

## Nasrul Wathoni, PhD – Universitas Padjadjaran



1	Full Name	apt. Nasrul Wathoni, S.Si., M.Si., Ph.D.
2	Sex	Male
3	Institution	Faculty of Pharmacy, Universitas Padjadjaran Ministry of Research, Technology and Higher Education
4	NIP NIDN	198205042006041003 0004058202
5	Status/Jabatan Fungsional Golongan	Associate Professor/Lektor Kepala IVa
6	<b>H Index Scopus</b> <b>H Index Google Scholar</b>	<b>7</b> <b>9</b>

Profil In Unpad :

<https://farmasi.unpad.ac.id/nasrulwathoni/>

Google scholar :

[https://scholar.google.com/citations?user=\\_JMUmT4AAAAJ&hl=en](https://scholar.google.com/citations?user=_JMUmT4AAAAJ&hl=en)

Scopus ID :

<https://www.scopus.com/authid/detail.uri?authorId=55520893400>

### Education

	Undergraduate	Master	Doctor
University	Universitas Padjadjaran	Institut Teknologi Bandung	Kumamoto University
Field	Farmasi	Farmasetika	Physical Pharmaceutics
Graduated	2004	2009	2017
Thesis titles	Efektivitas Lecithin sebagai Emulgator dalam Sediaan Emulsi Minyak Ikan	Pengaruh Iontoforesis Dan Zat Peningkat Penetrasi	Design and Evaluation of Sacran/Cyclodextrin Hydrogel Film for Wound Dressing Application

		Terhadap Difusi Sediaan Gel Piroksikam	
Supervisor	Drs. Boesro Soebagio, MS. Apt	Dr. Jessie Sofia Pamudji, MS., Apt.	Prof. Hidetoshi Arima, PhD.

### Work experiences

- Manager of Academic and Students Affairs, Faculty of Pharmacy, Universitas Padjadjaran (2017-2019)
- Chief of International Unit, Faculty of Pharmacy, Universitas Padjadjaran (2019-2020)
- Associate of International Office, Universitas Padjadjaran (2019 – recent)
- Deputy of Information Technology, Institut Pembangunan Jawa Barat (INJABAR) Universitas Padjadjaran (2020 - recent)

### Research grants

No	Year	Title	Grant
1	2019-2020	<u>Plester film hidrogel <math>\alpha</math>-mangostin dari kulit manggis (<i>Garcinia mangostana</i> L.) berbasis kitosan – alginat untuk mengobati sariawan (Reccurent Aphthous Stomatitis)</u>	<u>Hibah Bersaing DIKTI</u>
2	2019-2021	<u>The New Antiproliferative Agents in Breast Cancer Cells and Potential Inhibitors of Human Estrogen Receptor from Polymeric Nanoparticles of Alpha Mangostin (<i>G.mangostana</i>): In Slico, In Vitro, and Formulation</u>	<u>Hibah Bersaing DIKTI</u>
3	2019-2021	<u>Pengembangan hidrogel kitosan Liposom-hEGF (human Epidermal Growth Factor) Rekombinan Hasil Sekresi Ekstraseluler Menggunakan <i>Escherichia coli</i> BL21 Sebagai Kandidat Obat Penyembuhan Luka</u>	<u>Hibah Bersaing DIKTI</u>
4	2017-2019	<u>Pengembangan Sacran Hidrogel Film Sebagai Biomaterial Baru untuk Terapi Regeneratif pada Luka Diabetes Tahun 1</u>	<u>Riset Fundamental Unpad</u>
5	2012	<u>Pengembangan Biosensor Asam Urat yang Dikombinasikan dengan Teknik Reverse Iontophoresis:Upaya Deteksi Dini As Urat Tanpa Rasa Sakit Tahun 1</u>	<u>Hibah Bersaing DIKTI</u>
6	2013	<u>Pengembangan Biosensor Asam Urat yang Dikombinasikan dengan Teknik Reverse</u>	<u>Hibah Bersaing DIKTI</u>

		Iontophoresis:Upaya Deteksi Dini As Urat Tanpa Rasa Sakit Tahun 2	
7	2010	Pengaruh Propilenglikol terhadap Laju Difusi Krim Etil Vitamin C	DIPA Unpad
8	2009	Pemanfaatan Getah Pohon Pisang dan Lendir Lidah Buaya Sebagai Sediaan Obat Untuk Luka Baka	Hibah Strategi Nasional DIKTI
9	2007	Efektivitas Lesitin sebagai Emulgator dalam Sediaan Emulsi Minyak	DIPA Unpad

## Publications

No	Title	Journal	Volume/No/Year
1	Effect of Iontophoresis and Penetration Enhancers on The In Vitro Diffusion Of A Piroxicam Gel	Int J Pharm Pharm Sci	Vol 4, Issue 4,2012; 215-218
2	Measurement Of Uric Acid Level In Vitro by Reverse Iontophoresis.	Int J Pharma Sci Tech.	Vol-7, Issue – 1, January – June 2012. 27-34
3	Effect of iontophoresis and propylene glycol on the in vitro diffusion of ethyl vitamin c cream	Int. Res J Pharm. App Sci.,	2012; 2(4): 31-34
4	Measurement of Uric Acid Level In Vivo by Reverse Iontophoresis.	Int J Emerging Tech Computational App Sci.,	2013; 4(3); 319-324
3	Characterization and Optimization of Natural Maltodextrin-based	Niosome. J App Pharm Scie.	Volume: 3, Issue: 7, July, 2013. DOI: 10.7324/JAPS.2013.3712.
4	A survey of consumer expectation in community pharmacies in Bandung	Indonesia. J App Pharm Scie.	DOI: 10.7324/JAPS.2014.40114; 2014;4(1);084-090
5	Determination of uric acid level by polyaniline and poly (allylamine): Based biosensor	J Adv Pharm Technol Res	DOI:10.4103/2231-4040.126981; 2014;5(1);13-16
6	Biosensor for Uric Acid Determination Based on Combination of Polypyrrole and Poly(allylamine) Films	J Young Pharm.	doi:10.5530/jyp. 2014.1.72014; 6(1):39-41
7	Physically crosslinked-sacran hydrogel films for wound dressing application.	International Journal of Biological Macromolecules,	Volume 89, August 2016, Pages 465-470.
8	Enhancing effect of $\gamma$ -cyclodextrin on wound dressing properties of sacran hydrogel film	International Journal of Biological Macromolecules,	Volume 94, Part A, January 2017, Pages 181–186.

9	Enhancement of curcumin wound healing ability by complexation with 2-hydroxypropyl- $\gamma$ -cyclodextrin in sacran hydrogel film	Journal of Biological Macromolecules,	Volume 98, May 2017, Pages 268-276.
10	Repellent Activity of Essential Oils from <i>Cananga odorata</i> Lamk. and <i>Cymbopogon nardus</i> L. on Corn Starch-Based Thixogel.	Journal of Young Pharmacists,	2018; 10(2s):S118-S123.
11	A Review on Herbal Cosmetics In Indonesia	International Journal of Applied Pharmaceutics.	Vol 10, Issue 5 (Sep-Oct), 2018 Page: 13-16
12	Evolution of Contraceptive Implants: A Review.	International Journal of Applied Pharmaceutics.	Vol 10, Issue 6 (Nov-Dec), 2018
	Accelerated wound healing ability of sacran hydrogel film by keratinocyte growth factor in alloxan-induced diabetic mice	International Journal of Applied Pharmaceutics.	10(2), pp. 57-61, 2018
13	Host-Guest Interactions of $\alpha$ -Mangostin with ( $\alpha$ , $\beta$ , $\gamma$ )-Cyclodextrins: Semi-Empirical Quantum Mechanical Methods of PM6 and PM7	Journal of Young Pharmacist	Journal of Young Pharmacists 11 (1), 31, 2019
14	Fabrication of Native and Enzymatically Modified Durian Seed ( <i>Durio zibethinus</i> Murr.) Starch	Indonesian Journal of Pharmaceutics	Indonesian Journal of Pharmaceutics 1 (2), 1-6, 2019
15	Sacran Hydrogel Film Containing Keratinocyte Growth Factor Accelerates Wound Healing by Stimulating Fibroblast Migration and Re-epithelization	Chemical and Pharmaceutical Bulletin,	2019, Volume 67, Issue 8, Pages 849-854, Released August 01, 2019
16	Application and characterization of in situ gel	International Journal of Applied Pharmaceutics	10(6), pp. 34-37, 2019
17	Advances in orally targeted drug delivery to colon	Journal of Advanced Pharmaceutical Technology and Research	10(3), pp. 100-106, 2019
18	Characterization and antioxidant activity of pectin from Indonesian mangosteen ( <i>Garcinia mangostana</i> L.) rind	Heliyon	Heliyon 5(8),e02299, 2019

19	Formulation and characterization of mangostin in chitosan nanoparticles coated by sodium alginate, sodium silicate, and polyethylene glycol	Journal of Pharmacy and Bioallied Sciences	11(8), pp. S619-S627, 2019
20	Optimization of secreted recombinant human epidermal growth factor production using pectate lyase B from Escherichia coli BL21(DE3) by central composite design and its production in high cell density culture	Journal of Pharmacy and Bioallied Sciences	11(8), pp. S562-S566, 2019
21	Kahar method: A novel calculation method of tonicity adjustment	Journal of Pharmacy and Bioallied Sciences	11(8), pp. S635-S649, 2019
22	$\alpha$ -mangostin hydrogel film based chitosan-alginate for recurrent aphthous stomatitis	Applied Sciences (Switzerland)	9(23),5235, 2019
23	Nanoparticle drug delivery systems for $\alpha$ -mangostin	Nanotechnology, Science and Applications	13, pp. 23-36, 2020
24	The effectiveness of postoperative antibiotics following appendectomy in pediatric patients: A cost minimization analysis	<u>Open Public Health Journal</u>	13(1), pp. 80-86, 2020
25	Epidermal growth factor in sacran hydrogel film accelerates fibroblast migration	Journal of Advanced Pharmaceutical Technology and Research	11(2), pp. 74-80, 2020
26	Synthesis of nano- $\alpha$ mangostin based on chitosan and Eudragit S 100	Journal of Advanced Pharmaceutical Technology and Research	11 (3), 95, 2020
27	Activity and Effectiveness of Recombinant hEGF Excreted by Escherichia coli BL21 on Wound Healing in Induced Diabetic Mice	Journal of Experimental Pharmacology	12, 339-348, 2020
28	Enhancement of $\alpha$ -Mangostin Wound Healing Ability by Complexation with 2-Hydroxypropyl- $\beta$ -	Pharmaceuticals	13 (10), 290, 2020

	Cyclodextrin in Hydrogel Formulation		
29	Accelerated wound healing ability of <i>Jatropha</i> sap by iota carrageenan-poly (vinyl alcohol) hydrogel film	Journal of Advanced Pharmaceutical Technology and Research	11 (4), 226, 2020
30	Ulvan, a polysaccharide from Macroalga <i>Ulva</i> sp.: A review of chemistry, biological activities and potential for food and biomedical applications	Applied Sciences	2020, 10(16), 5488
31	Characterization and acute oral toxicity of concentrated minerals of Pamekasan Madura seawater	Journal of Advanced Pharmaceutical Technology & Research	2021, 12 (3), 305
32	A Comprehensive Review on Ulvan Based Hydrogel and Its Biomedical Applications	Chemical and Pharmaceutical Bulletin	2021, 69 (5), 432-443
33	The Use of Megamolecular Polysaccharide Sacran in Food and Biomedical Applications	Molecules	2021, 26 (11), 3362
34	Chitosan-Based Nanoparticles of Targeted Drug Delivery System in Breast Cancer Treatment	Polymers	2021, 13 (11), 1717
35	The Potential Cytotoxic Activity Enhancement of $\alpha$ -Mangostin in Chitosan-Kappa Carrageenan-Loaded Nanoparticle against MCF-7 Cell Line	Polymers	2021, 13 (11), 1681

## Books

1



Cegah kanker payudara sejak dini

ISBN : 9786024396275  
 Authors : Mughtaridi ... [et al.]  
 Publisher : Unpad Press  
 Bandung | 2019

2



### Karakterisasi Sediaan Cair Farmasi

ISBN : 9786024753184

Authors : Nasrul Wathoni, Iyan Sopyan, Arif Budiman, Sriwidodo

Publisher : Deepublish

Yogyakarta | 2018

3



### Karakterisasi Sediaan Padat Farmasi

ISBN : 9786024754211

Authors : Iyan Sopyan, Nasrul Wathoni, Taofik Rusdiana, Dolih Gozali

Publisher : Deepublish

Yogyakarta | 2018

4



### Menembus jurnal internasional bereputasi untuk peneliti pemula

ISBN : 9786024018849

Authors : Nasrul Wathoni, Rizky Abdulah dan Aliya Nur Hasanah

Publisher : Deepublish

Bandung | 2017

5



### Panduan penerapan adaptasi kebiasaan baru

ISBN : 9786024399429

Authors : Mughtaridi ... [et al.] ; editor, Sri Adi Sumiwi dan Taofik Rusdiana

Publisher : Unpad Press

Sumedang | 2020

6



### Pedoman penggunaan Indonesia Test Trace and Isolation (InaTTI)

ISBN : 9786024399771

Authors : Keri Lestari, Nasrul Wathoni

Publisher : Unpad Press

7



Pengobatan terkini ulkus diabetikum : bahan herbal hingga sediaan nanopartikel

ISBN : 9786230219955

Authors : Sriwidodo ... [et al.]

Publisher : Deepublish

Sumedang | 2020

## Patents

1

### EXC Sol UP

ID : DID2019007072  
Kategori : merek | Tahun Permohonan :2019  
Patent Holder : Universitas Padjadjaran  
Inventor :

- [NASRUL WATHONI](#)

2

### FILM HIDROGEL MUKOADHESIF NATRIUM ALGINAT-KITOSAN UNTUK OBAT SARIAWAN MULUTReccurent APHTHOUS STOMATIS

ID : S00202008134  
Kategori : paten sederhana | Tahun Permohonan :2020  
Patent Holder : Universitas Padjadjaran  
Inventor :

- [NASRUL WATHONI](#)

3

### InaTTI (Indonesia Test Trace and Isolation)

ID : JID2020069107  
Kategori : merek | Tahun Permohonan :2020  
Patent Holder : Keri Lestari  
Inventor :

- [NASRUL WATHONI](#)



4 Penghantaran Obat Baru: Nanopartikel Kitosan-hEGF Menggunakan Metode Gelasi Ionik Yang Distabilisasi Polietilen Glikol (PEG) 5 Sebagai Penyembuh Luka Ulkus Diabetikum

ID : S00202100098

Kategori : paten sederhana | Tahun Permohonan :0

Patent Holder : Dr. apt. Sriwidodo, M.Si, Prof. Dr. Toto Subroto, MS,, Prof. Dr. Iman Permana Maksum, MSi, Nasrul Wathoni, Ph.D

Inventor :

- [NASRUL WATHONI](#)
- 

5 Spray Pembentuk Film dari Kitosan Larut Air Yang Mengandung hEGF Tersalut Liposome Sebagai Terapi Ulkus Diabetikum

ID : S00202101310

Kategori : paten sederhana | Tahun Permohonan :0

Patent Holder : Dr. apt. Sriwidodo, M.Si,, MS,, Prof. Dr. Iman Permana Maksum, MSi, Nasrul Wathoni, Ph.D

Inventor :

- [NASRUL WATHONI](#)
-