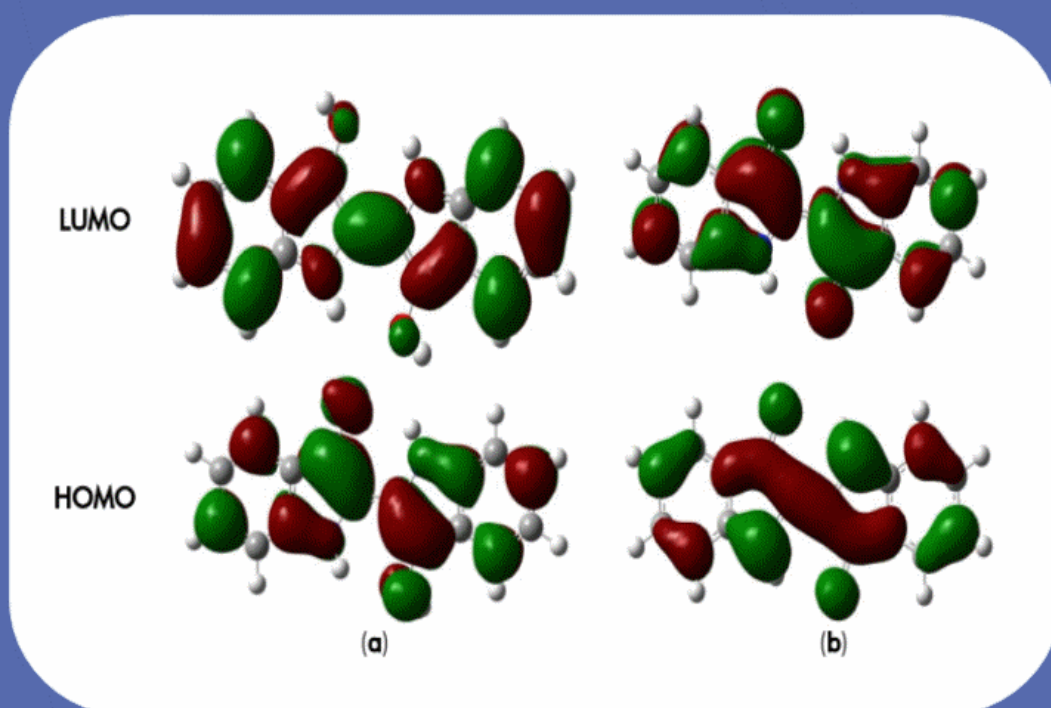


Jurnal Ilmiah Kimia

MOLEKUL

Vol. 15, No. 2, July 2020



Indexed by Scopus

Jurusan Kimia
Fakultas Matematika dan Ilmu Pengetahuan Alam
Universitas Jenderal Soedirman
Purwokerto

Molekul	Vol. 15	No. 2	pp. 63 - 139	Jul 2020	P-ISSN 1907-9761	E-ISSN 2503-0310
---------	---------	-------	--------------	-------------	---------------------	---------------------

EDITOR-IN-CHIEF

Amin Fatoni, M.Si, Ph.D (Universitas Jenderal Soedirman, Indonesia)

EDITORIAL BOARD

Prof. Dr. Wan Aini Wan Ibrahim (Universiti Teknologi Malaysia, Malaysia)
Prof. Dr. Kristian H Sugijarto (Yogyakarta State University, Indonesia)
Prof. Dr. Hassan Y Aboul-Enein (National Research Centre, Egypt)
Prof. Dr. drh. Maria Bintang (Institut Pertanian Bogor, Indonesia)
Prof. Dr. Hadi Nur (Universiti Teknologi Malaysia, Malaysia)
Prof. Shin-ichiro Suye (University of Fukui, Fukui, Japan)
Assist. Prof. Dr. Apon Numnuam (Prince of Songkla University, Hat Yai, Thailand)
Dr. Arief Cahyo Wibowo (King Fahd University of Petroleum & Minerals, Saudi Arabia)
Dr. Saluma Samanman (Princess of Naradhiwas University, Thailand)
Adi Darmawan, Ph.D (Diponegoro University, Indonesia)
Dr. Jas Raj Subba (Royal University of Bhutan, Bhutan)
Dr. Dadan Hermawan (Universitas Jenderal Soedirman, Indonesia)
Dr. Hartiwi Diastuti (Universitas Jenderal Soedirman, Indonesia)
Dr. Uyi Sulaeman (Universitas Jenderal Soedirman, Indonesia)
Mardiyah Kurniasih, M.Sc (Universitas Jenderal Soedirman, Indonesia)
Zusfahair, M.Si (Universitas Jenderal Soedirman, Indonesia)
Irmanto, M.Si (Universitas Jenderal Soedirman, Indonesia)

REVIEWERS

Prof. Unang Supratman, Ph.D (Universitas Padjadjaran, Indonesia)
Prof. Dr. Erizal Zaini, S.Si, M.Si, Apt. (Universitas Andalas, Indonesia)
Barbara Rojek, Ph.D (Medical University of Gdańsk, Poland)
Mulyono Pangestu, Ph.D (Monash University, Australia)
Dr.rer.nat. Arli Aditya Parikesit (Indonesia International Institute for Life Sciences, Indonesia)
Dr. Handoko Darmokoesoemo, Drs., DEA. (Universitas Airlangga, Indonesia)
Wahyu Tri Cahyanto, Ph.D ((Universitas Jenderal Soedirman, Indonesia)
Dr. Iqbal Musthapa, M.Si (Indonesia University of Education, Indonesia)
Dr. Mokusuli Yermia Samuel, M.Si (University of Manado, Indonesia)
Dr. Hari Purnomo, MS, Apt. (Universitas Gadjah Mada, Indonesia)
Dr. Mulyadi Tanjung, M.Si (Universitas Airlangga, Indonesia)
Yayuk Astuti, Ph.D (Diponegoro University, Indonesia)
Dr. Hasanudin (Sriwijaya University, Indonesia)

PUBLICATION FREQUENCY

Molekul is published three times a year (March, July and November)



PUBLISHER

Jurusan Kimia Fakultas MIPA UNSOED
Jl. Dr. Soeparno No. 61 Grendeng Purwokerto 53122,
Telp/fax : 0281-638793
Website : <http://www.jmolekul.com>, E-mail: j.molekul@gmail.com

PREFACE

MOLEKUL, a scientific journal in chemistry, constantly publishes articles related to the chemistry of regional focus and are related to the environment or natural products of Indonesia. We published the journal in print version and an electronic version. The electronic version was published at the website of www.jmolekul.com, which was indexed by SCOPUS, CAS (Chemical Abstract Service), ASEAN Citation Index, DOAJ, Google Scholar CrossRef and Sinta (Indonesian Science and Citation Index).

In this volume 15 issue 2, the highlight topics including Brotowali (*Tinospora crispa* L. Mier) potential as an alternative therapy for degenerative diseases, anti-toxicity of *Peperomia pellucida* on liver function of diabetic-induced rats, *Curcuma xanthorrhiza* for antibacterial, *Salacca zalacca* peel for activated carbon and synthetic zeolite from Rice Husk and Corncob. This issue also reported the computational study of Artemisinin as an Anti-diabetic Candidate.

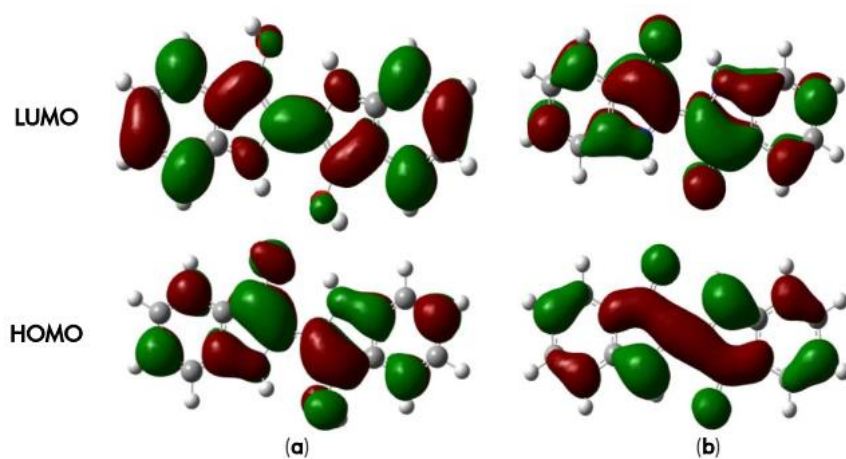
We would like to thank all authors and reviewers for their contributions.

Editor-in-Chief

Amin Fatoni

TABLE OF CONTENT

Kinetics and Thermodynamics Studies of Copper(II) Adsorption onto Activated Carbon Prepared from <i>Salacca zalacca</i> Peel Dewi Yuanita Lestari, Endang Widjajanti Laksono	63 – 72
Phytochemical Analysis and Antioxidant Activity of Brotowali (<i>Tinospora crispa</i> L. Mier) Stem Warsinah Warsinah, Hanif Nasiatul Baroroh, Harwoko Harwoko	73 – 78
Characterization of Curcuminoid from <i>Curcuma xanthorrhiza</i> and Its Activity Test as Antioxidant and Antibacterial Sri Atun, Nurfina Aznam, Retno Arianingrum, Senam Senam, Bian Ihda An Naila, Astuti Lestari, Nur Aini Purnamaningsih	79 – 87
Reverse Docking, Molecular Docking, Absorption, Distribution, and Toxicity Prediction of Artemisinin as an Anti-diabetic Candidate Ruswanto Ruswanto, Richa Mardianingrum, Siswandono Siswandono, Dini Kesuma	88 – 96
Anti-toxicity test of <i>Peperomia pellucida</i> steeping on liver function in diabetic-induced rat Saryono Saryono, Hernayanti Hernayanti, Atikah Proverawati	97 – 104
Removal of Cu Metals from Wastewater by Adsorption using Synthetic Zeolites from Rice Husk and Corncob Imas Solihat, Lilis Sulistiawaty, Putri Hawa Syaifie, Agus Taufiq	105 – 113
DFT Study of Leuco-Indigo and Indigo as Active Material in Dye-Sensitized Solar Cell Mirella Fonda Maahury, Yusthinus Thobias Male, Muhamad Abdulkadir Martoprawiro	114 – 120
Analysis of Solid-State Interactions of Ketoprofen-Cofomer Binary Mixtures by DSC and Hot Stage Microscopy Yudi Wicaksono, Dwi Setyawan, Siswandono Siswandono	121 – 129
Removal of Pb(II) using Hydroxyapatite from Golden Snail Shell (<i>Pomacea canaliculata</i> L.) Modified with Silica Poedji Loekitowati Hariani, Fahma Riyanti, Fatma Fatma, Addy Rachmat, Aldi Herbanu	130 – 139



Cover figure:
The display of HOMO and LUMO of leuco-indigo (a), and indigo (b) (see Mirella Fonda Maahury, et.al., pp 114-120)