

DAFTAR PUSTAKA

- (1) Pohrebova, I. S.; Pylypenko, T. M.: Inhibitors for Acid Corrosion of Metals Based on Quaternary Pyridinium Salts Containing Carbonyl Groups. *Materials Today Proceeding 2019*, 6, 192–201.
- (2) Tan, B.; Xiang, B.; Zhang, S.; Qiang, Y.; Xu, L.; Chen, S.; He, J.: Papaya Leaves Extract as a Novel Eco-Friendly Corrosion Inhibitor for Cu in H₂SO₄ Medium. *Journal Colloid Interface Science 2021*, 582, 918–931.
- (3) Fiori-Bimbi, M. V.; Alvarez, P. E.; Vaca, H.; Gervasi, C. A.: Corrosion Inhibition of Mild Steel in HCL Solution by Pectin. *Corrosion Science 2015*, 92 (December), 192–
- (4) Van der Kerk, G. J. M.: *Organotin Chemistry. Past, Present, and Future*; ACS Publications; Oklahoma, 1976.
- (5) El-Deeb, M. M.; Ads, E. N.; Humaidi, J. R.: Evaluation of the Modified Extracted Lignin from Wheat Straw as Corrosion Inhibitors for Aluminum in Alkaline Solution. *International Journal Electrochemical Science 2018*, 13 (5), 4123–4138.
- (6) Shivakumar, M.; Dharmaprakash, M. S.; Manjappa, S.; Nagashree, K. L.: Corrosion Inhibition Performance of Lignin Extracted from Black Liquor on Mild Steel in 0.5 m H₂SO₄ Acidic Media. *Porto Electrochimica Acta 2017*, 35 (6), 351–359.
- (7) Ren, Y.; Luo, Y.; Zhang, K.; Zhu, G.; Tan, X.: Lignin Terpolymer for Corrosion Inhibition of Mild Steel in 10% Hydrochloric Acid Medium. *Corrosion Science 2008*, 50 (11), 3147–3153.
- (8) Akbarzadeh, E.; Ibrahim, M. N. M.; Rahim, A. A.: Monomers of Lignin as Corrosion Inhibitors for Mild Steel: Study of Their Behaviour by Factorial Experimental Design. *Corrosion Engineering Science Technology 2012*, 47 (4), 302–311.
- (9) Alcántara, J.; de la Fuente, D.; Chico, B.; Simancas, J.; Díaz, I.; Morcillo, M.: Marine Atmospheric Corrosion of Carbon Steel: A Review. *Materials (Basel) 2017*, 10 (4).
- (10) Dwivedi, D.; Lepková, K.; Becker, T.: Carbon Steel Corrosion: A Review of Key Surface Properties and Characterization Methods. *RSC Advance 2017*, 7 (8), 4580–4610.
- (11) Pedferri, P.: *General Principles of Corrosion*; Springer; Cham; Milan, 2018.
- (12) Raja, P. B.; Sethuraman, M. G.: Natural Products as Corrosion Inhibitor for Metals in Corrosive Media - A Review. *Material Letters 2008*, 62 (1), 113–116.
- (13) Hassannejad, H.; Nouri, A.: Sunflower Seed Hull Extract as a Novel Green Corrosion Inhibitor for Mild Steel in HCl Solution. *Journal of Molecular Liquid 2018*, 254, 377–382.
- (14) Moretti, G.; Guidi, F.; Grion, G.: Tryptamine as a Green Iron Corrosion Inhibitor in 0.5 M Deaerated Sulphuric Acid. *Corrosion Science 2004*, 46 (2), 387–403.
- (15) Santa-Maria, M.; Ruiz-Colorado, A. A.; Cruz, G.; Jeoh, T.: Assessing the Feasibility of Biofuel Production from Lignocellulosic Banana Waste in Rural Agricultural Communities in Peru and Colombia. *Bioenergy Research 2013*, 6

- (3), 1000–1011.
- (16) Imam, M. Z.; Akter, S.: Musa Paradisiaca I. and Musa Sapientum I.: A Phytochemical and Pharmacological Review. *Journal Applied Pharmaceutical Science* 2011, 1 (5), 14–20.
- (17) Oliveira, L.; Evtuguin, D.; Cordeiro, N.; Silvestre, A. J. D.: Structural Characterization of Stalk Lignin from Banana Plant. *Industrial Crops Product* 2009, 29 (1), 86–95.
- (18) Florian, T. D. M.; Villani, N.; Aguedo, M.; Jacquet, N.; Thomas, H. G.; Gerin, P.; Magali, D.; Richel, A. Chemical Composition Analysis and Structural Features of Banana Rachis Lignin Extracted by Two Organosolv Methods. *Industrial Crops Product* 2019, 132, 269–274.
- (19) Lapierre, C.: *Determining Lignin Structure by Chemical Degradations*; CRC Press; Florida, 2010.
- (20) Altwaiq, A. mnim; Khouri, S. J.; Al-luaibi, S.; Lehmann, R.; Drücker, H.; Vogt, C.: The Role of Extracted Alkali Lignin as Corrosion Inhibitor. *Journal Material and Environmental Science* 2011, 2 (3), 259–270.
- (21) Kong, L.; Adidharma, H.: A New Adsorption Model Based on Generalized van Der Waals Partition Function for the Description of All Types of Adsorption Isotherms. *Chemical Engineering Journal* 2019, 375, 122112.
- (22) Yan, X. F.; Fan, X. R.; Wang, Q.; Shen, Y.: An Adsorption Isotherm Model for Adsorption Performance of Silver-Loaded Activated Carbon. *Thermal Science* 2017, 21 (4), 1645–1649.
- (23) Al-Ghouti, M. A.; Da'ana, D. A.: Guidelines for the Use and Interpretation of Adsorption Isotherm Models: A Review. *Journal of Hazardous Material* 2020, 393 (February), 122383.
- (24) Xu, X.; Singh, A.; Sun, Z.; Ansari, K. R.; Lin, Y.: Theoretical, Thermodynamic and Electrochemical Analysis of Biotin Drug as an Impending Corrosion Inhibitor for Mild Steel in 15% Hydrochloric Acid. *Research Society Open Science* 2017, 4 (12).
- (25) Hashim, D. M.; Man, Y. B. C.; Norakasha, R.; Shuhaimi, M.; Salmah, Y.; Syahariza, Z. A.: Potential Use of Fourier Transform Infrared Spectroscopy for Differentiation of Bovine and Porcine Gelatins. *Food Chemistry* 2010, 118 (3), 856–860.
- (26) Kumosinski, T. F.; Unruh, J. J.: Quantitation of the Global Secondary Structure of Globular Proteins by FTIR Spectroscopy: Comparison with X-Ray Crystallographic Structure. *Talanta* 1996, 43 (2), 199–219.
- (27) Antosiewicz, J. M.; Shugar, D.: UV–Vis Spectroscopy of Tyrosine Side-Groups in Studies of Protein Structure. Part 1: Basic Principles and Properties of Tyrosine Chromophore. *Biophysical Review* 2016, 8 (2), 151–161.
- (28) Kandelbauer, A.; Kessler, W.; Kessler, R. W.: Online UV-Visible Spectroscopy and Multivariate Curve Resolution as Powerful Tool for Model-Free Investigation of Laccase-Catalysed Oxidation. *Analytical and Bioanalytical Chemistry* 2008, 390 (5), 1303–1315.
- (29) Zhou, L.; Cai, M.; Tong, T.; Wang, H.: Progress in the Correlative Atomic

Force Microscopy and Optical Microscopy. *Sensors* 2017, 17 (4).

- (30) Galiwango, E.; Rahman, N. S. A.; Al-Marzuoqi, A. H.; Abu-Omar, M. M.; Khaleel, A. A.: Klason Method: An Effective Method for Isolation of Lignin Fractions from Klason Method: An Effective Method for Isolation of Lignin Fractions from Date Palm Biomass Waste. *Chemical Process Engineering* 2018, 57, 46–58.
- (31) Stiadi, Y.; Emriadi.; Lambardo. Ekstrak Daun Seri (*Muntingia Calabura* L.) Sebagai Inhibitor Korosi Baja Dalam Medium HCl 1M. *Journal of Chemistry Unand* 2021, 10 (1), 36–43.
- (32) Maiyeni.; Stiadi, Y.; Emriadi.: Ekstrak Kulit Jeruk Siam (*Citrus Microcrpa* Linn) Sebagai Inhibitor Korosi Baja Dalam Medium Asam Klorida. *Journal of Chemistry Unand* 2017, 6 (3), 14–19.
- (33) Wang, Q.; Tan, B.; Bao, H.; Xie, Y.; Mou, Y.; Li, P.; Chen, D.; Shi, Y.; Li, X.; Yang, W.: Evaluation of *Ficus Tikoua* Leaves Extract as an Eco-Friendly Corrosion Inhibitor for Carbon Steel in HCl Media. *Bioelectrochemistry* 2019, 128, 49–55.
- (34) Dehghani, A.; Bahlakeh, G.; Ramezanzadeh, B.; Ramezanzadeh, M.: Potential of Borage Flower Aqueous Extract as an Environmentally Sustainable Corrosion Inhibitor for Acid Corrosion of Mild Steel: Electrochemical and Theoretical Studies. *Journal of Molecular Liquid* 2019, 277, 895–911.
- (35) Zhao, J.; Xiuwen, W.; Hu, J.; Liu, Q.; Shen, D.; Xiao, R.: Thermal Degradation of Softwood Lignin and Hardwood Lignin by TG-FTIR and Py-GC/MS. *Polymer Degradation and Stability* 2014, 108, 133–138.
- (36) Suryati.; Arifin, B.; Akbar, I. Isolasi Senyawa Metabolit Sekunder Ekstrak Heksana Daun *Lantana Camara* L Dan Bioaktivitasnya Sebagai Sitotoksik. *Journal of Chemistry Unand* 2020, 9 (2), 18.

