

Acredited: SK No.: 60/E/KPT/2016 Website : http://ejournal.undip.ac.id/index.php/reaktor/

Reaktor, Vol. 19 No. 2, June Year 2019

TITLES INDEX

Volume 19 Number 1 March 2019

Investigating Mass Transfer Phenomena in Batch Solvent Extraction of Rice Bran Oil Lienda Aliwarga	1-10
Growth Mechanism and Characterization of PbTe _{0.5} Se _{0.5} Thin Films Used by Closed-Space Vapor Transport in a Vertical Reactor Yanuar Hamzah, Jimmi Copriady, and Ariswan	11-17
Treatment Of Tofu Industry Wastewater Using Bioreactor Anaerobic-Aerobic And Bioball As Media With Variation Of Hidraulic Retention Time Ariani Dwi Astuti, and Dewi Intania Ayu	18-25
Encapsulation of Soursop (Annona muricata Linn.) Leaf Tea Extract Using Natural Mucilage Melanie Cornelia, Kam Natania, Herry Cahyana, and Edison Sutiyono	26-33
Effect of Esterification on Cassava Starch: Physicochemical Properties and Expansion Ability Siswo Sumardiono, Listiyana Riska, Bakti Jos, and Isti Pudjihastuti	34-41
Volume 19 Number 2 June 2019	
Nutritional Characteristics and Potential Applications of Flour Prepared from Indonesian Wild White Yam (<i>Dioscorea esculenta L.</i>) Diah Susetyo Retnowati, Ratnawati Ratnawati, and Andri Cahyo Kumoro	42-47
The Impact of Combination of Ozonation and Ultrasonication Process on Morphological and Chemical Properties of κ-Carrageenan Nurfiningsih Nurfiningsih, Ratnawati Ratnawati, Aji Prasetyaningrum	48-52
Outdoor Closed System of Algal Mass Culture: In Sight of Comparison on Vertical and Horizontal Photobioreactor for Cultivating the <i>Spirulina</i> sp. Hilda Farida, Puspita Sari Harahap, Rifana Sobari, Rudyanto Gunawan, Delicia Yunita Rahman, and Dwi Susilaningsih	53-60
Utilization of Crude Intracellular Chitinase Enzyme from <i>Providencia stuartii</i> for Glucosamine Production from Shrimp Shells Hardoko, Titri Siratantri Mastuti, Desy Puspasari, and Yuniwaty Halim	61-66

Activated Carbon Derived from OPEFB by One Step Steam Activation and Its Application for Dye Adsorption: Kinetics and Isothermal Studies Fahriya Puspita Sari, Dede Heri Yuli Yanto, and Gustan Pari		
Study on Particle Swarm Optimization Variant and Simulated Annealing in Vapor Liquid Equilibrium Calculation Rama Oktavian, Agung Ari Wibowo, and Zuraidah Fitriah	76-82	
Solid Concentration Effect for Solvent Extraction Process of Oily Contaminated Soil Lely Fitriyani, Edwan Kardena, and Sukandar	83-87	



Acredited: SK No.: 60/E/KPT/2016 Website : http://ejournal.undip.ac.id/index.php/reaktor/

Reaktor, Vol. 19 No. 2, June Year 2019

AUTHORS INDEX

Α	Ν
Aliwarga, L., 1	Natania, K., 26
Ariswan, 11	Nurfiningsih, N., 48
Astuti, A.D., 18	
Ayu, D.I., 18	0
	Oktavian, R., 76
С	
Cahyana, H., 26	Р
Copriady, J., 11	Pari, G., 67
Cornelia, M., 26	Prasetyaningrum, A., 48
	Pudjihastuti, I., 33
F	Puspasari, D., 61
Farida, H., 53	
Fitriah, Z., 75	R
Fitriyani, L., 83	Rahman, D.Y., 53
	Ratnawati, R., 42
G	Ratnawati, R., 48
Gunawan, R., 53	Retnowati, D.S., 42
	Riska, L., 33
Н	
Halim, Y., 61	S
Hamzah, Y., 11	Sari, F.P., 67
Harahap, P.S., 53	Sobari, R., 53
Hardoko, 61	Sukandar, 83
	Sumardiono, S., 33
J	Susilaningsih, D., 53
Jos, B., 33	Sutiyono, E., 26
К	W
Kumoro, A.C., 42	Wibowo, A.A., 76
Μ	Y
Mastuti, T.S., 61	Yanto, D.H.Y., 67



Acredited: SK No.: 61/E/KPT/2016 Website : http://ejournal.undip.ac.id/index.php/reaktor/

Reaktor, Vol. 19 No. 2, June Year 2019

SUBJECTS INDEX

A

acetone, 83 activated Carbon, 67 aerobe, 18 aloe mucilage, 26 anaerobe, 18 antioxidant activity, 26 attached growth, 18

B

batch extraction, 1 bioball, 18 BJHP, 53 BJVP, 53

С

cassava starch, 33 centrifugation, 83 chemical, 48 close-spaced vapor transport, 11 contaminated soil, 83

Е

encapsulation, 26 ester starch, 33 etching reaction, 11 ethyle lactate, 33

F

flour, 42 food, 42 preparation, 42

G

glucosamine, 61

I

intracellular chitinase enzyme, 61 soursop tea extract, 26 storage time, 1

K

kinetic, 67 κ-carrageenan, 48

M

mass transfer, 1 micro-cube, 11 modified starch, 33 morphological, 48

0

oil sludge, 83 okra mucilage, 26 OPEFB, 67 outdoor mass cultivating system, 53 ozonation, 48

Р

PbTe_{0.5}Se_{0.50}, 11 P. Stuartii, 61 particle swarm optimization, 76 phase equilibrium, 76 photobioreactor, 53 proximate composition, 42

R

white yam, 42

rate, 1 rice bran oil, 1

Y

yield, 1

S

shrimp shells' chitin, 61 simulated annealing and activity coefficient model, 76 soil washing, 83 solid treatment, 83 solvent extraction, 83 soursop tea extract, 26 Spirulina, 53 steam activation, 67 stochastic method, 76 storage time, 1

Т

tofu wastewater, 18 treatment, 18 toluene, 83 TPH, 83

U ultrasonication, 48

V

volume expansion, 33

W

wastewater, 18



Acredited: SK No.: 60/E/KPT/2016 Website : http://ejournal.undip.ac.id/index.php/reaktor/

Reaktor, Vol. XX No. X, Month Year XXXX, pp. Xxx-xxx

Manuscript Preparation Guidelines

Author 1^{1,2,*)}, Author 2¹⁾, Author 3²⁾, and Author 4³⁾

¹⁾Department of Chemical Engineering, Faculty of Engineering, Diponegoro University Jl. Prof. Soedarto, SH, Tembalang, Semarang ²⁾Laboratory of Material Technology, UPT Terpadu Laboratory, Diponegoro University Jl. Prof. Soedarto, SH, Tembalang, Semarang ³⁾Center of Biomass and Renewable Energy (C-BIORE), UPT Terpadu Laboratory, Diponegoro University Jl. Prof. Soedarto, SH, Tembalang, Semarang

*)Corresponding author: j.reaktor@che.undip.ac.id

(Received : xx xx xxxx; Accepted: xx xx xxxx; Published: xx xx xxxx)

Abstract

Abstract title is written with Times News Roman style (10 pt and bold) and centered format. The body text of abstract was written italic style (10 pt) amounts 150-200 words, with left margin and right margin 25 mm and 20 mm from edge. The abstract should be clear, concise, and descriptive. This abstract should provide a brief introduction to the problem (preferably 1-2 sentences, objective of paper, research method in short, and a brief summary of results. The abstract should end with a comment on the significance of the results or a brief conclusion. The abstract is preferably not more than 300 words. Keywords written under the abstract text arranged in alphabetical order and separated by a semicolon. Title keywords written with regular format with 10 pt bold font while the key words in italics (italic).

Keywords: *abstract; keyword; tittle; writing guidelines*

INTRODUCTION

Reactor is published since 1997 with 2 (two) issues every year, i.e. June and December. In 2012, Reactor is published every April and October. Starting in 2016, Reactor is published 4 (four) times a year i.e. March, June, September and December. Reactor is a journal that has been accredited by SK No. 60/E/KPT/2016 with p-ISSN No. 0852-0798 and e-ISSN No. 2407-5973. Articles in the Reactor come from articles submitted to the Reactor Editor and after going through the review process by the Editorial Board and/or Reviewer. Articles submitted must be free from plagiarism and autoplagiarsm.

The Reactor as an accredited national journal has developed an online management system. The submitted/article submission process and article review process are performed by online. Currently, Reactor has been indexed by some indexing machines such as; Indonesia Citation Index, Google Scholar, Portal Garuda, E-print UNDIP, Open access articles, Research Bible, *DAIJ (Directory of Abstract Indexing Journal)*, OAJI (*Open Academic Journal Index*), EZB Nutzeranfragen, World Cat, SHERPA/RoMEO and DOAJ.

Articles can be written in either English or Indonesia. Articles can be results of research, state of the art studies, and analysis and problem solving in industries relevant to the field of chemical engineering, which have not been published in other publications.

WRITING METHOD General Instructions

Articles should be written on A4 paper (210 x 297 mm). Articles are written without page numbers and arranged in the following order: Title, Abstract, Keywords, Introduction, Research Method (or Model Development), Results and Discussion, Conclusions, Acknowledgments (if any), Notation List (if any) and References.

Writing Guidelines

The article begins with the title of the article written with Title Case format, font 16 pt bold. The title is an opportunity to attract the reader's attention. Remember that readers are the potential authors who will cite your article. Identify the main issue of the paper. Begin with the subject of the paper. The title should be accurate, unambiguous, specific, and complete. Do not contain infrequently-used abbreviations.

The author's name is written under the title with the Title Case format, font 12 pt bold. The author's name is written complete without an academic degree. Apostrophes are written behind the author's name in superscript format. The name of the institution (institution, address, phone number, facsimile number and e-mail) is written under the author's name with the theme of Times New Roman with Title Case format, 10 pt. If the author is more than one, should be written email for the correspondence author (corresponding author). Article title, author's name and institutional name are written flat center. The distance between the title and the author's name is 2 spaces (10 pt) and between the author's name and the institution name is 1 space (10 pt).

The contents of the article are written with a left margin of 25 mm, right margin 20 mm, bottom margin 20 mm and top margin 30 mm. The header distance from the edge of the paper is 20 mm, and the footer distance from the edge of the paper is 13 mm. Articles are written in MS Word program with Times New Roman font type, 10 pt font, 1 space and in two column format. The maximum number of article pages is 10 (including pictures and tables) and written justified. The beginning of the paragraph is written indented by a distance of 1 cm and the distance between paragraphs is 10 pt.

Subtitles are written in bold with UPPER CASE format and arranged align left with no number and underscore. Sub subtitles are written in bold with Title Case format and arranged align left with no number and underscore. Sub sub subtitles are written in bold with Sentence case format and arranged align left without numbers and underscores.

RESULTS AND DISCUSSION Figures and Tables

Figures and Tables are placed in groups of text and annotated. The figure is followed by the caption placed under the figure and the table followed by the caption placed on the table. The figures and the tables are numbered. The figure is guaranteed to be printed clearly even though it is reduced to 50%. Figure is not framed but the chart area need to be fully boarded. For colorful images or graphics, please send as many as 300 sheets if you want to print in color. Tables with no vertical lines, whereas horizontal lines are only shown in 3 main horizontal lines i.e. 2 horizontal lines for the column headings and 1 closing line for the bottom row.

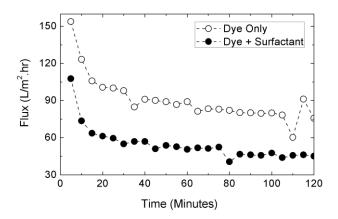


Figure 1. Flux Profile of Dye and Mixture of Dye and Surfactant Ultrafiltration at Remazol Blue concentration of 90 mg/l

Table 1. The microalgae composition of the	
Tetraselmis chuii species	

Tettasen	ins chun species
Component	Composition (%w/w)
α-sellulose	47.2 %
Hemisellulose	35.5%
HWS	17%

Equations

The equations are written center and numbered in parentheses. The number is placed at the end of the right margin of the column.

$$D = \frac{A}{\left(v_{rel}^2 \rho_a\right)^2} + B \left(\frac{M_{air}}{M_{liq}}\right)^{-\beta}$$
(1)

Quote Writing

The writing system quotes a manuscript or literature using the Harvard system. The literature source is composed only of the author's name and the year of its publication. Examples: Attempts to search for better heat storage systems have been widely used, including the latent heat melting of PCM (Yanadoro and Matsuda, 2006 *for one or two authors*; Smith *et al.*, 2011 *for more than two authors*). According to (2010),etc.

CONCLUSION

Articles submitted / registered online by accessing the website of the Reactor with the following address; <u>http://ejournal.undip.ac.id/</u>

<u>index.php/reaktor/index</u>. Author must have a username and keyword to be able to register the article. Metadata must be filled in completely. The article should be supplemented by a Declaration Letter stating that the article is free from conflict and plagiarism. For prospective Authors who have not been able to submit online can contact the Editor via E-mail with the address j.che@che.undip.ac.id atau reaktor_tkundip@yahoo.com.

The submitted articles will be reviewed by the Editorial Board and/or Reviewers. Correspondence will be addressed to the corresponding author. The author should immediately improve the article according to the reviewer's instructions. If the article has been declared acceptable, either the Main Revision or Minor Revision, the Author must correct it no later than **15 days** after the notice. If the author does not improve his article more than 15 days, then when submitting the article will be considered as a new registration (New Submission).

The editor reserves the right to reject articles submitted if irrelevant to the field of chemical engineering, not up to date or have been published in other scientific magazines.

NOTATION

Notation is written alphabetically. Latin letters are written first, followed by an Arabic letter.

REFERENCES

References are listed alphabetically without numbering and the distance between the bibliography

is 1 space (10 pt). The rules of writing used are as follows:

Magazine/scientific journal/proceedings:

Sumin, L., Youguang, M.A., Chunying, Z., Shuhua, S., and Qing, H.E., (2009), The Effect of Hydrophobic Modification of Zeolites on CO₂ Absorption Enhancement, *Chinese Journal of Chemical Engineering*, 17(1), pp. 36-41.

Book :

Fogler, H.S., (2006), *Elements of Chemical Reaction Engineering*, 4th, Prentice Hall International, Upper Sadle River, New Jersey, pp. 47-93

Disertation/thesis :

Djaeni, M., (2008), Energy Efficient Multistage Zeolite Drying for Heat Sensitive Products, *PhD Thesis*, Wageningen University, The Netherlands.

Patent :

van Reis, R.D., (2006), Charged Filtration Membranes and Uses Therefore, *US Patent 7,001,550*.

HandBook:

Knothe, G., van Gerpen, J., and Krahl, J., (2005), *The Biodiesel Hanbook*, AOCS Press, Campaign, Illionis, USA, pp. 70-84

Mujumdar, A.S. and Hasan, M., (2006), Drying of Polymers in *Handbook of Industrial Drying*, editor A.S. Mujumdar, 3rd ed, Marcel Dekker, New York, pp. 954-978.