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HASIL PENILAIAN SEJAWAT SEBIDANG ATAU *PEER REVIEW*
KARYA ILMIAH : PROSIDING

Judul Karya Ilmiah	:	Simultant Encapsulation of Vitamin C And Beta-Carotene in Sesame (*Sesamum Indicum L.*) Liposomes		
Jumlah Penulis	:	3 Orang		
Status Pengusul	:	Penulis ke-3		
Identitas Prosiding	:	a. Judul Prosiding	:	IOP Conference Series: Materials Science and Engineering: The 12th Joint Conference on Chemistry (JCC) 2017
		b. ISBN/ISSN	:	978-1-5108-6265-4 / 1757-8981
		c. Thn Terbit, Tempat Pelaks.	:	2018, Semarang - Indonesia
		d. Penerbit/Organiser	:	IOP Publishing Ltd
		e. Alamat Repository/Web	:	https://iopscience.iop.org/issue/1757-899X/349/1
		Alamat Artikel	:	https://iopscience.iop.org/article/10.1088/1757-899X/349/1/012014
		f. Terindeks di (jika ada)	:	Scopus/Scimagojr/SJR = 0,2 (2019)

Kategori Publikasi Makalah (beri ✓pada kategori yang tepat) : [√] *Prosiding* Forum Ilmiah Internasional
[ ] *Prosiding* Forum Ilmiah Nasional

Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai	Nilai Maksimal Prosiding		Nilai Akhir Yang Diperoleh
	Internasional [ ]	Nasional [ ]	
a. Kelengkapan unsur isi prosiding (10%)	3,00		3,00
b. Ruang lingkup dan kedalaman pembahasan (30%)	9,00		8,5
c. Kecukupan dan kemutahiran data/informasi dan metodologi (30%)	9,00		8,5
d. Kelengkapan unsur dan kualitas terbitan/prosiding(30%)	9,00		9,00
Total = (100%)	**30,00**		**29,00**
Nilai Pengusul = (40% x 29)/2 = 5,8			

Catatan Penilaian Paper oleh Reviewer :

1. **Kesesuaian dan kelengkapan unsur isi paper:** Artikel terdiri dari bab pendahuluan, metodologi, hasil dan pembahasan, dan referensi. Bagian-bagian tersebut sudah cukup dalam penyajian artikel ilmiah. Setiap bab dalam artikel saling berkaitan satu sama lain. Terdapat jumlah total referensi 39 jurnal ilmiah. Rujukan yang digunakan sebagai referensi, 98% berasal dari jurnal Internasional yang bereputasi.(3)
2. **Ruang lingkup dan kedalaman pembahasan:** Pendekatan yang digunakan dalam artikel ini adalah ilmu kimia koloid dan permukaan. Artikel membahas tentang enkapsulasi vitamin C dan beta-karoten dalam liposom sesame (*Sesamum indicum l.*) secara simultan. Studi yang dilakukan berupa mengetahui efisiensi enkapsulasi dan pengaruh penambahan kolestrol ke dalam liposom. Penulis mampu menjabarkan keseluruhan penelitian dengan baik bahkan mampu memprediksi posisi beta karoten dan kolestrol dalam membran liposom sesame. Hal tersebut mampu menjelaskan bahwa penambahan kolestrol ke dalam sesame untuk enkapsulasi beta karoten menurunkan efisensi enkapsulasi. Sistematika penulisan sudah cukup baik dan pendekatan yang digunakan dirujuk dari jurnal-jurnal yang sudah bereputasi.Namun analisa vit C dalam campuran btakaoten serta liposome menggunakan UV perlu dikaji validitasnya (8,5)
3. **Kecukupan dan kemutakhiran data/informasi dan metodologi:** Metodologi yang digunakan dalam penelitian sudah cukup baik dan cukup mutakhir. Analisis metodologi juga dilakukan dengan baik penulis.10 daei 39 jurnal terbit tahun sebelum artikel ini terbit (25%) (8,5)
4. **Kelengkapan unsur dan kualitas terbitan:** IOP Conference series adalah bagian dari IOP Publishing yang memuat prosiding hasil conference yang diadakan oleh IOP. IOP Publishing adalah perusahaan penerbitan Institute of Physics. Penerbit tersebut menyediakan publikasi melalui mana penelitian ilmiah didistribusikan di seluruh dunia, termasuk jurnal, situs web komunitas, majalah, proses konferensi dan buku. Pada artikel ini berupa terbitan prosiding oleh IOP Publishing yang sudah berindeks scopus dengan nilai SJR 0,2 (2017). (9)

Turnitin: 19% dengan Exclude Quote dan Bibliografi On

Semarang, 8-3-2021

Reviewer 1

Prof. Dr. Muhammad Cholid Djunaidi, S.Si., M.Si
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		f. Terindeks di (jika ada)	:	Scopus/Scimagojr/SJR = 0,2 (2019)

Kategori Publikasi Makalah (beri ✓pada kategori yang tepat) : [√] *Prosiding* Forum Ilmiah Internasional
[ ] *Prosiding* Forum Ilmiah Nasional

Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai	Nilai Maksimal Prosiding		Nilai Akhir Yang Diperoleh
	Internasional [ ]	Nasional [ ]	
a. Kelengkapan unsur isi prosiding (10%)	3,00		3,00
b. Ruang lingkup dan kedalaman pembahasan (30%)	9,00		8,50
c. Kecukupan dan kemutahiran data/informasi dan metodologi (30%)	9,00		8,50
d. Kelengkapan unsur dan kualitas terbitan/prosiding(30%)	9,00		8,50
Total = (100%)	**30,00**		**28,50**
Nilai Pengusul = (40% x 28,50)/2 = 5,70			

Catatan Penilaian Paper oleh Reviewer :

1. **Kesesuaian dan kelengkapan unsur isi paper:** Kelengkapan unsur isi jurnal telah terpenuhi karena pada artikel tersebut terdapat pendahuluan, metodologi, hasil dan pembahasan dan referensi. Setiap unsur isi jurnal berkaitan satu sama lain. Referensi yang digunakan dalam artikel 98% merupakan jurnal internasional yang bereputasi, dan terdapat sebanyak 39 jurnal ilmiah yang digunakan sebagai referensi. Artikel tersebut sesuai pedoman penulisan karya ilmiah.
2. **Ruang lingkup dan kedalaman pembahasan**: Artikel ini berisi tentang enkapsulasi vitamin C dan beta-karoten dengan liposom sesame (Sesamum indicum l.) secara bersamaan, dengan pendekatan yang digunakan yaitu kimia koloid dan permukaan. Sistematika penulisan artikel sudah cukup baik dan runtut. Penulis dapat menjelaskan bagaimana pengaruh penambahan kolesterol terhadap efisiensi enkapsulasi vitamin C dan beta-karoten, dan mampu memprediksi posisi beta-karoten dan kolesterol dalam membran liposom sesame dan memvisualisasikannya dalam bentuk gambar yang dapat memudahkan untuk memahami artikel tersebut. Penulis mampu menyusun pembahasan secara jelas dan mudah dipahami.
3. **Kecukupan dan kemutakhiran data/informasi dan metodologi:** Penelitian telah menghasilkan data/informasi yang berkaitan sehingga dapat saling menjelaskan. Metodologi yang diuraikan mudah untuk dipahami.
4. **Kelengkapan unsur dan kualitas terbitan:** Artikel ini sudah memenuhi kualitas terbitan karena diterbitkan oleh IOP Conference Series adalah bagian dari IOP publishing di mana merupakan perusahaan penerbitan Institut of Physics yang memuat posiding hasil conference yang diadakan oleh IOP. Penerbit tersebut menyediakan publikasi yang digunakan untuk mendistribusikan penelitian ilmiah mutakhir ke seluruh dunia. Artikel ini merupakan terbitan IOP publishing dan sudah terindeks scopus dengan nilai SJR sebesar 0,19 (2018).

Turnitin: 19% dengan Bibliografi On dan Exclude Quote

Semarang, 12 April 2023

Reviewer 2

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LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU *PEER REVIEW*
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		f. Terindeks di (jika ada)	:	Scopus/Scimagojr/SJR = 0,2 (2019)

Kategori Publikasi Makalah (beri ✓pada kategori yang tepat) : [√] *Prosiding* Forum Ilmiah Internasional
[ ] *Prosiding* Forum Ilmiah Nasional

Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai	Nilai Reviewer		Nilai Rata-rata
	Reviewer I	Reviewer II	
a. Kelengkapan unsur isi prosiding (10%)	3,00	3,00	3,00
b. Ruang lingkup dan kedalaman pembahasan (30%)	8,50	8,50	8,50
c. Kecukupan dan kemutahiran data/informasi dan metodologi (30%)	8,50	8,50	8,50
d. Kelengkapan unsur dan kualitas terbitan/prosiding(30%)	9,00	8,50	8,75
Total = (100%)	**29,00**	**28,50**	**28,75**
Nilai Pengusul = (40% x 28,75)/2 = 5,75			

Semarang, 12 April 2023

Reviewer 2

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Simultant encapsulation of vitamin C and beta-carotene in sesame (Sesamum indicum l.) liposomes

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Save all to author list

[a] Chemistry Department, Diponegoro University, Semarang, Indonesia
[b] Undergraduate Program, Chemistry Department, Diponegoro University, Semarang, Indonesia

Abstract

In this study sesame liposomes were used to encapsulate both vitamin C and beta-carotene simultaneously. Liposomes were prepared with addition of cholesterol. The encapsulation efficiency (EE) of sesame liposomes for vitamin C in the present of beta-carotene was 77%. The addition of cholesterol increased the encapsulation efficiency. The highest encapsulation efficiency was 89%

obtained in liposomes with 10% and 20% cholesterol. Contrary to that, the highest beta-carotene encapsulation efficiency of 78%, was found in the sesame liposomes prepared without the added cholesterol. Results showed that sesame liposomes can be used to encapsulate beta-carotene and vitamin C simultaneously. When beta-carotene and vitamin C were encapsulated concurrently, cholesterol intensified the efficiency of vitamin C encapsulation on the contrary it diminished the efficiency of beta-carotene encapsulation.

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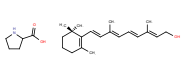

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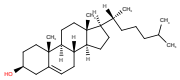

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12th Joint Conference on Chemistry

JCC12

2017

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2. **Guoping Chen** (National Institute for Materials Science, Japan)
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PREFACE

The Joint Conference on Chemistry (JCC) is annual society meeting of the Chemistry department consortium of Universitas Negeri Semarang (UNNES), Universitas Diponegoro (UNDIP), Universitas Sebelas Maret Surakarta (UNS), Universitas Jenderal Soedirman (UNSOED), and Universitas Kristen Satya Wacana (UKSW) in colaboratio with Indonesian Chemical Society or Himpunan Kimiawan Indonesia (HKI). The 12th JCC 2017 meeting was held in Semarang from 19th to 20th September 2017. It was co-organized by Chemistry Department, Faculty of Mathematics and Natural Sciences of UNNES.

The Conference adopts a timely theme Contributions of chemical sciences, engineering, education, and technology in solving global challenges Chemistry is one of the keys to create a sustainable society, and for that purpose we need to reinforce the chemistry science, technology and education and to extend our finding to innovation

Approximately 150 participants have attended the conference. Among the participants, they were 6 plenary speakers, 11 invited speakers, and 115 contributed speakers. Based on the country where the participants came from, they were from 10 (six) countries namely Singapore, Japan, Indonesia, Hong Kong, Malaysia, and Thailand

The speakers of the meeting have submitted their full papers for possible publications in a proceeding of IOP Publishing (Journal of Physics: Conference Series). After peer reviewed by experts in related fields, finally, the scientific boards decide to accept 77 papers.

The JCC acknowledges the enthusiasms of the participants, all members of the committees, the international advisory board, Chemistry Department Faculty of Mathematics and Natural Sciences of UNNES, and all those who have contributed to the success of the 12th JCC 2017.

The next JCC event will be held in 2018. We are looking forward to welcoming you to the 13th JCC 2018!

Cepi Kurniawan, PhD

Chairman of the 12th Joint Conference on Chemistry 2017

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