

DAFTAR PUSTAKA

- Achille, Y. L., Engelbert, A. J., Gabin, A. A., Pauline, A., Parfait, D., Habib, G., & Djang'eing'a, R. M. (2022). Quality Control of Paracetamol Generic Tablets Marketed in Benin and Search of Its Two Impurities P-Aminophenol and P-Nitrophenol by HPLC-UV/Visible. *American Journal of Analytical Chemistry*, 13(11), 449–460. <https://doi.org/10.4236/ajac.2022.1311030>
- Adnan, S. Z., & Abdul Samad, N. A. F. (2022). Effects of Nucleation and Crystal Growth Rates on Crystal Size Distribution for Seeded Batch Potash Alum Crystallization Process. *ASEAN Journal of Chemical Engineering*, 22(2), 258. <https://doi.org/10.22146/ajche.74121>
- Aitipamula, S., Banerjee, R., Bansal, A.K., Biradha, K., Cheney, M.L., Choudhury, A.R., Desiraju, G.R., Dikundwar, A.G., Dubey, R., Duggirala, N., Ghogale, P.P., Ghosh, S., Goswami, P.K., Goud, N.R., Jetti, R.R.K.R., Karpinski, P., Kaushik, P., Kumar, D., Kumar, V. and Moulton, B. (2012). Polymorphs, Salts, and Cocrystals: What's in a Name?. *Crystal Growth & Design*, 12(5), pp.2147–2152. <https://doi.org/10.1021/cg3002948>
- Arif, T. (2015). Salicylic Acid as a Peeling agent: a Comprehensive Review. *Clinical, Cosmetic and Investigational Dermatology*, 8(2015), pp.455–461. <https://doi.org/10.2147/ccid.s84765>
- Armarego, W.L.F. (2017). *Purification of laboratory chemicals*. Elsevier.
- Astuti, W. F., Pudjono, P., & Trsinawati, E. (2023). Uji Hidrolisis Parasetamol dalam Larutan pH 2,0; 5,0; dan 7,0 pada Suhu 37°C. *Pharmacy Peradaban Journal*, 3(2), 110–122. <https://journal.peradaban.ac.id/index.php/ppj/article/view/1543>
- Baron, F. A., & Hills, S. (1972). *Purification of p-aminophenol* (The United States Patent and Trademark Office (USPTO) Patent).
- Blagden, N., de Matas, M., Gavan, P.T. and York, P. (2007). Crystal engineering of active pharmaceutical ingredients to improve solubility and dissolution rates. *Advanced Drug Delivery Reviews*, 59(7), pp.617–630. <https://doi.org/10.1016/j.addr.2007.05.011>
- Bunaciu, A.A., Udriștioiu, E. gabriela and Aboul-Enein, H.Y. (2015). X-Ray Diffraction: Instrumentation and Applications. *Critical Reviews in Analytical Chemistry*, 45(4), pp.289–299. <https://doi.org/10.1080/10408347.2014.949616>
- Center for Drug Evaluation and Research (2019). *About FDA Guidances*. U.S. Food and Drug Administration. <http://www.fda.gov/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/default.htm>.
- Chaluvaraju, C., Manjunatha, O., Khot, B., & Unakalla, B. (2024). Melting Point Of Organic Compounds: A Comprehensive Guide. *International Journal of Creative Research Thoughts*, 12(9), 87–100.
- Chaudhari, P., Uttekar, P., Waria, N., & Ajab, A. (2008). Study of Different Crystal Habits Formed by Recrystallization Process and Study Effect of Variables. *Research J. Pharm. and Tech*, 1(4), 381–385.

- Chiam, E., Weinberg, L., & Bellomo, R. (2015). Paracetamol: a review with specific focus on the haemodynamic effects of intravenous administration. *Heart, Lung and Vessels*, 7(2), 121–132. <https://pubmed.ncbi.nlm.nih.gov/26157738/>
- Chinmay Ghoroi, Shah, J., Thakar, D., & Sakshi Baheti. (2021). Process Design and Economics of Production of p-Aminophenol. *ArXiv (Cornell University)*. <https://doi.org/10.48550/arxiv.2110.15750>
- Committee for Medicinal Products for Human Use (CHMP) Committee for Medicinal Products for Veterinary Use (CVMP). (2015). *Reflection paper on the use of cocrystals of active substances in medicinal products*. https://www.ema.europa.eu/documents/scientific-guideline/reflection-paper-use-cocrystals-active-substances-medicinal-products_en.pdf
- Correcher, V., Topaksu, M., Furio, M. and Garcia-Guinea, J. (2023). Thermal stability of the luminescence emission of irradiated paracetamol. *Journal of Thermal Analysis and Calorimetry*, 148(15), pp.7653–7660. <https://doi.org/10.1007/s10973-023-12239-5>
- Cooper, M., & Klymkowsky, M. (n.d.). *Hydrogen Bonding Interactions and Solubility*. In LibreText Chemistry.
- Cuadros-Rodríguez, L., Gámiz-Gracia, L., Almansa-López, E. M., & Bosque-Sendra, J. M. (2001). Calibration in chemical measurement processes. II. A methodological approach. *TrAC - Trends in Analytical Chemistry*, 20(11). [https://doi.org/10.1016/S0165-9936\(01\)00111-X](https://doi.org/10.1016/S0165-9936(01)00111-X)
- dos Santos, M. K., Acosta, A., Capote, R., Tabassam, B., Ley, J., Quirke, M., & Almirall, J. (2023). Chemical identification and optimization of the 4-aminophenol colorimetric test for the differentiation between hemp-type and marijuana-type cannabis plant samples. *Journal of Forensic Sciences*, 68(4). <https://doi.org/10.1111/1556-4029.15309>
- El Bourakadi, K., Bouhfid, R. and Qaiss, A. el K. (2021). Characterization techniques for hybrid nanocomposites based on cellulose nanocrystals/nanofibrils and nanoparticles. *Cellulose Nanocrystal/Nanoparticles Hybrid Nanocomposites*, pp.27–64. <https://doi.org/10.1016/b978-0-12-822906-4.00010-4>
- El-Houssini, O. M. (2013). RP-LC and TLC densitometric determination of paracetamol and pamabrom in presence of hazardous impurity of paracetamol and application to pharmaceuticals. *Analytical Chemistry Insights*, 8(1). <https://doi.org/10.4137/ACI.S12349>
- Eshaghi, Z. (2011). Photodiode Array Detection in Clinical Applications; Quantitative Analyte Assay Advantages, Limitations and Disadvantages. In *Photodiodes - Communications, Bio-Sensings, Measurements and High-Energy Physics*. <https://doi.org/10.5772/18244>
- Fahelbom, K.M., Saleh, A., Al-Tabakha, M.M.A. and Ashames, A.A. (2022). Recent applications of quantitative analytical FTIR spectroscopy in pharmaceutical, biomedical, and clinical fields: A brief review. *Reviews in Analytical Chemistry*, 41(1), pp.21–33. <https://doi.org/10.1515/revac-2022-0030>

- Ferchiou, R., Soussi, M. A., Ghedira, D., Ferchiou, D., Douki, W., & Najjar, M. F. (2023). Development and validation of a simple thin-layer chromatography–smartphone method for plasma paracetamol quantification. *Journal of Planar Chromatography - Modern TLC*, 36(4). <https://doi.org/10.1007/s00764-023-00247-y>
- Fiorelia, N.E., Wibowo, A.D., Lae, N.L., Ang, A. and Krisbianto, O. (2022). Types of High-Performance Liquid Chromatography (HPLC) Columns: A Review. *FoodTech: Jurnal Teknologi Pangan*, 5(1), pp.1–16. <https://doi.org/10.26418/jft.v5i1.57334>
- Fu, X., Chen, T.S., Ray, M.B., Nagasawa, H.T. and Williams, W.M. (2004). p-Aminophenol-induced Hepatotoxicity in hamsters: Role of Glutathione. *Journal of biochemical and molecular toxicology*, 18(3), pp.154–161. <https://doi.org/10.1002/jbt.20021>
- Gao, Y., Song, W., Yang, J., Ji, X., Wang, N., Huang, X., Wang, T., & Hao, H. (2024). Crystal Morphology Prediction Models and Regulating Methods. *Crystals*, 14(6), 484. <https://doi.org/10.3390/cryst14060484>
- Gupta, R. N., Eng, F., & Keane, P. M. (1977). Thin-layer chromatographic method for the quantitative analysis of paracetamol (N-acetyl-p-aminophenol) in blood plasma. *Journal of Chromatography B: Biomedical Sciences and Applications*, 143(1). [https://doi.org/10.1016/S0378-4347\(00\)81335-3](https://doi.org/10.1016/S0378-4347(00)81335-3)
- Hassanzadeh-Nazarabadi, Y. (2014). Predicting the Melting Point of Organic Compounds Consist of Carbon, Hydrogen, Nitrogen and Oxygen Using Multi Layer Perceptron Artificial Neural Networks. *Modern Chemistry*, 2(2). <https://doi.org/10.11648/j.mc.20140202.12>
- Hussein, A. (2023). Principles of Flow Assurance Solids Formation Mechanisms. *In Essentials of Flow Assurance Solids in Oil and Gas Operations*. <https://doi.org/10.1016/b978-0-323-99118-6.00017-4>
- Isac-García, J., Dobado, J. A., Calvo-Flores, F. G., & Martínez-García, H. (2015). Experimental Organic Chemistry: Laboratory Manual. *In Experimental Organic Chemistry: Laboratory Manual*. <https://doi.org/10.1016/C2015-0-00644-X>
- Jayant Kulkarni, S. (2016). Oxalic Acid : a Review on Analysis, Synthesis, and Application. *EPRA International Journal of Research and Development*, 1(7), pp.17–19.
- Javadzadeh, Y., Dizaj, S. M., Vazifehasl, Z., & Mokhtarpour, M. (2015). Recrystallization of Drugs — Effect on Dissolution Rate. *In Recrystallization in Materials Processing*. <https://doi.org/10.5772/60006>
- Jendrzewska, I., Goryczka, T., Pietrasik, E., Klimontko, J., & Jampilek, J. (2020). X-ray and Thermal Analysis of Selected Drugs Containing Acetaminophen. *Molecules*, 25(24), 5909. <https://doi.org/10.3390/molecules25245909>
- Javadzadeh, Y., Hamedeyazdan, S., & Asnaashari, S. (2012). Recrystallization of Drugs: Significance on Pharmaceutical Processing. *In Recrystallization*. <https://doi.org/10.5772/33156>
- Jeffery, G.H., Bassett, J. and Mendham, J. (1989). *Vogel's Textbook of Quantitative Chemical Analysis*. Essex Longman Scientific & Technical Vog.

- Joos, B., van Bael, M. K., & Hardy, A. T. (2020). Construction of a Room-Temperature Eutectic Binary Phase Diagram by Use of Differential Scanning Calorimetry. *Journal of Chemical Education*, 97(8). <https://doi.org/10.1021/acs.jchemed.0c00204>
- Johan Wouters, Luc Quéré and Society, R. (2012). *Pharmaceutical salts and co-crystals*. Cambridge: Royal Society Chemistry.
- Joncour, R., Ferreira, A., Duguet, N., & Lemaire, M. (2018). Preparation of para-Aminophenol from Nitrobenzene through Bamberger Rearrangement Using a Mixture of Heterogeneous and Homogeneous Acid Catalysts. *Organic Process Research & Development*, 22(3), 312–320. <https://doi.org/10.1021/acs.oprd.7b00354>
- Jyothirmayee, D., Harika, T. and Vardhan Reddy, K.V. (2015). Development of Immediate Release Liquid Fill Formulations for Soft Gels of parasetamol. *International Journal of Pharmaceutical Development & Technology*, 5(1), pp.75–82. e-ISSN : - 2248 - 910X.
- Keshavarz, M. H., Maghsoodi, N. K., & Shokrollahi, A. (2020). A reliable model for assessment of melting points of cyclic hydrocarbons containing complex molecular structures, isomers and stereoisomers. *Fluid Phase Equilibria*, 521. <https://doi.org/10.1016/j.fluid.2020.112692>
- Khan, S.A., Khan, S.B., Khan, L.U., Farooq, A., Akhtar, K. and Asiri, A.M. (2018). Fourier Transform Infrared Spectroscopy: Fundamentals and Application in Functional Groups and Nanomaterials Characterization. *Handbook of Materials Characterization*, pp.317–344. https://doi.org/10.1007/978-3-319-92955-2_9
- Khandavilli, U.B.R., Keshavarz, L., Skořepová, E., Steendam, R.R.E. and Frawley, P.J. (2020). Organic Salts of Pharmaceutical Impurity p-Aminophenol. *Molecules*, 25(8). <https://doi.org/10.3390/molecules25081910>
- Kitamura, C. (2015). Synthesis, Crystal Structures, and Solid-State Optical Properties of Substituted Tetracenes. *In Chemical Science of Electron Systems*. https://doi.org/10.1007/978-4-431-55357-1_5
- Korotkova, E.I. and Kratochvil, B. (2014). Pharmaceutical Cocrystals. *Procedia Chemistry*, 10, pp.473–476. <https://doi.org/10.1016/j.proche.2014.10.079>
- Kumar, S. and Nanda, A. (2017). Pharmaceutical Cocrystals: An Overview. *Indian Journal of Pharmaceutical Sciences*, 79(6). <https://doi.org/10.4172/pharmaceutical-sciences.1000302>
- Leokristi Rositawati, A., Metasari Taslim, C. and Soetrinanto, D. (2013). Rekristalisasi Garam Rakyat dari Daerah Demak untuk Mencapai SNI. *Jurnal Teknologi Kimia dan Industri*, 2(4), pp.217–225.
- Li, Y., Bentzley, C.M. and Tarloff, J.B. (2005). Comparison of para-aminophenol cytotoxicity in rat renal epithelial cells and hepatocytes. *Toxicology*, 209(1), pp.69–76. <https://doi.org/10.1016/j.tox.2004.12.008>
- M.M. Shokrieh and Mohammadi, A.H. (2014). Non-destructive testing (NDT) techniques in the measurement of residual stresses in composite materials: an overview. *Residual Stresses in Composite Materials*, pp.58–75. <https://doi.org/10.1533/9780857098597.1.58>

- Ma, N., Liu, Y., Ling, G. and Zhang, P. (2022). Preparation of meloxicam-salicylic acid co-crystal and its application in the treatment of rheumatoid arthritis. *Journal of Drug Delivery Science and Technology*, 74, pp.103542–103542. <https://doi.org/10.1016/j.jddst.2022.103542>
- Mallah, M.A., Sherazi, S.T.H., Bhangar, M.I., Mahesar, S.A. and Bajeer, M.A. (2015). A rapid Fourier-transform infrared (FTIR) spectroscopic method for direct quantification of parasetamol content in solid pharmaceutical formulations. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 141, pp.64–70. <https://doi.org/10.1016/j.saa.2015.01.036>
- Manami Dhibar, Chakraborty, S. and Basak, S. (2021). Assessment of Effects of Solvents on Cocrystallization by Computational Simulation Approach. *Current Drug Delivery*, 18(1), pp.44–53. <https://doi.org/10.2174/1567201817666200804110837>
- Mariyani, N., Patala, R. and Awilia, N. (2023). Analisis Kadar Parasetamol Generik Dibandingkan Bermerek Dagang. *JIFI (Jurnal Ilmiah Farmasi Imelda)*, 7(1), pp.7–12. <https://doi.org/10.52943/jifarmasi.v7i1.1483>
- Miguel A. Pedroza, Rosario Salinas, Gonzalo L. Alonso, & Amaya Zalacain. (2017). 9 - Oenological Applications of Winemaking By-Products (C. Galanakis, Ed.). *Academic Press*. <https://doi.org/https://doi.org/10.1016/B978-0-12-809870-7.00009-0>.
- Murad, H., Shamban, A.T. and Premo, P.S. (1995). The use of glycolic acid as a peeling agent. *Dermatologic Clinics*, 13(2), pp.285–307. <https://pubmed.ncbi.nlm.nih.gov/7600706/>
- National Center for Biotechnology Information (2024). *Acetaminophen*. Nih.gov. <https://pubchem.ncbi.nlm.nih.gov/compound/acetaminophen>.
- National Center for Biotechnology Information (2024). *4-Aminophenol*. Nih.gov. <https://pubchem.ncbi.nlm.nih.gov/compound/p-aminophenol>.
- National Center for Biotechnology Information (2024). *PubChem Compound Summary for CID 875, DL-Tartaric acid*. Nih.gov. <https://pubchem.ncbi.nlm.nih.gov/compound/DL-Tartaric-acid>.
- National Center for Biotechnology Information (2024). *Glycolic acid*. Nih.gov. <https://pubchem.ncbi.nlm.nih.gov/compound/Glycolic-acid>.
- National Center for Biotechnology Information (2024). *Oxalic acid*. Nih.gov. <https://pubchem.ncbi.nlm.nih.gov/compound/Oxalic-acid>.
- National Center for Biotechnology Information (2024). *L-Tartaric acid*. Nih.gov. <https://pubchem.ncbi.nlm.nih.gov/compound/Tartaric%20acid>
- Nikolin, B., Imamović, B., Medanhodžić-Vuk, S. and Sober, M. (2004). High Performance Liquid Chromatography in Pharmaceutical Analyses. *Bosnian Journal of Basic Medical Sciences*, 4(2), pp.5–9. <https://doi.org/10.17305/bjbms.2004.3405>.
- Pavia, D., Lampman, G., & Kriz, G. (2001). *Introduction to Spectroscopy (3rd ed.)*. Thomson Learning.
- Petrucci, R.H., F. Geoffrey Herring, Madura, J.D. and Bissonnette, C. (2011). *General Chemistry*. Prentice Hall.

- Prayogi, S., Pudjono and Trisnawati, E. (2022). Sintesis Parasetamol dengan Cara Asetilasi p-Aminofenol Menggunakan Anhidrida Asetat dan Asam Asetat. *Pharmacy Peradaban Journal*, 2(2), pp.75–85.
- Raja, P. B., Munusamy, K. R., Perumal, V., & Ibrahim, M. N. M. (2021). Characterization of nanomaterial used in nanobioremediation. In *Nano-Bioremediation: Fundamentals and Applications*. <https://doi.org/10.1016/B978-0-12-823962-9.00037-4>
- Rávai, B., Máté János Orosz, Orsolya Péterfi, Dorián László Galata and Bálint, E. (2023). Flow chemical laboratory practice for undergraduate students: synthesis of parasetamol. *Journal of Flow Chemistry*. <https://doi.org/10.1007/s41981-023-00303-y>
- Reddy, C., Khan, K., & Nagaraja, C. (2016). A Review on the Determination of Melting Point Measurement System. *International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering*, 5(2), 975–979.
- Roy, J. (2002). Pharmaceutical impurities—A mini-review. *AAPS PharmSciTech*, 3(2), pp.1–8. <https://doi.org/10.1208/pt030206>
- Ryu, S. R., Noda, I., & Jung, Y. M. (2011, March 10). *Positional Fluctuation of IR Absorption Peaks: Frequency Shift of a Single Band or Relative Intensity Changes of Overlapped Bands?* American Laboratory.
- Savjani, J. (2015). Co-crystallization: An approach to improve the performance characteristics of active pharmaceutical ingredients. *Asian Journal of Pharmaceutics*, 9(3), p.147. <https://doi.org/10.4103/0973-8398.160309>
- Serajuddin, A. T. M. (2007). Salt formation to improve drug solubility. *Advanced Drug Delivery Reviews*, 59(7), 603–616. <https://doi.org/10.1016/j.addr.2007.05.010>
- Silberberg, M.S., Rashmi Venkateswaran, Lavieri, S. and Amateis, P. (2016). *Chemistry : the molecular nature of matter and change*. Toronto: Mcgraw-Hill Ryerson.
- Singh, M., Barua, H., Vaskuri G.S. Sainaga Jyothi, Dhondale, M.R., Nambiar, A.G., Ashish Kumar Agrawal, Kumar, P., Shastri, N.R. and Kumar, D. (2023). Cocrystals by Design: A Rational Cofomer Selection Approach for Tackling the API Problems. *Pharmaceutics*, 15(4), pp.1161–1161. <https://doi.org/10.3390/pharmaceutics15041161>
- Snyder, L.R., Kirkland, J.J. and Dolan, J.W. (2011). *Introduction to Modern Liquid Chromatography*. John Wiley & Sons.
- Song, H. and Chen, T.S. (2001). p-Aminophenol-induced Liver toxicity: Tentative Evidence of a Role for Acetaminophen. *Journal of Biochemical and Molecular Toxicology*, 15(1), pp.34–40. [https://doi.org/10.1002/1099-0461\(2001\)15:1%3C34::aid-jbt4%3E3.0.co;2-u](https://doi.org/10.1002/1099-0461(2001)15:1%3C34::aid-jbt4%3E3.0.co;2-u).
- Song, L., Zhao, F. Q., Xu, S. Y., Ju, X. H., & Ye, C. C. (2020). Crystal Morphology Prediction and Anisotropic Evolution of 1,1-Diamino-2,2-dinitroethylene (FOX-7) by Temperature Tuning. *Scientific Reports*, 10(1). <https://doi.org/10.1038/s41598-020-59261-3>

- Sravobic, M., Huremovic, M., Catovic, B., Kulic, S. and Taletovic, A. (2017). Design Synthesis and Crystallization of Acetaminophen. *Journal of Chemical, Biological and Physical Sciences*, 7(1), pp.218–230.
- Stieger, N. and Wilna Liebenberg (2012). Recrystallization of Active Pharmaceutical Ingredients. *InTech eBooks*, pp.183–204. <https://doi.org/10.5772/52725>.
- Suresh, K. and Nangia, A. (2014). Lornoxicam Salts: Crystal Structures, Conformations, and Solubility. *Crystal growth & design*, 14(6), pp.2945–2953. <https://doi.org/10.1021/cg500231z>.
- Taupik, M., Djuwarno, E., Mustapa, M., Kunusa, W., Kilo, J., & Sahumena, M. (2021). The Type Fragmentation Patterns Confirmed Acetaminophen by Using Liquid Chromatography-Mass Spectroscopy (LCMS) from herbal Medicine (Jamu). *Journal of Islamic Science and Technology*, 7(2), 341–353.
- Terohid, S. A. A., Heidari, S., Jafari, A., & Asgary, S. (2018). Effect of growth time on structural, morphological and electrical properties of tungsten oxide nanowire. *Applied Physics A: Materials Science and Processing*, 124(8). <https://doi.org/10.1007/s00339-018-1955-0>
- Voinarovska, V., Kabeshov, M., Dudenko, D., Genheden, S., & Tetko, I. v. (2024). When Yield Prediction Does Not Yield Prediction: An Overview of the Current Challenges. In *Journal of Chemical Information and Modeling* (Vol. 64, Issue 1). <https://doi.org/10.1021/acs.jcim.3c01524>
- Wang, C. and Gu, C. (2023). X-Ray Diffraction. *Elsevier eBooks*, pp.642–653. <https://doi.org/10.1016/b978-0-12-822974-3.00037-9>.
- Yadav, A., Shete, A., Dabke, A., Kulkarni, P. and Sakhare, S. (2009). Co-crystals: A novel approach to modify physicochemical properties of active pharmaceutical ingredients. *Indian Journal of Pharmaceutical Sciences*, 71(4), p.359. <https://doi.org/10.4103/0250-474x.57283>.
- Young, J. (2013). *True Melting Point Determination*. *The Chemical Educator*, 18, 203–208.