



YANNY MARLIANA BINTI BABA ISMAIL

LECTURER

ABOUT ME

Date of birth: 12th September 1986

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Current position: Lecturer DS45

Expertise: Biomaterials, Rapid Prototyping, Nanomaterials, Stem Cells Technology

Nationality: Malaysian

Marital Status: Single

EDUCATION

BACHELOR OF ENGINEERING (HONOURS) (MATERIALS ENGINEERING) (2005-2009)
UNIVERSITI SAINS MALAYSIA
CGPA: 3.38

MASTER OF SCIENCE (MATERIALS ENGINEERING) (2009 – 2011)
UNIVERSITI SAINS MALAYSIA
MAJOR: **BIOCERAMICS**

DOCTOR OF PHILOSOPHY (2012 – 2016)
KEELE UNIVERSITY, UNITED KINGDOM
MAJOR: **BIOMEDICAL ENGINEERING**

WORKING EXPERIENCE

(MAY -JULY 2007)

RESEARCH ASSISTANT

SCHOOL OF MATERIALS & MINERAL RESOURCES ENGINEERING, USM, ENGINEERING CAMPUS, PENANG, MALAYSIA.

(APRIL-JULY 2008)

INDUSTRIAL TRAINEE

PENCHEM TECHNOLOGIES, PENANG, MALAYSIA.

(JULY-DEC 2009)

TUTOR/ LAB CO-ORDINATOR

SCHOOL OF MATERIALS & MINERAL RESOURCES ENGINEERING, USM, ENGINEERING CAMPUS, PENANG, MALAYSIA.

COLLABORATION EXPERIENCE

INDUSTRIAL: LUCIDEON (PREVIOUSLY KNOWN AS CERAM)

STOKE-ON-TRENT, ENGLAND, UNITED KINGDOM.

UNIVERSITIES:

[1] NEWCASTLE UNIVERSITY

NEWCASTLE-UPON-TYNE, ENGLAND, UNITED KINGDOM.

[2] UNIVERSITY OF EDINBURGH

EDINBURGH, SCOTLAND, UNITED KINGDOM.

[3] UNIVERSITY OF MANCHESTER

MANCHESTER, ENGLAND, UNITED KINGDOM.

RESEARCH FUNDING

ARTHRITIS RESEARCH UNITED KINGDOM - TISSUE ENGINEERING CENTRE (ARUK-TEC)

AWARDS

[1] INTERNATIONAL INVENTION, INNOVATION AND TECHNOLOGY EXHIBITION (ITEX), KUALA LUMPUR CONVENTION CENTRE, 20th-22nd MAY 2011.

INVENTION: NANO-CHARM: NANOSTRUCTURED CARBONATED HYDROXYAPATITE FOR BIOMEDICAL APPLICATIONS.

INVESTIGATOR: AHMAD FAUZI MOHD NOOR; YANNY MARLIANA BABA ISMAIL

AWARD: BRONZE MEDAL

[2] PENCIPTA 2011, KUALA LUMPUR CONVENTION CENTRE, 13th -15th SEPTEMBER 2011

INVENTION: NANO MG-MN FERRITE OF 3 IN 1 MINIATURIZATION OF ANTENNA APPLICATION.

INVESTIGATOR: AHMAD FAUZI MOHD NOOR; RADZALI OTHMAN, SRIMALA SREEKANTAN, WIDAD ISMAIL, NILAR LWIN, YANNY MARLIANA BABA ISMAIL

SILVER MEDAL

RESEARCH PUBLICATIONS

Journals:

- [1] N.H. Khalid, **Y.M. Baba Ismail**, A.A. Mohamad, ZnCl₂- and NH₄Cl-Hydroponics Gel Electrolytes for Zinc-Carbon Batteries, *Journal of Power Sources* 176 (2008) 393-395.
- [2] **Yanny-Marliana B.I** and Ahmad-Fauzi M.N., Effect of a Novel Approach of Sintering on Physical Properties of Carbonated Hydroxyapatite, *Journal of Materials Science and Engineering B1*(2011) 157-163.
- [3] **Yanny Marliana Baba Ismail**, Habsah Haliman, Ahmad Azmin Mohamad, Measuring solid gel-polymer electrolyte properties based on hydroponics polymer gel for Zn-MnO₂ alkaline batteries, *International Journal of Electrochemical Science* 7(2012) 3555-3566.
- [4] **Yanny M. Baba Ismail**, Ian Wimpenny, Oana Bretcanu, Kenneth W. Dalgarno, Alicia J. El Haj, 2016. Development of multi-substituted hydroxyapatite nanopowders as biomedical materials for bone tissue engineering applications. *Journal of Biomedical Materials Research Part A* (Under review).
- [5] **Yanny M. Baba Ismail**, Ana Marina Ferreira, Oana Bretcanu, Kenneth W. Dalgarno, Alicia J. El Haj, 2016. Enhanced cell-material interaction on poly (lactic acid) substrates using bone mimicking polyelectrolyte multilayers, *Colloids and Surfaces B: Biointerfaces* (Under review).
- [6] Yvonne Reinwald, Pierre O. Bagnnaninchi, Ying Yang, **Yanny M. Baba Ismail**, Alicia J. El Haj, 2016. Online monitoring of mechanical properties for quality assessment of tissue engineered constructs for quality assessment using optical coherence tomography in hydrostatic force bioreactor, *Science Reports- Nature* (Under review).

Proceedings:

- [1] **Yanny M. Baba Ismail**, Oana Bretcanu, Kenneth W. Dalgarno, Alicia J. El Haj, 2014. Synthesis and *in vitro* biocompatibility of multi-substituted hydroxyapatite for bone tissue engineering applications. *European Cells and Materials*, 8 (4): 4.
- [2] Yvonne Reinwald, Pierre O. Bagnnaninchi, Ying Yang, **Yanny M. Baba Ismail**, Alicia J. El Haj, 2016. Online monitoring of mechanical properties of three-dimensional tissue engineered constructs for quality assessment. *Proc. SPIE 9710, Optical Elastography and Tissue Biomechanics III*, 971007.
- [3] **YM Baba Ismail**, Y Reinwald, O Bretcanu, K Dalgarno, AJ El Haj, 2016. Designs of three-dimensional printed scaffolds promote formation of vascularized engineered bone. *European Cells and Materials*, 31(1): 144.
- [4] Yvonne Reinwald, Pierre O. Bagnnaninchi, Wesam Gamal, Ying Yang, **Yanny M. Baba Ismail**, Alicia J. El Haj, 2016. Online monitoring of mechanical properties of three-dimensional tissue engineered constructs for quality assessment. *European Cells and Materials*, 31(1): 243.

PRESENTATIONS

National:

[1] **Yanny-Marliana B.I** and Ahmad-Fauzi M.N (2010), Effect of a Novel Approach of Sintering on Bioactivity of Carbonated Hydroxyapatite, *Merging Biomaterials Expertise Towards Health Sustainability, Kelantan, Malaysia, 29-30 October 2010*.

[2] **Yanny-Marliana B.I** and Ahmad-Fauzi M.N (2010), Bioactivity of Carbonated Hydroxyapatite, *19th Scientific Conference of the Electron Microscopy Society of Malaysia, Langkawi, Malaysia, 14-16 December 2010*

International:

[1] **Yanny-Marliana B.I** and Ahmad-Fauzi M.N (2011), Physical and Mechanical Properties of Carbonated Hydroxyapatite Ceramics, *International Conference on Materials, Yogyakarta, 2-3 February 2011* (Oral).

[2] **Yanny M. Baba Ismail**, Oana Bretcanu, Kenneth W. Dalgarno, Alicia J. El Haj, 2014. Physico-chemical properties and in vitro biological assessment of multi-substituted hydroxyapatite powders. *Tissue Engineering & Regenerative Medicine International Society, Genova, Italy, June 2014* (Poster).

[3] **Yanny M. Baba Ismail**, Oana Bretcanu, Kenneth W. Dalgarno, Alicia J. El Haj, 2014. Synthesis and in vitro biocompatibility of multi-substituted hydroxyapatite for bone tissue engineering applications. *Tissue and Cell Engineering Society, Newcastle-upon-tyne, United Kingdom, July 2014* (Oral).

[4] **Yanny M. Baba Ismail**, Oana Bretcanu, Kenneth W. Dalgarno, Alicia J. El Haj, 2014. Synthesis and in vitro biocompatibility of carbonated hydroxyapatite for bone tissue engineering applications. *European Society of Biomaterials, Liverpool, United Kingdom, August 2014* (Poster).

[5] **Yanny M. Baba Ismail**, Oana Bretcanu, Kenneth W. Dalgarno, Alicia J. El Haj, 2014. Nanoscale multi-substituted hydroxyapatite particles for bone tissue engineering applications. *European Materials Research Society, Warsaw, Poland, September 2014* (Oral).

[6] **Yanny M. Baba Ismail**, Oana Bretcanu, Kenneth W. Dalgarno, Alicia J. El Haj, 2014. Nanoscale multi-substituted hydroxyapatite particles for bone tissue engineering applications. *Malaysian Tissue Engineering and Regenerative Medicine Scientific Meeting, Kuala Lumpur, Malaysia, September 2014* (Poster).

[7] Yvonne Reinwald, Pierre O. Bagnaninchi, Ying Yang, **Yanny M. Baba Ismail**, Alicia J. El Haj, 2016. Online monitoring of mechanical properties of three-dimensional tissue engineered constructs for quality assessment. *SPIE Optical Elastography and Tissue Biomechanics III, San Francisco, California, United States, February 2016* (Oral).






[8] **YM Baba Ismail**, Y Reinwald, O Bretcanu, K Dalgarno, AJ El Haj, 2016. Designs of three-dimensional printed scaffolds promote formation of vascularized engineered bone. *Tissue Engineering & Regenerative Medicine International Society, Uppsala, Sweden, June 2016* (Oral).

PATENT






Yanny Marliana Baba Ismail and Ahmad Fauzi Mohd Noor, 2013. Nanostructured Carbonated Hydroxy Apatite And Method And System For Making The Same. *World Intellectual Property Organization (WIPO) PATENTSCOPE* : WO2013019099.

SKILLS

WORK

MICROSOFT	
STATISTICAL SOFTWARE	
AUTOCAD/AUTODESK	
MATLAB	
VISUAL BASIC	

PERSONAL

COMMUNICATION	
ORGANIZATION	
TEAM PLAYER	
CREATIVITY	
SOCIAL	

COMMUNITY SERVICE

[1] Volunteer for The BING BANG UK Young Scientists and Engineers Fair; Birmingham, United Kingdom; March 2015.

[2] Demonstrator for Outreach Programme; Macclesfield, United Kingdom; May 2014.

[3] Blogger for Healthcare Engineering and Regenerative Therapies (HEART) website; April 2014-March 2015.

REFEREES

[1] Professor Alicia J El Haj

Institute for Science & Technology in Medicine, Keele University, United Kingdom.

a.j.el.haj@keele.ac.uk

[2] Professor Kenneth Dalgarno

School of Mechanical & Systems Engineering, Newcastle University, United Kingdom.

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