

DAFTAR PUSTAKA

1. Khumaidah, N.; Suka, G. E.; Syafriadi, S. Inhibisi korosi ekstrak buah pinang (*Areca catechu l.*) sebagai penghambat laju korosi pada baja karbon rendah c-mn steel dengan medium korosif HCL Dan NaCl. *J. Teor. dan Apl. Fis.* **2019**, *07* (01), 17–28.
2. Al-Qurashi, O. S.; Wazzan, N. Molecular and periodic DFT calculations of the corrosion protection of Fe(1 1 0) by individual components of *Aerva lanata* flower as a green corrosion inhibitor. *J. Saudi Chem. Soc.* **2022**, *26* (6), 101566.
3. Nugroho, F. Penggunaan Inhibitor Untuk Meningkatkan Ketahanan Korosi Pada Baja Karbon Rendah. *Angkasa* **2015**, *7* (1), 151–158.
4. Marni, L. G.; Emriadi, E.; Syukri, S.; Imelda, I. Mempelajari inhibisi korosi senyawa khellin dan visnagin pada atom besi menggunakan metode DFT (*Density Functional Theory*). *J. Litbang Ind.* **2019**, *9* (2), 111.
5. Suryati; Yenuuar, T. A. A.; Fadhia, S. H.; Ulia, R. V.; Salsabilla, M. M.; Arifin, B. Komponen kimia minyak atsiri yang diisolasi dari daun tanaman pucuk merah (*Syzygium myrtifolium* Walp.) dan potensi antibakteri serta toksisitasnya. *J. Ris. Kim.* **2023**, *14* (1), 70–80.
6. Ayu fika Helmi. *Ekstrak Daun Pucuk Merah (Syzygium Oleana) Sebagai Inhibitor Korosi Baja St. 37 Dalam Medium Asam Klorida*; Universitas Andalas, Padang., 2016.
7. Azizah, R. N.; Alam, G.; Rifai, Y.; Lethe, C. Aplikasi komputasi kimia dalam analisis hubungan kuantitatif struktur-aktivitas (HKSA) dari senyawa aktif antibakteri analog n-alkil imidazol pada bakteri (*Staphilococcus aureus*) dengan parameter elektronikmetode austin model (am 1). *J. Ilm. As-Syifaa* **2013**, *5* (1), 1–11.
8. Szyczewski, P.; Frankowski, M.; Ziola-Frankowska, A.; Siepak, J.; Szyczewski, T.; Piotrowski, P. Preparation of samples for determining heavy metals fe and mn in vegetable oils: a comparison of different extraction methods. *Polish J. Environ. Stud.* **2015**, *24* (6), 2647–2654.
9. Tahir, I.; Pranowo, H. D.; Makky, F. El; Wijaya, K. Analisis sifat fotosensitivitas senyawa antibakteri turunan fluorokuinolon berdasarkan data transisi elektronik dan selisih energi orbital Homo-Lumo. *Conf. Pharm. Biomed. Anal. Sch. Pharm.* **2005**, No. September 2005, 15–16.

10. M, M. W.; Pratiwi, D. E. Effectiveness of beluntas (*Pluchea indica less*) leaf extracts as corrosion inhibitor carbon steel in 3 , 5 % nacl solut. **2020**, 86–99.
11. Yanuar, A. P.; Pratikno, H.; Titah, H. S. Pengaruh penambahan inhibitor alami terhadap laju korosi pada material pipa dalam larutan air laut buatan. *J. Tek. ITS* **2017**, 5 (2), 8–13.
12. Haryono, G.; Sugiarto, B.; Farid, H. Ekstrak bahan alam sebagai inhibitor korosi. *Pros. Semin. Nas. Tek. Kim. "Kejuangan" Pengemb. Teknol. Kim. untuk Pengolah. Sumber Daya Alam Indones.* **2010**, 1–6.
13. Yetri, Y.; Gunawarman; Emriadi; Novesar, J. Theobroma cacao extract peels (tcpe) green inhibitor to recovery the mechanical properties of mild steel after corrosion. *ARPN J. Eng. Appl. Sci.* **2017**, 12 (18), 5325–5332.
14. Stiadi, Y.; Arief, S.; Aziz, H.; Efdi, M.; Emriadi, E. Inhibisi korosi baja ringan menggunakan bahan alami dalam medium asam klorida: Review. *J. Ris. Kim.* **2019**, 10 (1), 51–65.
15. Yetri, Y.; Gunawarman, G.; Emriadi, E.; Jamarun, N. Theobroma cacao peel extract as the eco-friendly corrosion inhibitor for mild steel. *Corros. Inhib. Princ. Recent Appl.* **2018**, 25 (4), e275–e281.
16. Marinda Sukmawanta, S. N.; Wulan, D. R.; Widjajanti, K.; Azkiya, N. I.; Maryanty, Y. Ekstrak kafein sebagai inhibitor korosi alami pada logam aluminium dalam media larutan asam sulfat dan biosolar. *J. Ris. Kim.* **2022**, 13 (1), 68–75.
17. Alika Maulidina Rahma; Anisa Zahra; Ateng Supriatna. Inventarisasi tumbuhan famili myrtaceae di kampung andir, rt.01/rw.08, desa rancamulya, sumedang. *J. Ris. Rumpun Ilmu Tanam.* **2023**, 2 (1), 53–64.
18. Prianto, B. Pemodelan kimia komputasi. *Ber. Dirgant.* **2007**, 8 (1), 4.
19. Liu, S. Bin. Conceptual density functional theory and some recent developments. *Wuli Huaxue Xuebao/ Acta Phys. - Chim. Sin.* **2009**, 25 (3), 590–600.
20. Gece, G. The use of quantum chemical methods in corrosion inhibitor studies. *Corros. Sci.* **2008**, 50 (11), 2981–2992.
21. Mi, H.; Xiao, G.; Chen, X. Theoretical evaluation of corrosion inhibition performance of three antipyrine compounds. *Comput. Theor. Chem.* **2015**, 1072, 7–14.
22. Radhi, A. H.; Du, E. A. B.; Khazaal, F. A.; Abbas, Z. M.; Aljelawi, O. H.; Hamadan, S. D.; Almashhadani, H. A.; Kadhim, M. M. HOMO-LUMO energies and geometrical structures effecton corrosion inhibition for organic compounds predict by DFT and PM3 methods. *NeuroQuantology* **2020**, 18 (1), 37–45.

23. Gad, E. A. M.; Azzam, E. M. S.; Halim, S. A. Theoretical approach for the performance of 4-mercapto-1-alkylpyridin-1-ium bromide as corrosion inhibitors using DFT. *Egypt. J. Pet.* **2018**, *27* (4), 695–699.
24. Obi-Egbedi, N. O.; Ojo, N. D. Computational studies of the corrosion inhibition potentials of some derivatives of 1h-imidazo [4, 5-f] [1, 10] phenanthroline. *J. Sci. Res.* **2015**, *14* (February), 50–56.
25. Tullatif, A. Mempelajari senyawa mirisitrin dengan penambahan substituen NH₂, NO₂, Dan CH₃ sebagai inhibitor korosi menggunakan metode *Density Fuctional Theory* (DFT). *Chempublish J.* **2021**, *5* (2), 166–178.
26. Paper, O. Density Functional Theory Investigation of Electrophilic. 2009, 397–403.
27. Kumar, D.; Jain, N.; Jain, V.; Rai, B. Amino acids as copper corrosion inhibitors: a density functional theory approach. *Appl. Surf. Sci.* **2020**, *514* (October 2019), 145905.
28. Udhayakala, P. Density functional theory calculations on corrosion inhibitory action of five azlactones on mild steel. *J. Chem. Pharm. Res.* **2014**, *6* (7), 117–127.
29. Guo, L.; Safi, Z. S.; Kaya, S.; Shi, W.; Tüzün, B.; Altunay, N.; Kaya, C. Anticorrosive effects of some thiophene derivatives against the corrosion of iron: a computational study. *Front. Chem.* **2018**, *6* (MAY), 1–12.
30. Ammouchi, N.; Allal, H.; Belhocine, Y.; Bettaz, S.; Zouaoui, E. DFT computations and molecular dynamics investigations on conformers of some pyrazinamide derivatives as corrosion inhibitors for aluminum. *J. Mol. Liq.* **2020**, *300*, 112309.
31. Erdoğan, Ş.; Safi, Z. S.; Kaya, S.; Işın, D. Ö.; Guo, L.; Kaya, C. A computational study on corrosion inhibition performances of novel quinoline derivatives against the corrosion of iron. *J. Mol. Struct.* **2017**, *1134*, 751–761.
32. Imelda, I.; Aziz, H.; Putri, H. Modifikasi struktur zat warna berbasis trifenilamin untuk meningkatkan kinerja dye-sensitized solar cells (dsscs): metode komputasi. *J. Res. Educ. Chem.* **2022**, *4* (1), 34.
33. Akman, F. A density functional theory study based on monolignols: molecular structure, homo-lumo analysis, molecular electrostatic potential. *Cellul. Chem. Technol.* **2019**, *53* (3–4), 243–250.
34. Kumar, D.; Jain, V.; Rai, B. Unravelling the mechanisms of corrosion inhibition of iron by henna extract: a density functional theory study. *Corros. Sci.* **2018**, *142*, 102–109.

35. Ime, Obot. New benzimidazole derivates as corrosion inhibitors for carbon steel in hcl solution. **2015**.
36. Madkour, L. H.; Elroby, S. K. Inhibitive properties, thermodynamic, kinetics and quantum chemical calculations of polydentate schiff base compounds as corrosion inhibitors for iron in acidic and alkaline media. *Int. J. Ind. Chem.* **2015**, 6 (3), 165–184.
37. Bedair, M. A. The effect of structure parameters on the corrosion inhibition effect of some heterocyclic nitrogen organic compounds. *J. Mol. Liq.* **2016**, 219, 128–141.
38. Ayuba, A. M.; Uzairu, A.; Abba, H.; Shallangwa, G. A. Theoretical study of aspartic and glutamic acids as corrosion inhibitors on aluminium metal surface. *Moroccan J. Chem.* **2018**, 6 (1), 160–172.
39. Petter, A.; Loretta, J. *Chemical Principles*, 5th ed.; W.H Freeman and company, 2019.
40. Elvira, D.; Imelda; S, R. F.; Oesamah. Modifikasi struktur zat warna kuinolin untuk meningkatkan kinerja selsurya menggunakan metode DFT. *Kim. Saintek dan Pendidik* **2021**, 2, 75–76.

