

CURRICULUM VITAE

- i. Full Name : Fridelina Binti Sjahrir
 ii. Academic Qualifications :

| No. | Academic Qualification | Institution/Country | Year of Graduation |
|-----|---|--------------------------------|--------------------|
| 1. | PhD in Biotechnology | Universiti Selangor | 2014 |
| 2. | Master of Science (Chemistry) | Univerisiti Teknologi Malaysia | 2001 |
| 3. | Bachelor of Science (Industrial Chemistry) (Hons). (Second Class Lower) | Universiti Teknologi Malaysia | 1998 |

- iii. Current Professional Membership:

| No. | Professional Body | Position/Title | Year |
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- iv. Current Teaching and Administrative Responsibilities:

- a. Current Subject(s) taught:

| No. | Code | Name of Subject |
|-----|---------|------------------------|
| 1. | FKD1223 | Chemistry II |
| 2. | FSD1241 | Physical Laboratory II |
| 3. | FSD3233 | Industrial Safety |
| 4. | FTS2243 | Corrosion |
| 5. | FIS3324 | Final Year Project II |

- b. Administrative Responsibilities:

| No. | Description | Date |
|-----|---|--|
| 1. | Dean Faculty of Engineering and Life Sciences | 1st September 2018 - ongoing |
| 2. | Deputy Dean Faculty of Engineering and Life Sciences | 1st September 2016 – 31st August 2018 |
| 3. | Dean Faculty of Science and Biotechnology | 1st December 2014 – 31st August 2016 |
| 4. | Dean | 1st January – |

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| | Faculty of Applied Science and Mathematics | 31st July 2008 |
| 5. | Director Centre for Foundation Studies | 1st August 2006 – 31st December 2007 |
| 6. | Deputy Dean Faculty of Science and Education | Oct 2005 – July 2006 |
| 7. | Head of Department, Science and Mathematics & Coordinator for Science Foundation Program Faculty of Science and Education | June 2004 – Oct 2005 |
| 8. | Chemistry Coordinator | Jan 2002 – June 2004 |

v. Previous Employment:

| No. | Employer Name and Address | Position | Years | |
|-----|----------------------------------|------------------------|--------------------------|--------------------------|
| | | | Start | End |
| 1. | UNISEL | Associate Professor | 15th December 2018 | - |
| 2. | UNISEL | Senior Lecturer | 1st January 2007 | 15th December 2018 |
| 3. | UNISEL | Lecturer | August 2001 | 31 December 2006 |
| 4. | UNISEL | Tutor | June 2001 | August 2001 |
| 5. | Universiti Teknologi Malaysia | Demonstrator | Jan 1999 | Mac 2000 |
| 6. | Universiti Teknologi Malaysia | Research Assistant | Jun 1998 | December 1998 |

vi. Conferences and Training:

| No. | Title | Venue | Date |
|-----|---|------------------------|------------------------|
| 1. | Sjahir, F., Nallapan Maniyam, M, Ibrahim, Abdul Latif I. (2016). Kinetic study of cell free extract of nitrile-hydrolyzing enzymes of <i>Rhodococcus</i> UKMP-5M in the biotransformation of nitrile. Proceedings in International | Shah Alam, Selangor | 29-30 November 2016 |

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| | Conference of Life Sciences Revolution 2016 | | |
| 2. | Sjahrir, F., Nallapan Maniyam, M, Ibrahim, Abdul Latif I and Cass A.E.G (2015). Optimization of method for immobilization of <i>Rhodococcus</i> UKMP-5M in the biotransformation of nitrile. Proceedings in International Conference of Life Sciences Revolution, | Shah Alam, Selangor | 24-25 November 2015 |
| 3. | Maegala Nallapan Maniyam, Fridelina Sjahrir, Abdul Latif Ibrahim. (2014). Detoxification of simulated cyanide-containing industrial effluents by <i>Rhodococcus</i> UKMP-5M. Monash Science Symposium, Malaysia | Monash University | 18-19 June 2014 |
| 4. | Fridelina Sjahrir, Maegala Nallapan Maniyam and Abdul Latif Ibrahim. (2014). Biotransformation of acrylonitrile by immobilised cells of <i>Rhodococcus</i> UKMP-5M. Monash Science Symposium, Malaysia Monash University, 18-19 June 2014. | Monash University | 18-19 June 2014 |
| 5. | Sjahrir F and Nallapan Maniyam M. The application of green chemistry methods by microbial green technology research group in Universiti Selangor. Proceedings in the Seminar Nasional Pengembangan Sumber Daya Manusia dan Perekonomian Masyarakat, | Fakultas Penternakan Universiti Andalas | 22 nd April 2013 |
| 6. | Nor Suhaila Y., Hasdianty, A., Norazah, M.N., Nallapan Maniyam M., Fridelina S dan Abdul Latif, I. Microbial in Green Chemistry. Proceedings in the Seminar Nasional Pengembangan Sumber Daya | Fakultas Penternakan Universiti Andalas | 22 nd April 2013 |

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| | Manusia dan Perekonomian Masyarakat | | |
| 7. | Norazah M.N., Maegala N.M., Nadzirah A.S., Nor Suhaila Y., Hasdianty A., Fridelina S., Rozila A., Jayesree N. and Noor Azmaheera A.G. IAB Women in Science International Program. Proceedings in the Seminar Nasional Pengembangan Sumber Daya Manusia dan Perekonomian Masyarakat | Fakultas Penternakan Universiti Andalas | 22 nd April 2013 |
| 8. | Nor Suhaila, Y., Hasdianty, A., Fridelina, S Norazah, M.N. and Maegala, N.M., Abdul Latif, I. Microbes as a source of Enzyme. Proceeding Seminar on Tropical Bio-resources for Sustainable Bio-industry | School of Life Sciences and Technology ITB, Bandung, Indonesia. | 30 th -31 st October 2013 |
| 9. | UNISEL-ITB Partnership Program (Special Poster Presentation) Proceeding Seminar on Tropical Bio-resources for Sustainable Bio-industry | School of Life Sciences and Technology ITB, Bandung, Indonesia. | 30 th -31 st October 2013 |
| 10. | Sjahrir, F., Nallapan Maniyam, M, Ibrahim, Abdul Latif and Cass A.E.G (2010). A study on the effect of inducers on the growth and the production of nitrile-converting enzymes from <i>Rhodococcus</i> UKMP-5M Proceedings in IAB-IAS International Symposium | Shah Alam, Selangor | 8-9 December 2010 |
| 11. | Sjahrir, F., Nallapan Maniyam, M, Ibrahim, Abdul Latif and Nagy J.M (2009). Optimization of culture conditions for the production of nitrilase from <i>Rhodococcus</i> UKMP-5M. | Shah Alam, Selangor | 29 – 30 October 2009 |

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| | Proceedings in 17 th Islamic World Academy of Science (IAS) Conference ‘Towards the knowledge Society in the Islamic World: Production, Application and Dessimination | | |
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vii. Research and Publications:

| No. | Title | Year |
|-----|--|------|
| 1. | Noor Halini Baharim, Maegala Nallapan Maniyam, Wan Zarina Wan Mohamed, Nazahiyah Sulaiman, Fridelina Sjahrir (2020). Chemistry Laboratory Manual Foundation in Science. Addeen Solution. | 2020 |
| 2. | Noor Halini Baharim, Wan Zarina Wan Mohamed, Nazahiyah Sulaiman, Fridelina Sjahrir, Norazlina Idris (2019). Laboratory Manual for General Chemistry: Addeen Solution. ISBN: 978-967-17369-3-7 | 2019 |
| 3. | F. Sjahrir, M.N. Maniyam, A.L. Ibrahim and A. E. G. Cass. (2018). Biotransformation of acrylonitrile by resting cells of <i>Rhodococcus</i> UKMP-5M as biocatalyst. <i>Journal of Fundamental and Applied Sciences</i> . 10(6S) : 896-908. doi: http://dx.doi.org/10.4314/jfas.v10i6s.41 | 2018 |
| 4. | Nallapan Maniyam M, Sjahrir F and Hari M. (2018). Decolourization of Methylene Blue by <i>Rhodococcus</i> Strain UCC0003. <i>International Journal of Environmental Science and Development</i> . 9(11) :322-326. doi: 10.18178/ijesd.2018.9.11.1122 | 2018 |
| 5. | Sjahrir, F., Nallapan Maniyam, M, Ibrahim, Abdul Latif and Cass A.E.G (2017). A potential of a Malaysia Strain, <i>Rhodococcus</i> UKMP-5M in Bioremediation of Nitrile. <i>Open Access Journal of Microbiology and Biotechnology</i> . 2(1) :000117. | 2017 |
| 6. | Sjahrir, F., Nallapan Maniyam, M, Ibrahim and Abdul Latif and Cass A.E.G (2016). Kinetic study of cell free extract of nitrile-hydrolyzing enzymes of <i>Rhodococcus</i> UKMP-5M in the biotransformation | 2016 |

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| | of nitrile. <i>Indian Journal of Fundamental and Applied Life Science</i> . 7(1) , 13-19. | |
| 7. | Sjahir, F., Nallapan Maniyam, M, Ibrahim, Abdul Latif and Cass A.E.G (2016). Biotransformation of acrylonitrile using immobilized cells of <i>Rhodococcus</i> UKMP-5M as biocatalyst. <i>Indian Journal of Fundamental and Applied Life Science</i> . 6(1) , 58-67. | 2016 |
| 8. | Nallapan Maniyam, M, Sjahir, F., Ibrahim, Abdul Latif and Cass A.E.G (2016). Biotransformation of cyanide by a Malaysian isolate, <i>Rhodococcus</i> UKMP-5M as biocatalyst. <i>Indian Journal of Fundamental and Applied Life Science</i> . 6(1) , 75-81. | 2016 |
| 9. | Nallapan Maniyam, M, Sjahir, F., Ibrahim, Abdul Latif and Cass A.E.G (2015). Biodegradation of cyanide-containing industrial wastewater by <i>Rhodococcus</i> UKMP-5M. <i>Biologia</i> . 69(12) , 1635-1643. | 2015 |
| 10. | Nallapan Maniyam, M, Sjahir, F., Ibrahim, Abdul Latif and Cass A.E.G (2015). Enzymatic cyanide degradation by cell-free extract of <i>Rhodococcus</i> UKMP-5M. <i>Journal of Environmental Science and Health</i> . 50(4) , 357-364. | 2015 |
| 11. | Maegala Nallapan Maniyam, Nor Suhaila Yaacob, Fridelina Sjahir, Jayasudha Nagarajan, Jayesree Nagarajan, Anthony E.G. Cass, Norazah Mohamad Nawawi and Abdul Latif Ibrahim (2016). <i>Rhodococcus</i> UKMP-5M: A versatile bioremediation Microorganism in Alvarez J. (Ed.) Biodegradation, Properties, Analysis and Performance. Nova Science Publisher Inc: New York. pp 1-78. | 2016 |
| 12. | Nallapan Maniyam M., Sjahir F., Ibrahim A. L. and Cass E. A. G. (2013). Biodegradation of cyanide by acetonitrile-induced cells of <i>Rhodococcus</i> sp. UKMP-5M. <i>The Journal of General and Applied Microbiology</i> . 59(6) : 393-404. | 2013 |
| 13. | Nallapan Maniyam M, Sjahir F, Ibrahim AL and Cass E. A. G. (2013). Biodegradation of cyanide by <i>Rhodococcus</i> UKMP-5M. <i>The Journal of General</i> | 2013 |

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| | <i>and Applied Microbiology. Biologia. 68: 177-185. (Impact factor: 0.557).</i> | |
| 14. | Nallapan Maniyam M, Sjahrir F and Ibrahim A. L. (2011). Bioremediation of cyanide by optimized resting cells of <i>Rhodococcus</i> strain isolated from Peninsular Malaysia. <i>International Journal of Bioscience, Biochemistry and Bioinformatics 1(2), 98-101.</i> | 2011 |

viii. Consultancy:

| No. | Name of Organization | Date |
|-----|--|--|
| 1 | Development of Banana Stem as Biomaterial for Remediation of Foul Odor and Color of Freshwater Sample. Research Member Geran Industri SEMESTA-MBI 2020. RM35,000.00 | 1 July 2020 – 30 th June 2021 |
| 2 | Development of an Adsorbent form banana Pseudo-Stem as a Smart Green Tool for the Removal of heavy metals in an abandoned mine in Bestari Jaya, Selangor . Project Leader Geran Penyelidikan Negeri Selangor (GPNS) RM35,000.00 | 16 Disember 2018-31 Disember 2020 |
| 3 | Continuous Operation System for Microalgae Production Optimized for Sustainable Tropical Aquaculture (COSMOS) Project Advisor Geran Penyelidikan SATREP – JICA RM1,429,000.00 | April 2016 - Mac 2021 |
| 4 | Establishment of Soil Extraction Techniques From Various Soil Types In Malaysia With Applications Of Computational Model To Enhance Targeted Algae Growth Member RM445,000.00 MOHE Matching Fund | Aug 2015 - ongoing |
| 5 | A Study on Selected Enzymes of <i>Rhodococcus</i> UKMP-5M and its Application in Green Chemistry Member Selangor State Government RM500,00.00 | 2008-2011 |

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| 6 | Building of Genomics-Led Green Chemistry for Industrial Biotechnology Researcher/Graduate Students Ministry of Science, Technology and Innovation | 2007-2009 |
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ix. Community Service:

| No. | Description | Period |
|-----|--|---------------|
| 1. | Editor in Chief Malaysian Journal of Sustainable Agriculture | 1 August 2017 |
| 2. | Associate Editors Open Access Journal of Microbiology and Biotechnology | March 2017 |

x. Other Relevant Information: