# Sr Dr. Md Azree Othuman Mydin

Curriculum Vitae

Senior Lecturer School of Housing, Building and Planning Universiti Sains Malaysia 11800, Penang MALAYSIA



## **Personal Particulars**

Name Md Azree Othuman Mydin

Telephone +604 6532813 E-mail address azree@usm.my Date of birth December, 13, 1981

Age 31 years

## **Education**

2007-2010	School of Mechanical, Aerospace and Civil Engineering			
2007-2010				
	University of Manchester, United Kingdom			
	Degree: Ph.D			
	Major: Civil Engineering			
	Research Title: Lightweight foamed concrete thermal and mechanical properties at			
	elevated temperatures and its application to composite walling system			
2004-2005	School of Housing, Building and Planning			
	Universiti Sains Malaysia, Penang			
	Degree: Masters of Science			
	Major: Building Technology			
	Dissertation Title: Effect of using additives to the compressive strength of			
	lightweight foamed concrete			
2001-2004	School of Housing, Building and Planning			
	Universiti Sains Malaysia, Penang			
	Degree: Bachelor of Science			
	Major: Housing, Building and Planning (Building Technology)			
1999-2000	Matriculation			
	Universiti Sains Malaysia, Penang			
	Degree: Science Matriculation			

# **Working Experiences**

2007-2010	USM Fellow (ASTS Scheme)
	University of Manchester, United Kingdom
2005-2007	Civil and Structural Engineer
	Penang Development Corporation Consultancy (PDCC)
2004-2005	Site Engineer
	Ten-tel and Construction Sdn. Bhd.

#### **Honours and Award**

**Housing, Building and Planning Best Student -** Awarded by Universiti Sains Malaysia on 4<sup>th</sup> August 2004 for final year Housing, Building and Planning best student

**Gold Medal Award -** Awarded by Institute of Engineering Malaysia (Northern Region) on 19<sup>th</sup> July 2004 for Housing, Building and Planning best student

#### **Research Interests**

Fire engineering, Material properties, Heat and mass transfer, Fire resistant testing, Sandwich construction, Structural engineering, Steel and composite, Thin-walled structures, concrete-filled tubes, Structural Fire Engineering:covering the response of concrete, steel and masonry elements, The behaviour (robustness) of structures under extreme loading.

#### **Publications**

#### 2012

#### Citation Indexed Journal

- 1) **Md Azree Othuman Mydin**, and Wang, Y. C., "Mechanical properties of foamed concrete exposed to high temperatures", Journal of Construction & Building Materials, Vol. 26, Issue 1, 2012, p 638-654 (Impact factor: 1.366)
- 2) Muamar Vebry, Ruhizal Roosli, **Md Azree Othuman Mydin**, Mazran Ismail, "Building and Planning of Post-Disaster Rehabilitation and Reconstruction", International Journal of Academic Research, Vol. 4, Issue 1, 2012, p 194-100 (ISI)
- 3) **Md Azree Othuman Mydin**, and Wang, Y. C., "Thermal and mechanical properties of Lightweight Foamed Concrete (LFC) at elevated temperatures", Magazine of Concrete Research, Vol. 64, Issue 3, 2012, p 213-224 (Impact factor: 0.520)
- 4) Hanizam Awang, **Md Azree Othuman Mydin**, Ahmad Farhan Roslan, "Microstructural investigation of lightweight foamed concrete incorporating various additives", International Journal of Academic Research, Vol. 4, Issue 2, 2012, p 148-156 (ISI)
- 5) Mazran Ismail, Abdul Malek Abdul Rahman, Ruhizal Roosli, **Md Azree Othuman Mydin**, "Potential and constraints of advanced stack ventilation application in the tropics: A review", International Journal of Academic Research, Vol. 4, Issue 2, 2012, p 148-156 (ISI)
- 6) **Md Azree Othuman Mydin**, Hanizam Awang, Ahmad Farhan Roslan, "Determination of lightweight foamed concrete thermal properties integrating various additives", Elixir Cement & Concrete Composites Journal, Issue 48, 2012, p 9286-9291 (Thomson Reuters)
- 7) Ruhizal Roosli, Phil O'Keefe, **Md Azree Othuman Mydin**, "Evolution of Disaster Planning and Housing in Malaysia: A Reviews", World Applied Sciences Journal, 2012 (ISI)

#### Other Publications

1) **Md Azree Othuman Mydin**, "The effects of different densities, porosities and pore sizes on thermal conductivity of foamed concrete", Bulletin of Research and Community Engagement, Vol. 2, Issue 1, 2012, p 29-34 (ISSN 1712-9842)

2) Khaw Yen, Md Azree Othuman Mydin, "Building Condition Survey and Defects Diagnosis on Hai Kee Chan Mansion (Georgetown World Heritage Building)", Bulletin of Research and Community Engagement, Vol. 2, Issue 1, 2012, p 42-46(ISSN 1712-9842)

### 2011

#### Book

- 1. **Md Azree Othuman Mydin**, "Foamed Concrete Properties at Elevated Temperatures", Lambert Academic Publishing, 2011 (ISBN: 978-3-8465-5713-6)
- 2. Abdul Naser Abdul Ghani, **Md Azree Othuman Mydin** and Noor Faisal Abas (eds.), 2011, Proceedings of International Building and Infrastructure Technology Conference, 2011 (ISBN 978-967-394-029-5), School of HBP, USM, 462

#### Citation Indexed Journal

- 1) **Md Azree Othuman Mydin**, "Thin-walled steel enclosed lightweight foamcrete: A novel approach to fabricate sandwich composite", Australian Journal of Basic and Applied Sciences, Vol. 5, Issue. 12, 2011, p 1727-1733 (Impact factor: 0.027)
- 2) **Md Azree Othuman Mydin**, and Wang, Y. C., "Structural Performance of Lightweight Steel-Foamed Concrete-Steel Composite Walling System under Compression", Journal of Thinwalled Structures, Volume 49, Issue 1, 2011, p 66-76 (Impact factor: 1.103)
- 3) **Md Azree Othuman Mydin**, and Wang, Y. C., "Potential of Using Lightweight Foamed Concrete in Composite Load-Bearing Wall Panels In Low-Rise Construction", Concrete Research Letters Journal, Vol. 2, Issue. 2, 2011, p 142-157
- 4) **Md Azree Othuman Mydin**, and Wang, Y. C., "Elevated-Temperature Thermal Properties of Lightweight Foamed Concrete", Journal of Construction & Building Materials, Volume 25, Issue 2, 2011, p 705-716 (Impact factor: 1.366)
- 5) **Md Azree Othuman Mydin**, "Effective thermal conductivity of foamcrete of different densities", Concrete Research Letters, Vol. 2, Issue 1, 2011, p 181-189.

### **Conference Proceedings**

- 1) **Md Azree Othuman Mydin**, Mazran Ismail, and Ruhizal Roosli "*Indicative Study On Fire Resistance And Structural Performance Of Foamcrete Based System*", Proc. of 5th International Conference & Workshop on Built Environment in Developing Countries, Vistana Hotel, Penang, December 2011, p 572-581.
- 2) **Md Azree Othuman Mydin**, Ruhizal Roosli, and Mazran Ismail "*Lightweight Foamed Concrete Strength and Stiffness Prediction Models*", Proc. of 5th International Conference & Workshop on Built Environment in Developing Countries, Vistana Hotel, Penang, December 2011, p 582-589.
- 3) Ahmad Farhan Roslan, Hanizam Awang, and **Md Azree Othuman Mydin**, "Engineering Properties of Foamed Concrete with Different Additives as Partial Cement and Sand Replacement", Proc. of 5th International Conference & Workshop on Built Environment in Developing Countries, Vistana Hotel, Penang, 6<sup>th</sup> & 7<sup>th</sup> December 2011, 521-530.
- 4) Ruhizal Roosli, **Md Azree Othuman Mydin**, and Mazran Ismail, "*A Comparison Study of Learning Process in Providing Emergency Housing in Developing Countries*", Proc. of 5th International Conference & Workshop on Built Environment in Developing Countries, Vistana Hotel, Penang, 6<sup>th</sup> & 7<sup>th</sup> December 2011, p 1753-1765.

- 5) Ruhizal Roosli, Mazran Ismail, and Md Azree Othuman Mydin, "A Comparison Study of Main References in Humanitarian Emergencies: Shelter, Settlement and Non-Food Items", Proc. of 5th International Conference & Workshop on Built Environment in Developing Countries, Vistana Hotel, Penang, 6<sup>th</sup> & 7<sup>th</sup> December 2011, p 1766-1775.
- 6) Mazran Ismail, **Md Azree Othuman Mydin**, and Ruhizal Roosli "*Solar Induced Ventilation Strategies in Architectural Context: A Review*", Proc. of 5th International Conference & Workshop on Built Environment in Developing Countries, Vistana Hotel, Penang, 6<sup>th</sup> & 7<sup>th</sup> December 2011, p 310-316.
- 7) Mazran Ismail, Abdul Malek Abdul Rahman, Ruhizal Roosli, and **Md Azree Othuman Mydin**, "Wind-Assisted Stack Ventilation Strategies: Potentials and Constraints in Malaysian
  Climate Conditions", Proc. of 5th International Conference & Workshop on Built Environment in Developing Countries, Vistana Hotel, Penang, 6<sup>th</sup> & 7<sup>th</sup> December 2011, p 317-326.
- 8) **Md Azree Othuman Mydin**, "Compressive Stress-Strain Relationship of Foamed Concrete at High Temperatures", Proc. of International Building & Infrastructure Technology Conference, Vistana Hotel, Penang, June 2011, p 29-37.
- 9) **Md Azree Othuman Mydin**, and Hanizam Awang, "A Review on Mechanical and Thermal Properties of Lightweight Foamed Concrete at Ambient Temperature", Proc. of International Building & Infrastructure Technology Conference, Vistana Hotel, Penang, June 2011, p 388-395.
- 10) Hanizam Awang, and **Md Azree Othuman Mydin**, "*Properties of Gypsum Plasterboards at Elevated Temperatures*", Proc. of International Building & Infrastructure Technology Conference, Vistana Hotel, Penang, June 2011, p 413-419.
- 11) **Md Azree Othuman Mydin**, "Fire Design for Hollowcore Concrete Flooring", Proc. of International Building & Infrastructure Technology Conference, Vistana Hotel, Penang, June 2011, p 439-444. sad

#### 2010

#### Phd Thesis

1) Md Azree Othuman Mydin, "Lightweight foamed concrete thermal and mechanical properties at elevated temperatures and its application to composite walling system", University of Manchester, United Kingdom (2010)

#### Citation Indexed Journal

1) **Md Azree Othuman Mydin**, and Wang, Y. C., "An Experimental Investigation of Mechanical Properties of Lightweight Foamed Concrete Subjected to Elevated Temperatures up to 600°C", Concrete Research Letters Journal, Volume 1, Issue 4, 2010, p 142-157

#### Conference Proceedings

1) **Md Azree Othuman Mydin**, and Wang, Y. C., "Hybrid numerical-experimental method for extracting the thermal properties of lightweight foamed concrete (LFC) exposed to elevated temperatures", Proc. 2nd United Kingdom-Malaysia Engineering Conference, University College London, United Kingdom, 2010, p 45-56.

## 2009

#### Conference Proceeding/Symposium

1) **Md Azree Othuman Mydin**, and Wang, Y. C., "*Thermal properties of lightweight foamed concrete at elevated temperatures*", Concrete Communication Symposium, The Concrete Centre, Leeds, United Kingdom, 2009, p 54-56.

## 2008

## Conference Proceeding

1) **Md Azree Othuman Mydin**, and Wang, Y. C., "*Performance of Cold Formed Thin Walled Composite Panel Systems*", Mechanical, Aerospace and Civil Engineering PGR Conference, University of Manchester, United Kingdom, 2008, p 8-10.

## **Research Projects**

No	Title	Level of	Date		Financial
190	Title	involvement	Start	Complete	Support
1	Fundamental Approach Of Predicting Insulation And Structural Response Of Foamed Concrete Panel For Fire Resistance	Principal Researcher	July 2012	June 2014	FRGS (KPT) RM88,690
2	Fire Insulation Performance of Foamed Concrete Panel System	Principal Researcher	August 2011	August 2013	Short Term (USM) RM39,390
3	A Model Of Working From Home (WFH) Concept In Malaysian Construction Industry	Co- Researcher	July 2011	July 2013	FRGS (KPT) RM50,000
4	Effect of Fibre on Properties of Lightweight Foamed Concrete	Co- Researcher	April 2011	March 2013	Short Term (USM) RM33,276
5	The Use Of The Lightweight Infill Material For Profiled Steel Sheet Dry Board Floor System (PSSDB)	Co- Researcher	April 2010	June 2012	Research University (USM) RM191,629
6	Potential of Using Foamed Concrete in Composite Loadbearing Wall Panels in Low- Rise Construction -completed-	Individual	April 2011	April 2012	Incentive (USM) RM5,000

# **Supervision**

## i) Phd (Postgraduate)

No	Name	Title	Involvement
1	Larry Seth Luat	Fire Safety Elements for Longhouses in Sarawak : Features, Causes and Solutions for Traditional House Design	Co-Supervisor
2	Eravan bin Serri	Performance of Oil Palm Shell as Course Aggregate Lightweight Concrete for Thermal Insulation	Co-Supervisor

#### ii) Master (Postgraduate)

No	Name	Title	Involvement
3	Ahmad Farhan bin Roslan	The use of lightweight infill material for profiled steel sheet dry board floor system (PSSDB)	Co-Supervisor

## iii) Final year research project for Building Surveying (Undergraduate)

No	Name	me Title	
1	Wang Xueke	Study on Selection and Optimization of Vertical Transportation System (Elevators) for Commercial Buildings	Main-Supervisor
2	Raja Nurul Waheeda Raja Zilan	Hospital's Patients and Visitors Reaction in The Event of Fire Emergency (Case Study: Hospital Universiti Sains Malaysia, Kubang Kerian, Kelantan)	Co-Supervisor
3	Mardziah Khalid	Building Condition Assessment and Defect Analysis on Shophouses in Penang	Main-Supervisor
4	Ooi Peih Shia	An Assessment of Building Security System and Active Fire Protection System in Administration Building	Main-Supervisor
5	Low Cheau Ming	Defect Analysis of Different Types of Walling System for Building	Co-Supervisor
6	Norshila Binti Ibni Hashim	Maintenance Management System of Administration Heritage Building	Co-Supervisor
7	Mohd Ariff Bin Mohd Jafri	The Relationship Between Design and Maintenance of High Rise Buildings in Malaysia.	Co-Supervisor
8	Siti Hajar Ismail	Maintenance Management System for The Heritage Museum	Co-Supervisor
9	Mohd Ami Bin Kadir	Influence of Different Building Materials on Building Maintenance of Residential Building	Co-Supervisor

10	Mohd Firdaus Amran	Building Condition and Defects Assessment: A Performance Evaluation on Heritage Mosque in Penang	Co-Supervisor
11	Woon Chin Ong	Assessment of Fire Protection and Prevention System in Hospital Building	Co-Supervisor
12	Siti Nurul Hasanah Binti Sohaime	Building Condition Survey and Defect Diagnosis on Heritage Museum	Main-Supervisor
13	Siti Solehah Mohamad Sanusi	Conservation of Roofing And Ceiling Elements of Heritage Buildings	Co-Supervisor
14	Hwong Dick Son	Green Building Index Application in Educational Building	Main-Supervisor
15	Shayan Shahmoradi Akram	Challenges and Obstacles of Sustainable Buildings in Malaysia	Co-Supervisor

## Service to Universiti Sains Malaysia

- 1. <u>Team Manager</u>, USM Senior Football Team, SUKUM-37 at Universiti Utara Malaysia, 2-12 July 2012
- 2. Assistant Manager, USM FC Premier League team, December 2011 until now
- 3. <u>Editorial Board</u>, Bulletin of Research and Community Engagement (BRACE), HBP, USM, December 2011 until now
- 4. <u>Committee</u> member Exhibition for "Hari Libatsama Komuniti-Universiti-Industri -PPPBP", HBP, USM, May 29, 2012
- 5. <u>Committee</u> member of Strategic Planning Workshop 2012, HBP, USM, December 16-18, 2011
- 6. <u>Committee</u> member of School of Housing, Building and Planning Research and Development, HBP, USM, August 2011 until now
- 7. <u>Committee</u> member of School of Housing, Building and Planning Concrete and Structure Lab, HBP, USM, August 2011 until now
- 8. **Mentor** of Sistem Intervensi Akademik Pelajar (SIAP), USM, August 2011 until now
- 9. <u>Committee</u> member of Housing, Building and Planning ECHO Bulletin, HBP, USM, 2011.
- 10. <u>Scientific committee</u> member of International Building and Infrastructure Technology Conference, HBP, USM June 7-8, 2011.
- 11. <u>Committee</u> member of Safety-Centered Housing Symposium & Exhibition: Towards a Safer and Sustainable Malaysia, HBP, USM, 2011.
- 12. <u>Committee</u> member of 5th International Conference on Built Environment in Developing Countries (ICBEDC), HBP, USM, December 6-7, 2011
- 13. <u>Committee</u> member of Workshop on Sustainable Building & Environment 2011, HBP, USM, July 5-6, 2011.

## **Professional and Community Services**

- 1. <u>Disciplinary Committee</u> of Football Association of Penang (FAP), May 2012 until present
- 2. <u>Editorial Board</u> of Elixir Journal, February 28 until present
- 3. <u>Member of Building Surveying Junior Organization (BSJO)</u>, Royal Institution of Surveyors Malaysia (RISM), February 2012 until present
- 4. <u>International Journal Reviewer</u> of Construction and Building Materials Journal, Limiting properties in the characterization of mixed recycled aggregates for use in the manufacture of concrete, 2011
- 5. <u>International Journal Reviewer</u> of Construction and Building Materials Journal, Hygric, thermal and durability properties of autoclaved aerated concrete, 2011
- 6. <u>Internal examiner</u> project evaluation for final year Housing, Building and Planning, USM Interior Design (RDS 309) student, April 26, 2011.
- 7. <u>International Journal Reviewer</u> of Construction and Building Materials Journal, Effects of curing methods on the properties of foamed concrete prepared with and without slag, 2010

## **Professional Memberships**

- 1) <u>Professional Member</u> of The Institution of Engineering and Technology (IET), United Kingdom, *Admission date:* 28<sup>th</sup> October 2010 (MIET)
- 2) <u>Member</u> of International Association of Engineers (IAENG), United Kingdom, *Admission date:* 13<sup>th</sup> September 2010
- 3) <u>Professional Member</u> of Royal Institution of Surveyors Malaysia, *Admission date: October* 2006 (MISM)
- 4) <u>Professional Member</u> of Association of Building Engineer, United Kingdom, *Admission date:* 8<sup>th</sup> December 2005 (MBEng)