

Nor Azizah binti Parmin, Research Fellow, UNIVERSITI MALAYSIA PERLIS

**A. PERSONAL INFORMATION**

1. Name : Nor Azizah binti Parmin
2. Date of Birth: 24<sup>th</sup> December 1984
3. Personal Biodata: Female; Single; Asian
4. Nationality: Malaysian
5. Phone: +6011-24122072(M); +604-977 8581 (O); +604-979 8578 (F)
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7. Office Address: Institute of Nanoelectronic Engineering, Universiti Malaysia Perlis, 01000 Kangar, Perlis, Malaysia. & School of Bioprocess Engineering, Universiti Malaysia Perlis, 02600 Arau, Perlis, Malaysia.
8. Home Address: PA 10/B 10/1 Jalan Parit Andin 3, Parit Yaani, 83710 Batu Pahat, Johor(Permanent)  
No 41, Taman Seri Pulau 4, Jalan Seri Pulau 4, 01000 Kangar, Perlis. (Temporary)
9. Citations

Web	No. of Publications	No. of Citations	H-Index
Google Scholar	38	53	5
Research Gate	37	38	4
Scopus	29	35	4

**B. ACADEMIC QUALIFICATION**

- 2015-present                      Universiti Malaysia Perlis  
Doctor Philosophy (Ph.D) in Nanobiotechnology Engineering  
Institute of Nanoelectronic and Engineering (INEE), UniMAP
- 2009-2013                         Universiti Putra Malaysia  
Master of Sciences with thesis, Faculty Biotechnology and  
Biomolecular Sciences  
CGPA: 4.00
- 2003-2006                         Universiti Putra Malaysia  
Bachelor Sciences of Biotechnology, Faculty Biotechnology and  
Biomolecular Sciences  
CGPA: 3.505

**C. CAREER BACKGROUND**

1. Approved in 2018 – Research Fellow in Universiti Malaysia Perlis, Perlis, Malaysia
2. Approved in 2012 – Research Officer (Contract) at Biotechnology Research Centre, MARDI-UPM Serdang
3. Approved in 2018 – Research Assistant (RA) at Faculty Biotechnology and Biomolecular Sciences (FBSB), UPM Serdang

4. September 2012-May 2014- Research Officer at Biotechnology Research Centre, MARDI-UPM Serdang
5. June 2008 to March 2012- Research Assistant at FBSB UPM Serdang
6. Dec 2008 to Dec 2010- Laboratory demonstrator in Microbiology and Biochemistry Department, FBSB UPM
7. April 2007 to May 2008- R&D Officer in Arjuna Herb Company Sdn. Bhd. Batu Pahat, Johor

#### D. TEACHING SERVICE

1. 2018-Present Course: Bioprocess Engineering, Universiti Malaysia Perlis, Malaysia
2. Biochemistry/Semester II/ERT 151/3 – 3 credit hrs.
3. 2008-2009 Teaching Assistant of Principles of Cell and Tissue Culture (BTK3401) Course at UPM
4. 2009-2010 Teaching Assistant of Biochemistry Lab Course (BCM 3201) at UPM
5. 2010-2014 Tutor at Didik Jaya, Usaha Waja, Cikgu Amin and Maryam Tuition Centre
6. Experience in teaching Biology, Sciences, Mathematic for Form 4 and 5, Science, Mathematics, History for Form 1, 2 and 3
7. Experience in teaching standard 1 to 6 in Science, Mathematics and English

#### E. ACADEMIC AWARDS AND HONOURS

1. 2017 The Best Innovation Technical Category, 13th Innovative and Creative Group Convention (KIK) 2017, Public University Category, 1-3th August 2017.
2. 2016 -Gold prize, Seoul International Invention Fair 2016 (SIIF 2016), Korea Invention Promotion Association, 1-4th December 2016.  
-Special Award, Ibnu Sina Award, 7th Exposition on Islamic Innovation (i-INOVA) 2016, 8-9th November 2016, Dewan Tuanku Canselor, Universiti Sains Islam Malaysia (USIM) Negeri Sembilan.  
-Gold Award, Ibnu Sina Award, 7th Exposition on Islamic Innovation (i-INOVA) 2016, 8-9th November 2016, Dewan Tuanku Canselor, Universiti Sains Islam Malaysia (USIM) Negeri Sembilan.
3. 2015 -Silver Award, PECIPTA 2015, The International Conference and and Exposition on Inventions by Institutions of Higher Learning, 4-6 th December 2015, Kuala Lumpur Convention Centre (KLCC)  
-Bronze prize, Seoul International Invention Fair 2015 (SIIF 2015), Korea Invention Promotion Association, 26-29 November 2015.  
-Grand Award, Ph.D category, Nano Kebangsaan 2015, 5-7 Oktober 2015, Pusat Konvensyen Shah Alam (SACC),  
-Silver Award, International Invention and Innovation Exhibition (ITEX 2015), National Innovation Conference and Exhibition (NICE 2015), 21-23 May 2015, Kuala Lumpur Convention Centre (KLCC)  
-Gold Award Winner, Invention and Innovation Awards 2015, Malaysia Technology Expo 2015, 12-14 February 2015, Kuala Lumpur

-The Very Best Award , Invention and Innovation Awards 2015, Malaysia Technology Expo 2015, 12-14 February 2015, Kuala Lumpur

4. 2014 -Special Award of Biotechnology Innovation Of The Year, BioInnovation Awards 2014, Kuala Lumpur Convention Centre (KLCC)  
 -Gold Award Winner, BioInnovation Awards 2014, Kuala Lumpur Convention Centre (KLCC)

**F. SUPERVISION**

No.	Degree/Year	Title of the Project	Student Name	University
1.	Intern/2017	A Sensitive DNA Biosensor using Interdigitated Electrode (IDE) to Detect Cervical Cancer	Nur Athirah Bt Abdul Kahar	UiTM Perlis
2.	FYP/2015	Cervical Cancer Detection through DNA Hybridization of Clinical Blood Sample by Using Nanotechnology	Muhamad Syazwan bin Paraja	UniMAP
3.	FYP/2013	Study of Surface Functionalization on IDE by using 3-Aminopropyl triethoxysilane (APTES) for Cervical Cancer Detection	Siti Raqeema Ali	UniMAP
4.	FYP/2013	The Study of Concentration Effects of Target Hybridization on Cervical Cancer Detection Using Interdigitated Electrodes (IDE)	Che Noriani Bt Husain @ Muhammad	UniMAP
5.	FYP/2013	Effect of Different Concentration of HPV DNA Probe Immobilization for Cervical Cancer Detection Based IDE Biosensor	Roshila binti Mohd Lazim	UniMAP

**G. GRANTS**

No.	Duration	Title of the Project	Role	Amount	Agency
1.	2015-2017	Early Detection of HPV Cervical Cancer using Nanotechnology-based Biosensor	Co-Researcher	RM 185,000	PRGS
2.	2014-2016	Fundamental Study of Cervical Cancer Screening by Molecular Detection of Specific ssDNA using Electrical DNA Chip	Co-Researcher	RM 118,800	FRGS

## H. PUBLICATIONS

### PATENTS

No.	Year	Title of the Invention	Type	Patent Number
1.	2014	DNA Nano Chips based TiO <sub>2</sub> Interdigitated Electrode (IDE) Nanobiosensor for Early Detection of Cervical Cancer	Malaysian	PI 2014703411

### *Articles in Refereed Journals (Last 5 years-Selected-Publications) – Total Publications 38*

No.	Year	Title of the Article	Impact Factor	Quartile
1.	2017	N.A. Parmin, U. Hashim, S.C.B. Gopinath, Designing probe from E6 genome region of human Papillomavirus 16 for sensing applications, Int. J. Biol. Macromol. (2017) 1–9. doi:10.1016/j.ijbiomac.2017.10.051	3.671	Q2
2.	2017	N. Azizah, U. Hashim, S.C.B. Gopinath, S. Nadzirah, A direct detection of human papillomavirus 16 genomic DNA using gold nanoprobe, Int. J. Biol. Macromol. 94 (2017) 571–575. doi:10.1016/j.ijbiomac.2016.10.060.	3.138	Q2
3.	2017	Ibrahim, A. S., Al-Douri, Y., Voon, C. H., Foo, K. L., Azizah, N., Gopinath, S. C. B., ... Ibrahim, S. S. (2017). Surface functionalized Cu <sub>2</sub> Zn <sub>1-x</sub> Cd <sub>x</sub> SnS <sub>4</sub> quaternary alloyed nanostructure for DNA sensing. Applied Physics A, 123(3), 200. <a href="http://doi.org/10.1007/s00339-017-0838-0">http://doi.org/10.1007/s00339-017-0838-0</a>	1.455	Q2
4.	2016	Azizah, N., Hashim, U. Gopinath, S.C.B., Nadzirah, Sh. Gold Nanoparticle Mediated Method for Spatially Resolved Deposition of DNA on Nano-gapped Interdigitated Electrodes, and its application to the detection of the Human Papillomavirus. Microchimica Acta 183: 3119-3126.	4.8	Q1
5.	2016	Lakshmipriya, T., Hashim, U., Gopinath, S. C. B., & Azizah, N. (2016). Microfluidic-based biosensor: signal enhancement with a gold nanoparticle. Microsystem Technologies. <a href="http://doi.org/10.1007/s00542-016-3074-1">http://doi.org/10.1007/s00542-016-3074-1</a>	1.195	Q2
6.	2015	Nadzirah, Sh., Azizah, N., Hashim, U., Gopinath, S.C.B., M. Kashif. Titanium Dioxide Nanoparticle-based Interdigitated Electrodes: A Novel Current to Voltage DNA Biosensor	3.2	Q1

Recognizes E. coli O157:H7. Plos One 10:  
e0139766.

7. 2015

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