

## CURRICULUM VITAE

**NAME: DR. SHAH RIZAL KASIM**

**NATIONALITY: MALAYSIA**

**GENDER: MALE**

**ADDRES (OFFICE): PUSAT PENGAJIAN KEJURUTERAAN BAHAN DAN SUMBER MINERAL, KAMPUS KEJURUTERAAN, UNIVERSITI SAINS MALAYSIA, 14300, NIBONG TEBAL, SEBERANG PERAI SELATAN, PULAU PINANG**

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### RESEARCH GRANT

1. Study on The Firing Schedule and The Properties of Zn-Based Crystal Glaze (USM INSENTIF) RM 5,000.00 (10/9/2009 – 9/9/2010)
2. Stir Welding of Aluminum Alloy (AUN/SEED NET) RM 20,894.74 (1/4/2010-15/3/2013)
3. Preparation and Characterization of Geopolymer Concrete (AUN/SEED NET) RM 16,054.60 (1/4/2011 – 31/3/2014)
4. Development of Transparent Surface-Glow Glaze (USM SHORT TERM) RM 39,653.00 (15/8/2011 – 14/8/2013)
5. Development and Characterization of Lead Free Pewter Alloy (AUN/SEED NET) RM 23,022.24 (1/7/2009-15/3/2011)
6. Fabrication of Carbonated Hydroxyapatite Foam by Conversion of  $\alpha$ -TCP Using Wet CO<sub>2</sub> Gas (AUN/SEED NET) RM 20,719.37 (1/10/2010 – 15/3/2013)
7. Synthesis and Characterization of Doped Strontium Magnesium Silicates for Persistent Luminescence (USM SHORT TERM) RM 39,341.00 (15/6/2012 – 14/6/2014)
8. Exploring A Novel Approach to Sintering of Dense Silicone Substituted Carbonated Hydroxyapatite (Si-CHA) Bioceramics for Human Bone Graft Substitute (Kementerian Pengajian Tinggi) RM 80,000.00 (1/8/2012 – 31/1/2015)
9. Fabrication of Intelligent Three-Dimensional (3D) Scaffold for Bone Tissue Engineering (BTE) (USM RU) RM 243,561.00 (1/12/2013 – 30/11/2016)

### GRADUATE SUPERVISION

1. Abdul Rashid bin Jamaludin (MSc) The Effects of CaCO<sub>3</sub> Addition on the Properties of ZnO Crystal Glaze (Graduate 2012)
2. Chou Soklin (MSc) Fabrication and Characterization of Lead Free Pewter Alloys (Graduate 2012)

3. Asam M.A. Abudalazez (PhD) Electrophoretic Deposition of Ceramic Coating on Dental Implant (Graduate 2013)
4. Sunarso (MSc) Fabrication of Interconnected Porous Carbonated Hydroxyapatite (Graduate 2013)
5. Chhor Darong (MSc) Fabrication and Characterization of Porous Alumina(Graduate 2013)
6. Wan Ruzaini Bin Wan Sulaiman (MSc) Effect of Stand-Off Distance and Plasma Current on The Properties of Hydroxyapatite Coatings Produced By Plasma Spray (Graduate 2014)
7. Ooi Jer Ping (PhD) Cytotoxicity and Genotoxicity Effects of Manufactured Nano  $\beta$ -TCP (On-Going)
8. Abdul Rashid Bin Jamaludin (PhD) Fabrication of High Performance Foam Structure for Porous Medium Burner (On-Going)
9. Nor Nazida Binti Awang (Phd) Synthesis of  $\text{SrAl}_2\text{O}_4: \text{Eu}^{2+}, \text{Dy}^{3+}$  Phosphor For Glow Glaze Application (On-Going)

#### RESEARCH PUBLICATION (SELECTED)

1. ***The Effect of Calcium Carbonate Particle Size on  $\beta$ - $\text{Ca}_3(\text{PO}_4)_2$  Formation.*** Shah Rizal Kasim, Hazman Seli, Yeong Meng Yee, Hazizan Md. Akil and Zainal Arifin Ahmad, School of Materials and Mineral Resources, Engineering Campus, Universiti Sains Malaysia, 14300 Nibong Tebal, Pulau Pinang, Malaysia. *Journal of Ceramic Processing Research, Vol 10 (2009) No. 5 pp. 664-668.*
2. ***The Effect Of  $\text{CaCO}_3$  Addition on the Crystallization Behavior of ZnO Crystal Glaze Fired at Different Gloss Firing and Crystallization Temperatures.*** A. R. Jamaludin, S. R. Kasim, Z. A. Ahmad. School of Materials and Mineral Resources, Engineering Campus,Universiti Sains Malaysia, 14300 Nibong Tebal, Pulau Pinang, Malaysia. *Science of Sintering, 42 (2010) pp 345-355.*
3. ***Synthesis and Characterization of Porous Biphasic Calcium Phosphate Scaffold From Different Porogens For Possible Bone Tissue Engineering Applications.*** A. Amara, A. M. A. Abudalazez, A. Rashid Ismail, N. Hayati Abd Razak, S. Malik Masudi, S. Rizal Kasim, Z. Arifin Ahmad. *Science of Sintering, 43 (2011) pp 183-192.*
4. ***Electrophoretic Deposition of Biphasic Calcium Phosphate (BCP) Coatings on 316L Stainless Steel at Room Temperature.*** Asam M. A. Abudalazez, Shah Rizal Kasim, Azlan b. Ariffin and Zainal Arifin Ahmad, School of Materials and Mineral Resources, Engineering Campus, Universiti Sains Malaysia, 14300 Nibong Tebal, Pulau Pinang, Malaysia. *Advanced Materials Research Vol. 501 (2012) pp 169-175.*
5. ***Sago Starch as Binder and Pore-Forming Agent for The Fabrication of Porcelain Foam.*** Abdul Rashid Jamaludin, Shah Rizal Kasim, Mohd Zulkifly Abdullah, Zainal Arifin Ahmad , School of Materials and Mineral Resources, Engineering Campus, Universiti Sains Malaysia, 14300 Nibong Tebal, Pulau Pinang. *Ceramics International. Vol 40 (2014) pp 4777-4784.*

6. ***Fabrication of Porcelain Foam Substrates Coated With SiC, Ni, and Cr Using The Dip Coating Technique.*** Abdul Rashid Jamaludin, Shah Rizal Kasim, Mohd Zulkifly Abdullah, Zainal Arifin Ahmad , School of Materials and Mineral Resources, Engineering Campus, Universiti Sains Malaysia, 14300 Nibong Tebal, Pulau Pinang. *Ceramics International. Vol 41 (2015) pp 2940-2947.*
  
7. ***The Effect of Sago Binder in The Fabrication of Alumina Foam Through The Polymeric Sponge Replication Technique.*** Abdul Rashid Jamaludin, Shah Rizal Kasim, Mohd Zulkifly Abdullah, Zainal Arifin Ahmad , School of Materials and Mineral Resources, Engineering Campus, Universiti Sains Malaysia, 14300 Nibong Tebal, Pulau Pinang. *Journal of European Ceramic Society (2014).*

#### **ASSESSOR/EXAMINER**

##### **INTERNAL EXAMINER**

1. Characterization of Cambodian Clays and Their Suitability for Ceramic Industry Applications, BUN KIM NGUN (USM) 2012 (PhD)
2. Effect of Precursor Chemicals, pH and Synthesis Temperature on Precipitated Carbonated Hydroxyapatite, CHONG WEE LOON (USM) 2012 (MSc)
3. Development of Carbonated Hydroxyapatite/Poly(L-Lactide)/Poly(Vinyl Alcohol) Biocomposite, KEE CHIA CHING (USM) 2013 (MSc)
4. Porous Cordierite Using Different Foaming Agent: Effect of Mechanical Strength, NURUL SYAZWANI BT OTHMAN (USM) 2014 (MSc)
5. Development of Porous Ceramic Sponge as Catalyst Support for Hydrotalcite in the Production of Biodiesel, SHARMIWATI BT MOHAMMED SHARIF (USM) 2014 (PhD)
6. Characterization and Synthesis of Soda-Lime Silicate Glass Produced From Cambodian Silica Sand, EM SEREIRATANA (USM) 2015 (MSc)

##### **SERVICE TO THE UNIVERSITY AND COMMUNITY**

1. School Committee Member Jawatankuasa Penggerak KPI PPKBSM (2011 – 2015)
2. School Committee Member Penerbitan Buletin Enjiner PPKBSM (2012-2015)
3. School Committee Member Persidangan RCM 5 & RCNM 5 (2013)
4. University Committee Wakil Perpustakaan (2009-2012)
5. School Committe Young Person's Lecture Competition (2010-2014)
6. School Committee Ahli Jawatankuasa Ad Hoc Semakan Audit Ruang Kampus Kejuruteraan (2011)
7. School Committee Ahli Jawatankuasa Akreditasi PPKBSM (2014)
8. School Committee Ahli Jawatankuasa Projek Penyelidikan Tahun Akhir PPKBSM (2013-2015)

9. Community Service, Committee Innovative Science Camps (2014)
10. School Committee Member Persidangan RAMM (2015)
11. School Committee Member Jawatankuasa Keselamatan dan Kesihatan Pekerjaan (JKKP) (2014-2015)

#### **AWARDS AND RECOGNITIONS/ACHIEVEMENTS**

1. Anugerah Sanggar Sanjung 2004 (Paroduk)
2. Hadiah Sanjungan 2009 (Penerbitan Jurnal)
3. Pingat Perak I-Sweep 2009 (Texas, USA)
4. Hadiah Sanjungan 2012 (Penerbitan Jurnal)