Besar Riset Pengelolaan Produk dan Bioteknologi Kelautan dan Perikanan, Jakarta.
- Pranoto, Y., 2006, Potensi Gelatin Ikan untuk Menggantikan Gelatin Mamalia di Bidang Pangan, *Prosiding*, Universitas Gadjah Mada, Yogyakarta.
- Pratama, W.A., dan Zulkarnain, A.K., 2015, Uji SPF In Vitro dan Sifat Fisik Beberapa Produk Tabir Surya yang Beredar di Pasaran, *Majalah Farmasetik*, **11**(1), 275-283.
- Kim, S., Thiessen, P.A., Bolton, E.E., Chen, J., Fu, G., Gindulyte, A., Han, L., He, S., Shoemaker, B.A., Wang, J., Yu, B., Zhang, J., Bryant, S.H., 2016, PubChem Substance and Compound databases, *Nucleic Acids Research*, **44**(D1), D1202-13.
- Quinones, D., & Ghaly, E.S., 2008, Formulation and Characterization of Nystatin Gel, *P. R. Health Sci. J.*, **27** (1), 61-67.
- Raharja, K., 2004, Manfaat Gelatin Tulang Pari (1), *Kedaulatan Rakyat*, Yogyakarta.
- Rajesh, B., Saumya, D., Dharmajit, P., & Pavani, M., 2014, Formulation Design and Optimization of Herbal Gel Containing *Albizia lebbeck Bark Extract*, *Int. J. Pharm., Sci.*, **6** (5), 111-114.
- Ratri, S.A., 2018, Sintesis dan Uji aktivitas Senyawa Turunan Kalkon Sebagai Tabir Surya Serapan Lebar dan Agen Filter Fototerapi, *Tesis*, Fakultas Matematika dan Ilmu Pengetahuan Alam Universitas Gadjah Mada.
- Rodrigues, N.D.N., Staniforth, M., dan Stavros, V.G., 2016, Photophysics of sunscreen molecules in the gas phase: a stepwise approach towards understanding and developing next-generation sunscreens, *Proc. R. Soc.*, **472**, 1-29.
- Rowe, R.C., Shesky, P.J., & Owe, S.J., 2006, *Handbook of Pharmaceutical Excipient*, 5th Ed, Pharmaceutical Press. Inc, London.
- Saewan, N., & Jimtaisong, A., 2013, Photoprotection of Natural Flavonoids, *J. Appl. Pharm. Sci.*, **3**, 129-141.
- Shaath NA, 1986, The Chemistry of Sunscreens, *Cosmetics and Toiletries*, **101**, 55–68.
- Sharma, B., Agrawal, S.C., dan Gupta, K.C., 2010, Chalcones- A new Class Potential Non-Azo Dyes, *Int J Chem Res.*, **1**(1), 25-28.
- Shi., L., Shan, J., Ju, Y., Aikens, P., & Prud'homme, R.K., 2011, Nanoparticles as Delivery Vehicles for Sunscreen Agents, *Colloids and Surfaces A:Physicochem. Eng. Aspects*, **396**, 122-129.
- Shu, M., 2013, Formulasi Sediaan Gel Hand Sanitizer dengan Bahan Aktif Triklosan 0,5% dan 1%, *Calyptre: Jurnal Ilmiah Universitas Surabaya*, **2** (1), 1-14.
- Sinko, P.J., 2006, *Martin's Physical Pharmacy and Pharmaceutical Science: Physical Chemical and Biopharmaceutical Principle in the Pharmaceutical Science*, 5th Ed., 78-79, Lippincott William and Wilkins, Philadelphia.



- Standring, S., 2008, *Gray's Anatomy The Anatomical Basis of Clinical Practice*, 40th Edition, Churchill Livingstone Elsevier, London.
- Sugihartini, N., Marchaban, dan Pramono, S., 2005, Pengaruh penambahan fraksi etanol dari infusa daun Plantago major L. terhadap efektivitas oktil metoksisinamat sebagai bahan aktif tabir surya, *Majalah Farmasi Indonesia*, **16** (3), 130 – 135.
- Suryani, Nafisah, A., dan Mana'an, S., 2017, Optimasi Formula Gel Antioksidan Ekstrak Etanol Buah Bligo (Benincasa hispida) dengan Metode Simplex Lattice Design (SLD), *Jurnal Farmasi Galenika (Galenika Journal of Pharmacy)*, **3** (2): 150 – 156
- Susanti, E.V.H., Matsjeh, S., Wahyuningsih, T.D., Mustofa dan Redjeki, T., 2012, Synthesis, Characterization and Antioxidant Activity of 7-Hydroxy-3', 4'-Dimethoxyflavone, *Indones. J. Chem.*, **12**(2), 146-151.
- Tahir, I., Jumina, Yuliastuti, I., 2002, Analisis Aktivitas Perlindungan Sinar Uv Secara *In Vitro* dan *In Vivo* dari Beberapa Senyawa Ester Sinamat Produk Reaksi Kondensasi Benzaldehida Tersubstitusi dan Alkil Asetat, *Makalah pada Seminar Nasional Kimia XI*, Jurusan Kimia FMIPA UGM.
- Taufikkurohmah, T., 2005, Synthesis of p-Methoxy-Cynnamil-p-Metoxyccinamate From Ethyl P-Methoxycinamat was Isolated from Dried Rhizoma *Kaempferia galanga L.* as Sunscreen Compound, *Indo. J. Chem.*, **5** (3), 193-197.
- Voigt, R., 1984, *Buku Pelajaran Teknologi Sediaan Farmasi*, diterjemahkan oleh Soendani, N.S., dan Mahtilda, B.N., 312, Gadjah Mada University Press, Yogyakarta.
- Wasitaatmadja, S.M., 1997, *Penuntun Ilmu Kosmetik Medik*, 28, UI Press, Jakarta.
- Widyani, S.R., 2016, Optimasi Formula Gel Ekstrak Daun Teh (*Camellia sinensis* L.) Dengan Kombinasi Karbomer dan CMC-Na Menggunakan Metode Simplex Lattice Design, *Skripsi*, Fakultas Farmasi UGM.
- Widyaninggar, Amalia, Triwahyudi, Triyana, K., & Rohman, A., 2012, Differentiation Between Porcine and Bovine Gelatin in Capsule Shells Based o Amino Acid Profiles and Principle Component Analysis, *Indonesia J. Pharm*, **23** (2), 104-109.
- Wilkinson, J. B., & Moore, R. J., 1982, *Harry's Cosmeticology*, 7th Edition, Chemical Publishing Company, New York.
- Yuliani, S.H., 2012, Formulasi Sediaan Hidrogel Penyembuh Luka Ekstrak Etanol Daun Binahong (*Anredera cordifolia* (Ten) Steenis), *Disertasi*, Universitas Gadjah Mada, Yogyakarta.
- Zatz, J.I., & Gregory, P.K., 1996, Gel, dalam Lieberman, H.A., Rieger, M.M., Bunker, G.S., 1996, *Pharmaceutical Dosage Forms: Disperse Systems*, 2, Marcel Dekker Inc, New York.