



PERSONAL DETAILS

Name : Zarani bt Mat Taher
Gender : Female
Nationality : Malaysian
Marital status : Married
Email : zarani@ibd.utm.my
zarani@utm.my

EDUCATION BACKGROUND

1. Doctor of Philosophy (Biosciences)
University of Nottingham, United Kingdom
2. Master of Bioprocess Engineering
Universiti Teknologi Malaysia, Skudai
3. Bachelor Science (Biomedical Science)(Hons)
University Putra Malaysia (UPM), Serdang Selangor.
4. Sijil Pelajaran Malaysia
Sultan Ibrahim Girls School, Johor Bahru

PROFESSIONAL COURSES

- Diploma in Holistic Massage, International Therapy Examination Council (ITEC), London
- Diploma of Aromatherapy, International Therapy Examination Council (ITEC), London

PROFESSIONAL EXPERIENCE

- Oct 2005 – present : Research Officer (Q44)
- 2001 – 2005 : Research Officer (contract staff in Chemical Engineering Pilot Plant UTM)
- Tutor for Anatomy & Physiology (Holistic Massage and Aromatherapy Courses) – more than 10 years

AREA OF EXPERTISE AND SPECIALISATION

- Plant and food biomaterial, fine chemicals
- Powder technology
- Plant Processing
- Products formulation
- Aromatherapy and Holistic Massage.

DUTIES

- Control and managing Herbal Extraction Centre and Herbal and Phytochemical Processing Laboratory
- Involved in overall experimental work, products development and products analysis
- Supervising and monitoring final year project (Projek Sarjana Muda) and Postgraduate research project
- Consultation for products development
- As a tutor for *in-house* short courses
- As a tutor for Holistic and Aromatherapy Massage courses (national level)

SPECIAL ACTIVITIES

- Appointed as Manager of Herbal Extraction Centre
- Appointed as Head of Herbal and Phytochemical Processing Unit
- Appointed as evaluation panelist for skill development for Kolej Komuniti (national level)
- Appointed as development panelist for Diploma (Professional) Nutritional Therapy module
- Co-coordinator for Anatomy and Physiology module
- Prepared module and tutor for ITEC Diploma of Holistic Massage and ITEC Diploma of Aromatherapy.
- Prepared module and tutor for short courses for Holistic Massage and Aromatherapy.
- Doing contract research and contract manufacturing.

MEMBERSHIP IN INTERNATIONAL ORGANISATION

AWARDS

Name of Organization	Year	Organization status national, regional/international	Awarded for
Korea Invention Promotion Association (KIPA)	2008	International	Gold Prize- Seoul International Invention Fair 2008. Virgin coconut based skin care Bronze Prize- Seoul International Invention Fair 2008. Virgin coconut based hair cream
Malaysia Association Research Scientist (MARS)	2008	National	Silver Medal- Malaysia Technology Expo 2008. Virgin coconut based skin care Bronze Medal- Malaysia Technology Expo 2008 .Virgin coconut based hair cream
Malaysia Association Research Scientist (MARS)	2010	National	Bronze Medal- Malaysia Technology Expo 2010. Bronze Medal- Malaysia Technology Expo 2010.
Universiti Teknologi Malaysia (UTM), Skudai	2010	University	Silver Medal- Industrial Art & Technology Exhibition (INATEX 2010) Bronze Medal- Industrial Art & Technology Exhibition (INATEX 2010)
The Ministry of Science, Technology & the Environment of Malaysia	2002	National	Silver Medal- Invention & Innovation Competition .Expo Science & Technology 2002
The Ministry of Science, Technology & the Environment of Malaysia	2001	National	Bronze Award – Invention & Innovation Competition. Expo Science & Technology 2002

PATENT

Universiti Teknologi Malaysia (UTM) , Skudai	2007	Local	1.Patent filing – PI 2007 1617 2.Patent filing - PI 2007 1901
Universiti Teknologi Malaysia (UTM) , Skudai	2010	Local	3.Patent filing – PI 2010 1398 4.Patent filing- PI 2010 1977
A trans-dermal or trans-epithelial composition	2017	National	MY 160686A
Virgin coconut oil based skin nutrient cream	2017	National	MY163530-A
Virgin coconut oil hair cream	2020	National	UI 20071901

COMMERCIALISATION

- Virgin coconut oil based skin care (WISDERM[®])
- Virgin coconut oil based hair cream

PUBLICATIONS AND PRESENTATIONS

Book chapter

1. Harisun Yaakob, Muhammad Fauzi Abdul Jalil, Noorazwani Zainol, Zarani Mat Taher. Functional plant material on lipid application. Recent trends in Malaysian Medicinal Plants Research. UTM Press
2. Ramlan Aziz, Zarani Mat Taher, Sulaiman Ngadiran, Mohd Ismail Ware. Effect of extraction processing method on the phytochemical compound of plant material. Advanced in Malaysian Herbal and Phytochemical Processing Technologies. UTM Press
3. Hesham En Enshasy, Farid Agouillal, Zarani Mat Taher, Roslinda Malek, Siti Zulaiha Hanapi, Ong Mei Leng, Daniel Joe Dailin and Dalia Sukmawati. Pleurotus ostreatus: A Biofactory for Lignin-Degrading Enzymes of Diverse Industrial Application. Recent

Advancement in White Biotechnology through Fungi. Vol 3: Perspective for sustainable environments. Springer.

Publication

1. Zarani M. Taher, Mohamad R. Sarmidi (2015). Optimisation Processing Parameters for *Curcuma xanthorrhiza* oleoresin yield and its antioxidant activity. International Journal of Biotechnology for Wellness Industries. Vol.4, pp 97-102.
2. Influence of pecan nut pre-treatment on the physical quality of oil bodies. Journal of Food Quality.
3. A Review of Genetic Taxonomy, Biomolecules Chemistry and Bioactivities of *Citrus hystrix* DC. Farid Agouillal, Zarani M. Taher, Houria Moghrani, Nouredine Nasrallah and Hesham El Enshasy. Biosciences biotechnology research Asia Vol 14 (1) 285-305.
4. Influence of Seed Pre-Soaking and Oil Body Washing Regime on the Physical Quality of the Final Suspension. AICHE 2016, 13-18 Nov 2016, San Francisco, United State of America (Scopus).
5. The Establishment of Herbal Processing Technology for the Production of *Orthosiphon Stamineus* Standardised Extracts. AICHE 2016 , 13-18 Nov 2016, San Francisco , United State of America (Scopus)
6. Scaling-up Processing Parameter of *Andrograpis Paniculata* Standardised Extracts. AICHE, 13-18 Nov 2016 San Francisco, United State of America (Scopus).
7. Rahimah Sabtu, Mohd Azrie Awang, Hainorita Hairon, Norfarhana Abd Talib, Ramlan Aziz, Chua Lee Suan and Zarani Mat Taher.Extraction of *Piper Sarmentosum* leaves (Kadok): Effect of particles sizes, raw material to solvent ratio and time on yield of

extract. 6th International Conference of Biotechnology for Wellness Industry. 16 - 18 Aug 2016 Hotel Equatorial Melaka.

8. Hainorita Hairon, Mohd Azrie Awang, Norfarhana Abd Talib, Ramlan Aziz, Chua Lee Suan and Zarani Mat Taher. Extraction of *Gynura Procumbens* Leaves (Sambung Nyawa) with different parameters using maceration process. 6th International Conference of Biotechnology for Wellness Industry. 16 - 18 Aug 2016, Hotel Equatorial Melaka.
9. Norfarhana Abd Talib, Rahimah Sabtu, Mohd Azrie Awang, Hainorita Hairon, Ramlan Aziz, Chua Lee Suan and Zarani Mat Taher. A review of hydroxychavicol (HC) and eugenol (EU) from *Pepper betel L.*: Extraction process condition. 6th International Conference of Biotechnology for Wellness Industry 2016. 16 - 18 Aug 2016, Hotel Equatorial Melaka.
10. Mohd Azrie Awang, Norfarhana Abd Talib, Hainorita Hairon, Rahimah Sabtu, Ramlan Aziz, Chua Lee Suan and Zarani Mat Taher. Comparison of different solvent on the extraction of *Melastoma malabathrium* leaves using Soxhlet extraction method. 6th International Conference of Biotechnology for Wellness Industry. 16 - 18 Aug 2016, Hotel Equatorial Melaka.
11. F Agouillal, H Moghrani, N Nasrallah, Z Hanapi, Z Mat Taher and H A El Enshasy. Coupling Ultrasound with Enzyme Assisted Extraction of Essential Oil from Algerian *Artemisia herba alba* Asso. Journal of Scientific & Industrial Research Vol. 77, August 2018, pp.465-471.
12. Zarani M Taher, F Agouillal, Lim J.R, Aina Q. Marof, Daniel Joe Dailin, Muktiningsih Nurjayadi, Ezzaty N.M Razif, Sara E. Gomma and Hesham A. El Enshasy. Anticancer Molecules from *Catharanthus roseus*. Indonesian Journal of Pharmacy. Vol 30(3) 2019 : 147-156. Review articles.

Oral presentation

1. 13th National Biotechnology Conference. Effect of Blanching on phytochemical content in *Curcuma longa* oleoresin.
2. Malaysia Science and Technology Congress 2001. Effect of process variables on the phytochemicals from turmeric.
3. Natural Products Malaysia 2002. Effect of process variables on the antioxidant activity from *Curcuma xanthorrhiza*.
4. Regional Symposium on Chemical Engineering (RSCE 2002). Extraction of turmeric rhizome: Comparative study on yield, curcumin content and antioxidant activity. ISBN983-41147-0-2
5. Regional Symposium on Chemical Engineering (RSCE 2002). Phytochemical processing: The next Emerging Field In Chemical Engineering: Aspects and Opportunities. International Conference on Chemical and Bioprocess Engineering. ISBN983-2643-15-5
6. International Conference on Chemical and Bioprocess Engineering 2003. Effect of processing parameter on antioxidant activity of essential oils from *Zingiberaceae* family.
7. Natural Products Malaysia 2004. Effect of curcuminoids on antioxidant activity.
8. 105th American Oil Chemists Society (AOCS), San Antonio Texas, United State of America 2014. Recovery and quantification of phospholipids of oil bodies in sunflower seeds.
9. AICHE 2016 San Francisco, United State of America. Influence of Seed Pre-Soaking and Oil Body Washing Regime on the Physical Quality of the Final Suspension.

Invited speaker

10. Innovation to boost translational research in Traditional Medicine. 12 Sept 2019. Faculty of Medicine, Siriraj Hospital, Mahidol University Bangkok Thailand.

Poster presentation

1. 10th ASEAN Food Conference 2007. Effects of extraction time, temperature and agitation on antioxidant activity of *Curcuma xanthorrhiza*
2. Biodiversity & Biotechnology International Symposium. Optimization of oleoresin extraction from *Curcuma xanthorrhiza* using Central Composite Design.
3. 3rd International Conference on Chemical and Bioprocess Engineering (ICCBPE/SOMChe-2009 Optimization of processing parameter for *Curcuma xanthorrhiza* oleoresin yield and its antioxidant activity.)
4. International Conference and Exhibition on Pharmaceutical, Nutraceutical and Cosmeceutical Technology 2010. The stability and viscosity of *Curcuma xanthorrhiza* essential oil in cosmetic gel preparation.
5. Eurofed Lipid 2013, Montpellier, France. Influence of sunflower seed pre-soaking and oil body washing regime on the physical quality of final suspension.

RESEARCH GRANT

1. Production of standardised whole extract using green technology approach of *Garcinia cambogia*- HICOE. **RM 50,000**
2. Production of standardized plant whole extract from *Swietenia mahagoni*, *Garcinia mangostana* and *Phaleria macrocarpa*. HICOE. **RM 255,000.00**
3. Development of high viability spray dried probiotics powder. **RM 50,000.00**
4. Production of standardized terpene rich fractions from Tongkat Ali, Misai Kucing and Hempedu Bumi. HICOE. **RM255, 000.00**
5. Encapsulation of *Andrographis paniculata* and *Garcinia cambogia* for cosmeceutical and nutraceutical applications. HICOE. **RM 230,000.00**
6. Program pembangunan spa dan produk berasaskan herba bagi melestarikan industri pelancongan Johor. IISJ. **RM 29,500.00**
7. Penjenamaan bagi produk pelancongan berasaskan laut. IISJ. **RM31, 500.00**

8. Optimization, scaling up and establishment of herbal processing technology for the production of bioactive extract from *Piper Betle* L., *Piper Sarmentosum*, *Gnyura Procumbens* and *Melastoma malabathrium* L. NRGs. **RM28, 000.00**

9. ADD-X: A Novel Frying Oil Additive for Global Market. MyLAB. **RM 500,000.00**

10. The potential of *Murraya koenigii* as biopreservative for the improvement of storage life during frying. GUP Tier 1. **RM 50,000.00**

REFERENCES

1. Prof. Dr. rer. Nat. Hesham Ali EI-Enshasy

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2. Prof. Ir. Dr. Ani Idris

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