

International Conference on Pharmaceutical
Sciences (ICOPS@IIUM2022)

8th & 9th August 2022

BOOK OF ABSTRACTS

*Enhancement of Pharmaceutical
Efficacy through Sustainable
Research and Innovation*

Organisers:



AN INTERNATIONAL AWARD-WINNING INSTITUTION FOR SUSTAINABILITY

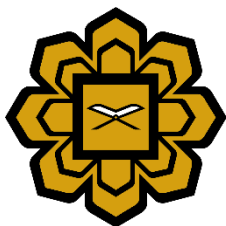
LEADING THE WAY
KHALIFAH - AMANAH - IGBA - RAHMATAN UL-ALAMIN
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Uhamka
UNIVERSITAS MUHAMMADIYAH PROF. DR. HAMKA

Abstracts of the
International Conference on Pharmaceutical Sciences
ICOPS@IIUM2022

Kuantan, Malaysia, 8th & 9th August 2022



International Conference on Pharmaceutical Sciences

ICOPS@IIUM2022

Virtual Conference | 8th & 9th August 2022

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About ICOPS@IIUM2022

The pharmaceutical science field concerns a spectrum of areas of study that include pharmacoeconomics, clinical sciences, drug delivery, drug action, drug discovery and design, and regulatory affairs. This field is growing fast, creating room for improvement and opportunities for pharmaceutical scientists to innovate and develop new drugs and new approaches to diseases and other related subjects of interest.

Conferences and seminars are great places for scientists to expand their knowledge on a lot of things. It might involve learning from leading researchers, new methods, new tools, and data that have not been published. Additionally, it provides a great forum for networking with colleagues in the field, meeting like-minded people, and receiving feedback from others.

Kulliyah of Pharmacy, IIUM successfully hosted the International Conference on Industrial Pharmacy (ICIP) in 2014 and 2016. The third ICIP conference was slated to take place in 2020. However, the conference was held for a period because of the COVID-19 pandemic. For 2022, we are hosting this conference jointly with the Faculty of Pharmacy and Science at Universitas Muhammadiyah Prof. Dr. Hamka (UHAMKA), Jakarta, Indonesia, in an effort to boost participation in the pharmaceutical discipline globally. The conference is now known as the "International Conference on Pharmaceutical Sciences (ICOPS)" to reflect this rebranding. The conference is held virtually as a first step to inspire all pharmaceutical scientists after the pandemic. This year's selected theme is Enhancement of Pharmaceutical Efficacy through Sustainable Research and Innovation.

General Information

ORGANISING COMMITTEE

Advisors

Dr. Juliana Md Jaffri

Assoc. Prof. Dr. Hazrina Ab. Hadi

Chairperson

Prof. Dr. Muhammad Taher Bakhtiar

Deputy Chairperson

Dr. apt. Fith Khaira Nursal

Secretariat & Registration

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2. Sr. Zailillah Md Tahir
3. Sr. Rahmatul Wahida Ahmad
4. Sr. Siti Rusianti Tomin
5. Drs. apt. Inding Gusmayadi
6. Anang Rohwiyono

Programme

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2. Dr. Izzat Fahimuddin Mohamed Suffian
3. Sr. Amirah Binti Abdul Rashid

IT & Technical

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3. Sr. Umi Kalthum Mohd Hanapi (ITD, OCD)
4. Br. Najmuddin Md Yasim
5. apt. Kriana Efendi

Scientific

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3. Dr. Awis Sukarni Mohmad Sabere
4. Dr. apt. Hadi Sunaryo
5. Dr. apt. Rini Prastiwi

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2. Br. Ahmad Khuzairi Irfan Alias (Finance Department, OCD)
3. Apt. Kori Yati

Publication & Program Book

1. Dr. Kamal Rullah (Head)
2. Assoc. Prof. Dr. Farahidah Mohamed

Promotion & Publicity

1. Dr. Zalikha Ibrahim (Head)
2. Assoc. Prof. Dr. Alfi Khatib

Welcome Message



السلام عليكم ورحمة الله وبركاته

Alhamdulillah, all praises be to Allāh subhā nahū wata'ālā

I am indeed honoured to write a few words in this abstract book of the International Conference on Pharmaceutical Sciences (ICOPS) 2022. I would also like to extend a warm welcome to all of the conference attendees from all around the globe.

ICOPS 2022 aims at covering a wide range of topics in pharmaceutical sciences. This rich program is anticipated to be both stimulating and informative. We believe that this two-day comprehensive programme will be both enlightening and stimulating. Additionally, it gives all participants the chance to network, meet, and interact with one another while sharing their research findings. With your support and participation, the conference will continue to be organised to update recent findings on global pharmaceutical sciences issues.

I must express my gratitude to the conference organisers from both Kulliyah of Pharmacy IIUM and Faculty of Pharmacy and Science, Universitas Muhammadiyah Prof. Dr. Hamka (UHAMKA), Indonesia, for their efforts and dedication. Also, to everyone who helped directly and indirectly in making this conference possible.

Thank you. Wassalām.

Dzul kifli Abdul Razak, Prof. Emeritus Tan Sri Dato'
Rector
International Islamic University Malaysia (IIUM)

Welcome Message



Assalammualaikum warahmatullahi wabarakatuh

Alhamdulillah, let us give thanks to the presence of Allah Subhanahu wa Ta'ala for His gift. I would like to say thank you to the International Islamic University Malaysia (IIUM), especially the Kuliyyah of Pharmacy, for collaborating with the Faculty of Pharmacy and Science (FFS) Universitas Muhammadiyah Prof. Dr. Hamka (UHAMKA) in the International Conference on Pharmaceutical Sciences (ICOPS) IIUM 2022 on this occasion.

I would like to congratulate the organizing committee of ICOPS 2022 IIUM and UHAMKA for their success in preparing this event from the beginning. Congratulations to the speakers and all participants from several countries, I am happy to be with you all in this prestigious event.

The exciting theme of the conference, namely "Enhancement of Pharmaceutical Efficacy through Sustainable Research and Innovation" brings an opportunity for both parties (IIUM and Uhamka), in particular, as well as all participants from various institutions able to work together. Research in the field of science such as pharmacy will continue to develop with technological advances, so this event is very appropriate to display various updates and findings of sustainable research. Hopefully, in this ICOPS event, you will find the latest things that are useful for the advancement of education and for the interests of the Ummat.

Once again, I would like to say congratulate the committee. May it bring goodness to IIUM and UHAMKA and all speakers and participants; enjoy the conference enthusiastically.

Prof. Dr. Gunawan Suryoputro, M.Hum.
Rector
Universitas Muhammadiyah Prof. Dr. Hamka

Welcome Message



السلام عليكم ورحمة الله وبركاته

In the name of Allah, the Most Gracious, the Most Merciful.

I bid welcome to all participants of the International Conference on Pharmaceutical Sciences at the International Islamic University Malaysia (ICOPS@IIUM) 2022, which is being held in collaboration with Universitas Muhammadiyah Prof. Dr. HAMKA (UHAMKA), Indonesia. I hope it will be a landmark event for the Kulliyah of Pharmacy (KOP) and the University.

ICOPS@IIUM 2022 brings together researchers, academicians and practitioners to exchange ideas, advanced knowledge and discuss critical issues in pharmacy-related fields. In addition, this conference serves as a forum for disseminating the most recent discoveries and technological advancements in pharmacy. The conference highlights promising areas of technological development and encourages academic advancement.

Lastly, the organizers surely deserve our appreciation for their excellent work and contribution in preparing for this event. I also would like to thank all those who have contributed in one way or another to make this a successful conference.

Thank you and **وسلم**

Asst. Prof. Dr. Juliana Bt. Md. Jaffri
Dean of Kulliyah of Pharmacy (KOP)
International Islamic University Malaysia (IIUM)

Welcome Message



Assalamualaikum warahmatullahi wabarakatuh

May the peace, mercy, and blessings of Allah be with you.

Alhamdulillah, praise to Allah Subhanahu Wa Ta'ala for His grace. It is an honour to join the International Conference on Pharmaceutical Sciences at the International Islamic University Malaysia (ICOPS@IIUM) 2022 on this occasion. ICOPS@IIUM 2022 is an academic collaboration event between the Kuliyyah of Pharmacy International Islamic University Malaysia (IIUM) and the Faculty of Pharmacy and Science, Universitas Muhammadiyah Prof. Dr. HAMKA (UHAMKA), Indonesia.

It is distinct pleasure to join you today and I congratulate the organizing committee of ICOPS@IIUM 2022 for successfully preparing and organizing this event. Congratulations also to all participants who joined this conference.

In accordance with the conference theme, "Enhancement of Pharmaceutical Efficiency through Sustainable Research and Innovation", I hope that both parties (IIUM and UHAMKA) as well as all participants from various institutions can work together. Today's Pharmaceutical Sciences are experiencing prompt development with a lot of research that produces new technology and sustainable information. The importance of collaborative research between universities, even between countries, encourages pharmaceutical academics to be more creative and innovative.

I am very optimistic that this conference will succeed in encouraging academics and researchers to be more serious and enthusiastic about doing research, and always discover useful findings in the field of science, especially pharmacy. I also hope this conference will play a key role in promoting networking in the field of pharmacy sciences among invited speakers and oral speakers from different countries, especially Malaysia and Indonesia. Again, I would like to congratulate the organizing committee on holding the ICOPS@IIUM 2022 and wish everyone enjoy a very rewarding conference with enthusiasm.

Nashrun Minallah wa Fathun Qarib.

Wassalamualaikum warahmatullahi wa barakatuh.

Assoc. Prof. Dr. apt. Hadi Sunaryo, M.Si.
*Dean of Faculty of Pharmacy and Science
Universitas Muhammadiyah Prof. Dr. Hamka*

Welcome Message



Assalamualaikum warahmatullahi wabarakatuh

Praises to ALLAH s.w.t., the Most Benevolent and the Most Merciful.

On behalf of the Organising Committee, I am pleased to welcome you to the International Conference on Pharmaceutical Sciences at the International Islamic University Malaysia (ICOPS@IIUM) 2022. This conference is a brand-new name of our previous conference, the International Conference on Industrial Pharmacy (ICIP), which was successfully held the previous year. This name change is part of our strategy to broaden the scope of the conference, hence more colleagues could join. This brand-new conference is organised in collaboration with the Faculty of Pharmacy, Universitas Muhammadiyah Prof. Dr. Hamka, Jakarta, Indonesia. This conference is presenting 8 keynote and plenary speakers, 8 invited presenters and 50 oral participants from various countries such as

UK, Iran, Indonesia, India, and Japan. The conference covers a wide range of pharmaceuticals fields such as biologics development, cosmeceutical, drug delivery, drug discovery, drug formulation, nano-medicine, natural products, natural product formulations, pharmaceutical biotechnology, pharmaceutical nanotechnology, pharmacology and pharmacy practice.

In line with the theme of the conference "Enhancement of Pharmaceutical Efficacy through Sustainable Research and Innovation" is that we should learn from Covid-19 pandemic with the active research and innovation to face unprecedented challenges in the global health issue. In addition, we hope that the conference will facilitate active interactions and benefit all participants in gaining experience and expanding their network.

We would like to thank Plenary and Keynote speakers Prof. Dr. Mohamed Haniki from IIUM, Professor Seid Mehdi from Gorgan University of Agricultural Sciences and Natural Resources, Iran; Professor Galvin Halbert from the University of Strathclyde; Professor Kinji Mishima from Fukuoka University, Japan; Professor Farid Dorkoosh from Tehran University of Medical Sciences; Professor Dyah Perwitasari from the University of Ahmad Dahlan; Assoc. Professor Dr Abd Almoneem Doolaanea from

IIUM and Assoc. Professor Dr. Supandi from the University of Hamka for sharing your vast experience. We wish that your sharing can inspire us to be involved in research in the pharmaceutical fields.

Allow me to express our gratitude to the hardworking organising committee from IIUM and Uhamka to make this virtual conference successful.

Finally, we would like to express our heartiest gratitude to the platinum sponsor BUCHI Malaysia Sdn. Bhd., Pharmaniaga Bhd., and to other sponsors Johnson & Johnson Sdn. Bhd., K-Link International Sdn. Bhd. and Dream AI Enterprise.

We wish all the participants a productive and enjoyable conference.

Thank you very much.

Wassalamualaikum Wr. Wb.

Prof. Dr. Muhammad Taher
Chairperson ICOPS@IIUM 2022

Conference Schedule

TIME	DAY 1 (8th August 2022)	
08.00-08.20	Registration Zoom Link: https://iium.zoom.us/j/94695185372 Meeting ID: 946 9518 5372 Passcode: 467105	
08.20-08.25	Welcoming Address by Master of Ceremony	
08.25-08.30	Recitation of Al-Quran	
08.30-08.40	Welcoming Speech by Chairperson of ICOPS 2022	
08.40-08.50	Opening Speech by Rector of UHAMKA	
08.50-09.00	Officiation of ICOPS2022 by the Rector of IIUM	
09.00-09.05	Photo Session	
09.05-09.45	Plenary I: Prof. Dr. Mohamad Haniki (International Islamic University Malaysia)	
09.45-10.00	Sponsored talk by BUCHI Malaysia Sdn. Bhd.	
10.00-10.40	Plenary II: Dr. Abd Almonem Doolanea (International Islamic University Malaysia)	
10.40-10.45	Tea Break	
	BREAKOUT ROOM A	BREAKOUT ROOM A
Oral Presentation Session 1		
10.45-11.00	1A. Aqilah Amran (IIUM)	1B. Muhammad Hakeem (IIUM)
11.00-11.15	2A. Umar Azhan (IIUM)	2B. Ihsan Safwan (FRIM)
11.15-11.30	3A. Maduka Chetana (GPRCP)	3B. Nur Farahani (UiTM)
11.30-11.45	4A. Srilakshmi Gamagundam (GPRCP)	4B. Karishma Kanukuntla (GPRCP)
11.45-12.00	Invited speaker I (Apt. Dina Permata Wijaya, M.Si)	Invited speaker II (Apt. Sofia Fatmawati, MS)
12.00-12.15	5A. Nurul Huda Kamsani (IIUM)	5B. Abdur Rashid Mia (IIUM)
12.15-12.30	6A. Silagani Navyasri (GPRCP)	6B. A. Rama (GPRCP)
12.30-12.45	7A. Aisha Rahman (GPRCP)	7B. Mustofa Ahda (UAD)
12.45-13.00	8A. Shweta Savarn (GPRCP)	8B. Nur Farisya (IIUM)
13.00-14.00	Lunch Break	

Oral Presentation Session 2		
14.00-14.15	9A. CV Sai Sravani (GPRCP)	9B. Helmi Husaini (IIUM)
14.15-14.30	10A. Javeria Tamkeen (GPRCP)	10B. Sapiah Derahman (USM)
14.30-14.45	Invited speaker III (Apt. Hariyanti, M.Si)	Invited speaker IV (Apt. Hafiz Ramadhan, MS)
14.45-15.00	11A. Veeranti Vipanchi (GPRCP)	11B. Nur Adibah (IIUM)
15.00-15.15	12A. Nurul Jummah (ITB)	12B. Sasha Abu Rass (UKM)
15.15-15.30	15A. Somaia Abueta (IIUM)	13B. Hariyanti (UHAMKA)
15.40-16.20	Keynote Speaker I: Prof. Dr. Gavin Halbert (University of Strathclyde)	
16.20-17.00	Keynote Speaker II: Prof. Dr. Seid Mahdi Jafari (Gorgan University)	
End of Day 1		

TIME	DAY 2 (9th August 2022)	
08.00-08.30	Registration Zoom Link: https://ium.zoom.us/j/94695185372 Meeting ID: 946 9518 5372 Passcode: 467105	
08.30-09.10	Keynote Speaker III: Prof. Dr. Dyah Aryani Perwitasari (Universitas Ahmad Dahlan)	
09.10-09.25	Sponsored talk by Pharmaniaga Bhd.	
09.25-10.05	Plenary III: Prof. Dr. Kenji Mishima (University of Fukuoka)	
10.05-10.15	Tea Break	
	BREAKOUT ROOM A	BREAKOUT ROOM B
Oral Presentation Session 3		
10.15-10.30	14A. Ebrahim Sadaqa (ITB)	14B. Rindita (UHAMKA)
10.30-10.45	13A. Silvy Aldila (UNAND)	15B. Siska (UHAMKA)
10.45-11.00	16A. Nur Suhaila Sudarman (IIUM)	16B. Budi Untari (UNSRI)
11.00-11.15	17A. Maimuna Fatima (GPRCP)	17B. Herlina (UNSRI)
11.15-11.30	Invited speaker V (Prof. Dr. Marlina, MS)	18B. Izzuddin Ahmad Nadzirin (IIUM)
11.30-11.45	20A. Lili Fitriani (UNAND)	Invited speaker VI (Prof. Dr. Bharath Kumar)
11.45-12.00	21A. Uswatul Hasanah (UNAND)	19B. Fitria Nugrahaeni (UHAMKA)
12.00-12.15	22A. Inding Gusmayadi (UHAMKA)	20B. Dyah Rahmasari (UMM)
12.15-12.30	23A. Landyyun R. Sjahid (UHAMKA)	21B. Fitri Yuniarti (UHAMKA)
12.30-12.45	24A. Adhitya Jessica (UNAND)	22B. T.Vithya (RGUHS)
12.45-13.00	25A. Tahyatul Bariroh (UHAMKA)	23B. Yeni (UHAMKA)
13.00-14.00	Lunch Break	

Oral Presentation Session 4		
14.00-14.15	Lunch Break	24B. Nora Wulandari (UHAMKA)
14.15-14.30		25B. Yen Yen Indrawijaya (UNAIR)
14.30-14.45	Invited speaker VII (Dr. Nor Amlizan Ramli)	Invited speaker VIII (Mr. Mohemmad Redzuan)
14.50-15.30	Keynote Speaker IV: Prof. Dr. Farid Dorkoosh (Tehran University of Medical Sciences)	
15.30-16.10	Plenary IV: Assoc. Prof. Dr. Supandi (UHAMKA)	
16.10-16.15	Tea Break	
16.15-16.30	Closing Speech by Deputy Chairperson of ICOPS 2022	
16.45-17.00	Postgraduate awards presentation	
End of Day 2		

23B - PHARMACEUTICAL ANALYSIS

THE QUANTITATIVE ANALYSIS OF ALKALOIDS IN *PTEROCARPUS INDICUS* WILLD. LEAVES ETHANOL EXTRACT WITH MACERATION AND SOXHLETATION EXTRACTION METHODS

Yeni Yeni*, Hurip Budi Riyanti, and Lucy Syifa Griselda

ABSTRACT

Pterocarpus indicus Willd. is one of the plants that can be used for the prevention and treatment of diseases. The leaves of this plant contain secondary metabolites such as alkaloids, tannins, saponins, glycosides and flavonoids. The aim of this study is to determine the effect of the extraction method on the levels of alkaloids contained in the ethanol extract of P. indicus leaves. The extraction of alkaloid compounds was carried out using maceration and soxhletation extraction methods. Determination of alkaloid content was conducted using UV-Vis spectrophotometer. The yield of maceration extract was 10.6375% and the yield of soxhletation extract was 24.04%. The results of the quantitative analysis of the maceration extract were 166.8792 ± 3.1288 mg reserpine equivalent/g and the results of the quantitative analysis of the soxhletation extract were 85.6670 ± 2.5871 mg reserpine equivalent/g. Based on the independent sample T-test, a significance of 0.000004 (<0.05) was obtained. It means that there is a significant difference in the levels of alkaloids in P. indicus by maceration and soxhletation methods.

KEYWORDS:

Alkaloid;
Pterocarpus indicus;
Maceration;
Soxhletation;
UV-Vis spectrophotometer.

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