

**PEJABAT TIMBALAN NAIB CANSELOR (PENYELIDIKAN DAN INOVASI)**  
*OFFICE OF THE DEPUTY VICE CHANCELLOR (RESEARCH AND INNOVATION)*

Ruj. Kami: UPM.TNCPI.PSP.300-6/2/6

Tarikh: 9 Julai 2025

**YBhg. Prof. Dr. Muhammad Rezal Kamel Ariffin**  
Jabatan Matematik dan Statistik,  
Fakulti Sains, UPM

YBhg. Prof. Dr.,

**Salinan Dokumen Persetujuan Kerahsiaan bagi Rahsia Dagangan/*Know-how*  
"Post-Quantum Digital Signature System For Preserving Integrity, Authenticity  
And Disallowing Repudiation Of Digitally Transmitted Message And Method  
Thereof & PI2025000745 "**

Dengan segala hormatnya saya merujuk kepada perkara di atas.

2. Dimajukan dokumen persetujuan kerahsiaan bagi rahsia dagangan " **Post-Quantum Digital Signature System For Preserving Integrity, Authenticity And Disallowing Repudiation Of Digitally Transmitted Message And Method Thereof & PI2025000745** " TS2025070902 untuk rekod YBhg. Prof. Dr.

3. Untuk sebarang pertanyaan, pihak YBhg. Prof. Dr boleh menghubungi pegawai kami di talian 03-9769 1243 (Pn Ashida).

Sekian, terima kasih.

**"MALAYSIA MADANI"**  
**"BERILMU BERBAKTI"**

Saya yang menjalankan amanah,



**PROF. MADYA TS. DR. SAIFUL HASLEY RAMLI**  
Timbalan Pengarah  
Bahagian Promosi dan Pengurusan Harta Intelekt  
Putra Science Park

**s.k: Timbalan Dekan**  
Penyelidikan & Siswazah  
Fakulti Sains, UPM

## UNDERTAKING AS REGARD TO CONFIDENTIALITY AND SECRECY OF INFORMATION

I PROF. DR. MUHAMMAD REZAL KAMEL ARIFFIN, hereby undertake that I shall at all times adhere to and maintain the confidentiality and secrecy of the declared information for **POST-QUANTUM DIGITAL SIGNATURE SYSTEM FOR PRESERVING INTEGRITY, AUTHENTICITY AND DISALLOWING REPUDIATION OF DIGITALLY TRANSMITTED MESSAGE AND METHOD THEREOF & PI2025000745** extract and shall not disclose such information which I have the direct or indirect access of the Trade Secret/Know-how, except in meeting an obligation required under a signed agreement between UPM and the receiving party.

SIGNED BY,



Name: PROF. DR. MUHAMMAD REZAL KAMEL ARIFFIN

Address: UNIVERSITI PUTRA MALAYSIA

HP no.: 012-3766494

Date: 8 JUL 2025

WITNESSED BY,



Deputy Director  
Putra Science Park

Name: PROF. MADYA. TS. DR. SAIFUL HASLEY BIN RAMLI  
Bahagian Promosi dan Pengurusan Harta Intelekt  
Putra Science Park,  
Address: Pejabat Timbalan Naib Canselor (Penyelidikan & Inovasi)  
Universiti Putra Malaysia

Date: 8/7/2025

## TRADE SECRET/KNOW-HOW DOCUMENT

*This document is intended as a record and proof of existence of trade secret/know-how by UPM researchers. All details herein are kept as confidential and shall not be disclosed to person not listed in part C below except with permission in writing by all/surviving researchers or in pursuant to agreed contractual obligation between UPM and another party. All parts below must be duly completed.*

*Please also fill in the "UNDERTAKING AS REGARD TO CONFIDENTIALITY AND SECRECY OF INFORMATION"*

A) In view of Trade Secret/Know How protection **POST-QUANTUM DIGITAL SIGNATURE SYSTEM FOR PRESERVING INTEGRITY, AUTHENTICITY AND DISALLOWING REPUDIATION OF DIGITALLY TRANSMITTED MESSAGE AND METHOD THEREOF & PI2025000745**

I solemnly declare the following information (Please state clearly the trade secret/know-how. For lengthy information, please provide as Attachment):

Please refer attachment (08072025 TSKN KAZ\_SIGN\_1.6.4 PI2025000745)

B) Type of trade secret/know-how (delete the unnecessary): formulae

C) List of person(s) who know / been disclosed with the trade secret/know-how ((Please use separate sheet if more than three (3) names. Please note that a trade secret will lose its protection if become public knowledge or a matter of common knowledge):

1. Name:.....

Address:

2. Name:.....

Address:

3. Name: .....

Address:

***I solemnly and sincerely declare that the trade secret/know-how has not been disclosed to person(s) other than those listed above in any form.***

SIGNED BY:



Name: PROF. DR. MUHAMMAD REZAL KAMEL ARIFFIN

Address: UNIVERSITI PUTRA MALAYSIA

Date: 8 JUL 2025

WITNESSED BY:



Deputy Director

Putra Science Park

Date: 8/7/2025

PROF. MADYA, TS. DR. SAIFUL HASLEY BIN RAMLI

Bahagian Promosi dan Pengurusan Harta Intelek

Putra Science Park,

Pejabat Timbalan Naib Canselor (Penyelidikan & Inovasi)

Universiti Putra Malaysia

Updated: 4 October 2021