

## Megat Azmi Megat Johari



Megat Azmi Megat Johari (M.A. Megat Johari) is presently a Professor at the School of Civil Engineering, Universiti Sains Malaysia. He obtained his BSc from Ohio Northern University, and MSc as well as PhD from the University of Leeds. His research focusses on the broad area of concrete materials and technology with emphasis on supplementary cementitious materials, high strength and high-performance concrete, alkali activated and geopolymer concrete, as well as concrete evaluation, repair, and retrofitting. He has successfully supervised more than 30 PhD and MSc students. He has published more than 100 papers in indexed journals and proceedings, with total citations of more than 2200 and a Scopus *h*-index of 26.

## BRIEF CURRICULUM VITAE

1. Name: Megat Azmi Megat Johari (M.A. Megat Johari)
2. Current Position: Professor
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Researcher ID: G-5264-2011
4. Academic Qualifications: BSc (1990; Ohio Northern University); MSc (1996) & PhD (2001) (Leeds)
5. Career History at Universiti Sains Malaysia (USM):  
Tutor: 1990-2001; Lecturer: 2001- 2004; Senior Lecturer: 2004-2009; Associate Professor: 2009-2016; Professor: 2016-present
6. Field(s) of Specialization: Concrete Materials & Technology
7. Current Research Areas/Topics: Supplementary cementitious materials; high strength and high-performance concrete; engineered cementitious composites; ultra high-performance fiber reinforced concrete; green concrete; alkali activated binders & geopolymers; concrete evaluation, repair & strengthening
8. Appointment as Editorial Board Member:
  - Malaysian Construction Research Journal
  - Journal of Civil Engineering, Science and Technology
  - The Open Civil Engineering Journal
9. Appointment as Journal Articles Reviewer:
  - Advances in Civil Engineering
  - Advances in Civil Engineering Materials
  - Advances in Concrete Construction
  - Advances in Materials Science and Engineering
  - Advances in Mechanical Engineering
  - Case Studies in Construction Materials
  - Computers and Concrete
  - Construction and Building Materials
  - Cement and Concrete Research
  - Desalination and Water Treatment
  - Environmental Science and Pollution Research
  - International Journal of Environment and Waste Management
  - International Journal of Physical Sciences

- Journal of Building Engineering
- Journal of Civil Engineering and Construction Technology
- Journal of Civil Engineering and Management
- Journal of Cleaner Production
- Journal of Construction in Developing Countries
- Journal of Engineering and Technological Sciences
- Journal of Hazardous Materials
- Journal of Thermal Analysis and Calorimetry
- Jurnal Kejuruteraan UKM
- Malaysian Construction Research Journal
- Materials and Structures
- Proceedings of ICE Construction Materials
- Progress in Rubber Plastics and Recycling Technology
- Songklanakarin Journal of Science and Technology
- The Arabian Journal for Science and Engineering
- The Open Civil Engineering Journal

#### 10. Completed & On-Going Research Grant:

- "Investigation on the Suitability of Metakaolin Produced from Locally Available Kaolinitic Clay as a Mineral Admixture for Concrete", USM short-term grant, Project leader, 2001-2003.
- Performance of High-Strength Metakaolin Concrete Subjected to Different Curing Regimes. USM short term grant, 2009-2012.
- Performance of palm oil fuel ash self-compacting concrete subjected to different curing and exposure regime. Research University Grant. RM195,400. 2010-2013.
- Development of Green Palm Oil Fuel Ash-Based Geopolymer Mortar for Superior Performance in Aggressive Environments. Research University Grant. RM201,979. 2013-2017.
- Characterization of Corrosion Mechanism and Probabilistic Modelling Approach for Predicting Future Reinforced Concrete Structural Performance. Fundamental Research Grant. RM90,200. 2017-2020.

#### 11. Completed PhD Supervision:

- MOHD FADZIL BIN ARSHAD, PhD, Influence of Multiple Blended Binders on Engineering Properties and Durability of Concrete, 2011, **Main Supervisor.**
- NURDEEN MOHAMED O. ALTWAIR, PhD, Properties and Performance of Engineered Cementitious Composites Containing Palm Oil Fuel Ash, 2013, **Main Supervisor.**
- ABDULLAH MOHSEN AHMED ZEYAD, PhD, Influence of Steam Curing on Engineering and Fluid Transport Properties of High Strength Green Concrete Containing Palm Oil Fuel Ash, 2013, **Main Supervisor.**
- MUSTAFA JUMA A. MIJARSH, PhD, Palm Oil Fuel Ash Based-Geopolymer Mortar: Synthesis and Evaluation of Performance, 2015, **Main Supervisor.**
- MORUF OLALEKAN YUSUF, PhD, Synthesis of Alkaline Activated Binder for Mortar and Concrete Using Binary Blending of Ground Steel Slag and Palm Oil Fuel Ash, 2015, **Main Supervisor.**
- MOHD HANIF ISMAIL, PhD, Properties and Performance of High Strength Concrete Containing Ternary Blended Binder, 2016, **Main Supervisor.**
- RAMI J. A. HAMAD, PhD, Performance of Structural Concrete Beam Reinforced with Fiber Reinforced Polymer Rebars at Elevated Temperatures, 2017, **Main Supervisor.**

- SALAMI BABATUNDE ABIDOUN, PhD, Development of Engineered Geopolymer Composites Using Palm Oil Fuel Ash, 2018, **Main Supervisor.**
- NORFANIZA MOKHTAR, PhD, A Study on Self-Healing Concrete Containing Palm Oil Fuel Ash Using Bacillus Sphaericus Bacteria, 2018, **Main Supervisor.**
- OTMAN MOSBAH MOHAMED ELBASIR, PhD, Characterization and Evaluation of Alkaline Activated Mortars Synthesized from Binary and Ternary Blends of Palm Oil Fuel Ash, Ground Granulated Blast Furnace Slag and Fly Ash, 2018, **Main Supervisor.**
- MOHAMED IBRAHIM, PhD, Development of Natural Pozzolan-Based Alkali Activated Concrete Incorporating Nano Silica, 2020, **Main Supervisor.**
- ABDUALLAH MUFTAH MENSBAZ, PhD, Evaluation of Performance of Alkali Activated Mortars Synthesized from Ternary Blends of Ultrafine Palm Oil Fuel Ash, Ground Granulated Blast-Furnace Slag and Metakaolin, 2020, **Main Supervisor.**
- AZHAR BIN ABDUL HALIM, PhD, Treatment of Semi-Aerobic Leachate using Organic and Mineral Based Composite Adsorbent, 2009, **Co-Supervisor.**
- ALIK ANAK DUJU, PhD, Structural Stress Grading of Selected Sarawak Timber Species Using Non-Destructive Tests, 2009, **Co-Supervisor.**
- MOHD HAZIMAN BIN WAN IBRAHIM, PhD, Engineering Properties and Microstructure of Brickwork under Aggressive Environment, 2011, **Co-Supervisor.**
- RAMADHANSYAH PUTRA JAYA, PhD, Properties of Concrete Containing Rice Husk Ash under Aggressive Environments Subjected to Wetting and Drying, 2012, **Co-Supervisor.**
- BASSAM A. O. TAYEH, PhD, Characteristics of The Interfacial Bonding Between Normal Concrete Substrate and Ultra High-Performance Fiber Concrete Repair Material, 2013, **Co-Supervisor.**
- ISKANDA BIN OPENG, PhD, Influence of Moisture Content on Creep Bending of Selected Sarawak Timber Structures, 2013, **Co-Supervisor.**
- SHAHIRON SHAHIDAN, PhD, Damage Classification in Reinforced Concrete Beam by Acoustic Emission Signal Analysis, 2014, **Co-Supervisor.**
- NOR HAZURINA OTHMAN, PhD, Effect of Cockle (Anadara Granosa) Shell as Partial Cement Replacement on the Properties of Concrete, 2014, **Co-Supervisor.**
- MAJED A. A. ALDAHDOOH, PhD, Development of POFA-Based Green Ultra High-Performance Fiber Reinforced Cementitious Composites as Retrofitting Material, 2014, **Co-Supervisor.**
- MOHAMED ROHAIZAD MOHAMED RASHID, PhD, The Use of Sago Pith Waste Ash as Potential Raw Material for Ceramic and Geopolymer Fabrication, 2018, **Co-Supervisor.**

#### 12. Completed MSc Supervision:

- MUHD NORHASRI BIN MUHD SIDEK, MSc, Effect of Curing and Exposures Conditions on Strength Performance and Durability Characteristics of Concrete Containing Metakaolin, 2010, **Main Supervisor.**

- AHMAD ZAKI, MSc, Assessment of Rebar Corrosion Using Ground Penetrating Radar and Image Processing, 2013, **Main Supervisor.**
- NURHANA ZAKARIA, MSc, Influence of Palm Oil Fuel Ash as Supplementary Binder on Properties of Polymer Modified Concrete, 2014, **Main Supervisor.**
- ZAINURUL ZAINUL, MSc, Influence of Palm Oil Fuel Ash as a Supplementary Binder on Properties of Self-Compacting Concrete, 2014, **Main Supervisor.**
- ALIAKHBAR MAHMOUDI KOUCH AKSARAEI, MSc, Corrosion Resistant Performance of High Strength Green Concrete Containing Palm Oil Fuel Ash, 2014, **Main Supervisor.**
- SYAMSUHAILI BINTI SAID, MSc, Effects of Time-Dependent Deformation on the Strength of Masonry, 2010, **Co-Supervisor.**
- FARAH ALWANI BINTI WAN CHIK, MSc, Properties of Concrete Block Containing Rice Husk Ash, 2010, **Co-Supervisor.**
- CHE NORAZMAN BIN CHE WAN, MSc, Engineering Properties of Porous Asphalt Subjected to Short-Term and Long-Term Ageing, 2010, **Co-Supervisor.**
- ALI PAPZAN, MSc, Forecasting the Compressive Strength of Self-Compacting Concretes Containing Mineral Admixtures by Artificial Neural Networks, 2011, **Co-Supervisor.**

### 13. On-Going Postgraduates Supervision:

- KHAIRUL ANUAR SHAHID, PhD, Structural Health Monitoring of Corroded Reinforced Concrete Beam Based on Acoustic Emission Technique, **Main Supervisor.**
- NURIL IZZEATY ISHAK, PhD, Influence of RHA and GGBS as Ternary Blended Binders on Properties of High Strength Green Concrete, **Main Supervisor.**
- SYED KHAJA NAJAMUDDIN, PhD, Development of Sustainable Alkali Activated Concrete Using Silico Manganese Fumes, **Main Supervisor.**
- MUHAMMAD NASIR, PhD, Synthesis of Alkali-Activated Silico-Manganese Fumes and Ground Steel Slag Based Binary Blended Binder, **Main Supervisor.**
- RAMZY J ABDUSSALAM SHALADI, PhD, High Performance Concrete Utilizing Binary and Ternary Blended Binder, **Main Supervisor.**
- MOHAMED OMAR MOHAMED MASHRI, PhD, Geopolymer Mortar, **Main Supervisor.**
- KHATIB ZADA FARHAN, PhD, Sustainable Green Concrete, **Main Supervisor.**
- KAFFAYATULLAH KHAN, PhD, Influence of aging and environmental conditions on strength and shrinkage potential of high strength concrete containing natural pozzolans basaltic volcanic ash; Experiments and prediction models, **Main Supervisor.**
- EZLIANA BINTI GHAZALI, PhD, Development of Controlled Low Strength Concrete by Using Clinical Waste Fly Ash and Other By-Products, **Main Supervisor.**
- ALOTAIBI, KHALAF NASHI O, MSc, Rehabilitation of Concrete Structural Member by Jacketing Technique, **Main Supervisor.**

14. Selected Journal Publications:

- Nasir M., **Megat Johari M.A.**, Maslehuddin M., Yusuf M.O., Al-Harathi M.A., "Influence of heat curing period and temperature on the strength of silico-manganese fume-blast furnace slag-based alkali-activated mortar", *Construction and Building Materials*, Volume 251, 10 August 2020, Article number 118961.
- Bunnori N.M., Alani A.H., Naoman A.T., **Megat Johari M.A.**, Majid T.A., "Relationships between Compressive Strength and Transport Properties of Ultrahigh-Strength Green Concrete Utilizing Ternary-Blended Binder", *Journal of Materials in Civil Engineering*, Volume 32, Issue 3, 1 March 2020, Article number 04020011.
- Shahid K.A., Bunnori N.M., **Megat Johari M.A.**, Hassan M.H., Sani A., "Assessment of corroded reinforced concrete beams: Cyclic load test and acoustic emission techniques", *Construction and Building Materials*, Volume 233, 10 February 2020, Article number 117291.
- Nasir M., **Megat Johari M.A.**, Maslehuddin M., Yusuf M.O., "Sodium sulfate resistance of alkali/slag activated silico-manganese fume-based composites", *Structural Concrete*, Article in press.
- Nasir M., **Megat Johari M.A.**, Maslehuddin M., Yusuf M.O., "Sulfuric acid resistance of alkali/slag activated silico-manganese fume-based mortars", *Structural Concrete*, Article in press.
- Ibrahim M., **Megat Johari M.A.**, Hussaini S.R., Rahman M.K., Maslehuddin M., "Influence of pore structure on the properties of green concrete derived from natural pozzolan and nanosilica", *Journal of Sustainable Cement-Based Materials*, Article in press.
- Hamad R.J.A, Haddad R.H., **Megat Johari M.A.**, "New anchorage system of bars to improve the mechanical performance of post-heated FRP-reinforced concrete beams", *Construction and Building Materials*, Volume 229, 30 December 2019, Article number 117090
- Abo Sabah S.H., Zainal N.L., Muhamad Bunnori N., **Megat Johari M.A.**, Hassan M.A., "Interfacial behavior between normal substrate and green ultra-high-performance fiber-reinforced concrete under elevated temperatures", *Structural Concrete*, Volume 20, Issue 6, 1 December 2019, 1896-1908.
- Hassan M.H., Abo Sabah S.H., Bunnori N.M., **Megat Johari M.A.**, "Fluid transport properties of normal concrete substrate and a new green fiber reinforced concrete overlay composite", *Structural Concrete*, Volume 20, Issue 5, 1 October 2019, 1771-1780.
- Nasir M., **Megat Johari M.A.**, Yusuf M.O., Maslehuddin M., Al-Harathi M.A., Dafalla H., "Impact of Slag Content and Curing Methods on the Strength of Alkaline-Activated Silico-Manganese Fume/Blast Furnace Slag Mortars", *Arabian Journal for Science and Engineering*, Volume 44, Issue 10, 1 October 2019, 8325-8335.
- Abo Sabah S.H., Hassan M.H., Muhamad Bunnori N., **Megat Johari M.A.**, "Bond strength of the interface between normal concrete substrate and GUSMRC repair material overlay", *Construction and Building Materials*, Volume 216, 20 August 2019, 261-271.
- Salami B.A., **Megat Johari M.A.**, Ahmad Z.A., Owolabi T.O., Maslehuddin M., Olantuji S.O., "Modelling the early strength of alkali-activated cement composites containing palm oil fuel ash", *Proceedings of Institution of Civil Engineers: Construction Materials*, Volume 172, Issue 3, 2019, 133-143.



- Zeyad A.M., **Megat Johari M.A.**, Tayeh B.A., Alshaikh I.M., "Influence of palm oil fuel ash on properties of high-strength green concrete", *Scientific Journal of King Faisal University*, Volume 20, Issue 1, 2019, 63-72.
- Mohammed Ibrahim, **Megat Azmi Megat Johari**, Mohammed Maslehuddin, Muhammed Kalimur Rahman, Babatunde Abiodun Salami, Hatim Dafalla Mohamed, "Influence of composition and concentration of alkaline activator on the properties of natural-pozzolan based green concrete", *Construction and Building Materials*, 201 (2019), 186-195.
- Syed Khaja Najamuddin, **Megat Azmi Megat Megat Johari**, Mohammed Maslehuddin, Moruf Olalekan Yusuf, "Synthesis of low temperature cured alkaline activated silicomanganese fume mortar", *Construction and Building Materials*, 200 (2019), 387-397.
- Alani A.H., **Johari M.A.M.**, Aldahdooh M.A.A., Muhamad Bunnori N., "Development of engineering and transport properties of green high strength concrete utilizing ternary blended binders", *European Journal of Environmental and Civil Engineering*, Article in press.
- Elbasir, O.M.M., **Megat Johari, M.A.**, Ahmad, Z.A., "Effect of fineness of palm oil fuel ash on strength and microstructure of alkaline activated mortar", *European Journal of Environmental and Civil Engineering*, Volume 23, Issue 2, 1 February 2019, 136-152.
- Babatunde Abiodun Salami, **Megat Azmi Megat Johari**, Zainal Arifin Ahmad, Mohammed Maslehuddin, Adeshina Adewale Adewumi, "Impact of  $Al(OH)_3$  addition to POFA on the compressive strength of POFA alkali-activated mortar", *Construction and Building Materials*, 190 (2018), 65-82.
- Mohammed Ibrahim, **Megat Azmi Megat Johari**, Muhammed Kalimur Rahman, Mohammed Maslehuddin, Hatim Dafalla Mohamed, "Enhancing the engineering properties and microstructure of room temperature cured alkali activated natural pozzolan based concrete utilizing nanosilica", *Construction and Building Materials*, 189 (2018), 352-365.
- Ibrahim, M., **Johari, M.A.M.**, Maslehuddin, M., Rahman, M.K., "Influence of nanoSiO<sub>2</sub> on the strength and microstructure of natural pozzolan based alkali activated concrete", *Construction and Building Materials*, 173 (2018), 573-585.
- Mohamad Rohaidzat bin Mohamed Rashid, Mustafa Juma A. Mijarsh, Hazman Seli, **Megat Azmi Megat Johari**, Zainal Arifin Ahmad, "Sago pith waste ash as a potential raw material for ceramic and geopolymer fabrication", *Journal of Material Cycles and Waste Management*, 20 (2) (2018), 1090-1098.
- Zeyad, A.M., Tayeh, B.A., Saba, A.M., **Johari, M.A.M.**, "Workability, setting time and strength of high-strength concrete containing high volume of palm oil fuel as", *The Open Civil Engineering Journal*, 12 (2018), 35-46.
- Walid Al-Kutti, Muhammad Nasir, **Megat Azmi Megat Johari**, Saiful Islam A. B. M., Abdullah A. Manda, Nawaf I. Blaisi, "An overview and experimental study on hybrid binders containing date palm ash, fly ash, OPC and activator composites", *Construction and Building Materials*, 159 (2018), 567-577.
- Zaki A., **Johari M.A.M.**, Hussin W.M.A.W., Jusman Y., "Experimental Assessment of Rebar Corrosion in Concrete Slab Using Ground Penetrating Radar (GPR)", *International Journal of Corrosion*, Volume 2018, 2018, Article number 5389829.
- Salami, B.A., **Johari, M.A.M.**, Ahmad, Z.A., Maslehuddin, M. "POFA-engineered alkali-activated cementitious composite performance in acid environment", *Journal of Advanced Concrete Technology*, 15 (2017), 684-699.

- Ibrahim, M., **Megat Johari, M.A.**, Rahman, M.K., Maslehuddin, M., "Effect of Alkaline Activators and Binder Content on the Properties of Natural Pozzolan-Based Alkali Activated Concrete", *Construction and Building Materials*, 147 (2017), 648-660.
- Rami J. Hamad, **Megat Johari, M.A.**, Rami H. Haddad, "Mechanical properties and bond characteristics of different fiber reinforced polymer rebars at elevated temperatures", *Construction and Building Materials*, 142 (2017), 521-535.
- Zeyad, A.M., **Megat Johari, M.A.**, Tayeh B.A., Yusuf, M.O., "Pozzolanic reactivity of ultrafine palm oil fuel ash waste on strength and durability performances of high strength concrete", *Journal of Cleaner Production*, 144 (2017), 511-522.
- Salami B.A., **Megat Johari, M.A.**, Ahmad, Z.A., Maslehuddin, M., "Durability performance of palm oil fuel ash based engineered alkaline activated cementitious composite (POFA-EACC) mortar in sulfate environment", *Construction and Building Materials*, 131 (2017), 229-244.
- Zeyad A.M., **Megat Johari, M.A.**, Tayeh B.A., Yusuf M.O., "Efficiency of treated and untreated palm oil fuel ash as a supplementary binder on engineering and fluid transport properties of high strength concrete", *Construction and Building Materials*, 125 (2016), 1066-1079.
- Aldahdooh M.A.A., Muhamad Bunnori N., **Megat Johari, M.A.**, Jamrah A., Alnuaimi A., "Retrofitting of damaged reinforced concrete beams with a new green cementitious composite material", *Composite Structures*, 142 (2016), 27-34.
- Salami B.A., **Megat Johari, M.A.**, Ahmad, Z.A., Maslehuddin, M., "Impact of added water and superplasticizer on early compressive strength of selected mixtures of palm oil fuel ash-based engineered geopolymer composites", *Construction and Building Materials*, 109 (2016), 198-206.
- Yusuf, M.O., **Megat Johari, M.A.**, Ahmad, Z.A., Maslehuddin, M., "Evaluation of Slag Blended Alkaline Activated Palm Oil Fuel Ash Mortar Exposed to the Sulphuric Acid Environment", *Journal of Materials in Civil Engineering*, Volume 27, Issue 12, 1 December 2015, Article number 04015058.
- Mijarsh, M.J.A., **Megat Johari, M.A.**, Ahmad, Z.A., "Compressive strength of treated palm oil fuel ash based geopolymer mortar containing calcium hydroxide, aluminium hydroxide and silica fume as mineral additives", *Cement and Concrete Composites*, 60 (2015), 65-81.
- Mijarsh, M.J.A., **Megat Johari, M.A.**, Ahmad, Z.A., "Effect of delay time and  $\text{Na}_2\text{SiO}_3$  concentrations on compressive strength development of geopolymer mortar synthesized from TPOFA", *Construction and Building Materials*, 86 (2015), 64-74.
- Yusuf, M.O., **Megat Johari, M.A.**, Ahmad, Z.A., Maslehuddin, M., "Impacts of silica modulus on the early strength of alkaline activated ground slag-ultrafine palm oil fuel ash based concrete", *Materials and Structures*, 48 (2015), 733-741.
- Yusuf, M.O., **Megat Johari, M.A.**, Ahmad, Z.A., Maslehuddin, M., "Shrinkage and strength of alkaline activated ground steel slag-ultrafine palm oil fuel ash pastes and mortars", *Materials and Design*, 63 (2014), 710-718.
- Yusuf, M.O., **Megat Johari, M.A.**, Ahmad, Z.A., Maslehuddin, M., "Influence of curing methods and concentration of NaOH on strength of the synthesized alkaline activated ground slag-ultrafine palm oil fuel ash mortar/concrete", *Construction and Building Materials*; 66 (2014), 541-548.



- Yusuf, M.O., **Megat Johari, M.A.**, Ahmad, Z.A., Maslehuddin, M., "Strength and microstructure of alkali-activated binary blended binder containing palm oil fuel ash and ground blast-furnace slag", *Construction and Building Materials*, 52 (2014), 504-510.
- Mijarsh, M.J.A., **Megat Johari, M.A.**, Ahmad, Z.A., "Synthesis of geopolymer from large amount of palm oil fuel ash – Application of the Taguchi method in investigating the main parameters affecting compressive strength", *Construction and Building Materials*, 52 (2014), 473-481.
- Yusuf, M.O., **Megat Johari, M.A.**, Ahmad, Z.A., Maslehuddin, M., "Effects of H<sub>2</sub>O/Na<sub>2</sub>O molar ratio on the strength of alkaline activated ground blast furnace slag-ultrafine palm oil fuel ash based concrete", *Materials and Design*, 56 (2014), 158-164.
- Yusuf, M.O., **Megat Johari, M.A.**, Ahmad, Z.A., Maslehuddin, M., "Performance of different grades of palm oil fuel ash with ground slag as base materials in the synthesis of alkaline activated mortar", *Journal of Advanced Concrete Technology*, 12 (2014), 378-387.
- Mohammed, A.N., **Megat Johari, M.A.**, Zeyad, A.M., Tayeh, B.A., Yusuf, M.O., "Improving the engineering and fluid transport properties of ultra-high strength concrete utilizing ultrafine palm oil fuel ash", *Journal of Advanced Concrete Technology*, 12 (2014), 127-137.
- Yusuf, M.O., **Megat Johari, M.A.**, Ahmad, Z.A., Maslehuddin, M., "Evolution of alkaline activated ground blast furnace slag-ultrafine palm oil fuel ash-based concrete", *Materials and Design*; 55 (2014), 387-393.
- Yusuf, M.O., **Megat Johari, M.A.**, Ahmad, Z.A., Maslehuddin, M., "Effects of addition of Al(OH)<sub>3</sub> on the strength of alkaline activated ground blast furnace slag-ultrafine palm oil fuel ash (AAGU) based binder", *Construction and Building Materials*, 50 (2014), 361-367.
- Tayeh B.A., Abu Bakar B.H., **Megat Johari M.A.**, Zeyad, A.M., "Microstructural analysis of the adhesion mechanism between old concrete substrate and UHPFC", *Journal of Adhesion Science and Technology*, 28(18) (2014), 1846-1864.
- Aldahdooh, M.A.A., Muhamad Bunnori, N., **Megat Johari, M.A.**, "Influence of palm oil fuel ash on ultimate flexural and uniaxial tensile strength of green ultra-high performance fiber reinforced cementitious composites", *Materials and Design*, 54 (2014), 694-701.
- Altwair, N.M., **Megat Johari, M.A.**, Saiyid Hashim, S.F., "Influence of treated palm oil fuel ash on compressive properties and chloride resistance of engineered cementitious composites", *Materials and Structures*, 47 (2014), 667-682.
- Tayeh B.A., Abu Bakar B.H., **Megat Johari M.A.**, Ratnam, M.M., "Existing concrete textures: their effect on adhesion with fibre concrete overlay", *Proceedings of the ICE – Structures and Buildings*, 167(6) (2014), 355-368.
- Ramadhansyah, P.J., Abu Bakar, B.H., **Megat Johari, M.A.**, Wan Ibrahim, M.H., Hainin, M.R., Jayanti, D.S., "Strength and microstructure analysis of concrete containing rice husk ash under sea water attack by wetting and drying cycles", *Advances in Cement Research*; 26(3) (2014), 145-154.
- **Megat Johari, M.A.**, Altwair, N.M., Saiyid Hashim, S.F., "Fracture and tensile characteristics of engineered cementitious composites containing POFA", *Advances in Cement Research*; 25 (4) (2013), 189-199.
- Aldahdooh, M.A.A., Muhamad Bunnori, N., **Megat Johari, M.A.**, "Development of green ultra high-performance fiber reinforced concrete containing ultrafine palm oil fuel ash", *Construction and Building Materials*, 48 (2013), 379-389.

- Aldahdooh, M.A.A., Muhamad Bunnori, N., **Megat Johari, M.A.**, "Evaluation of ultra-high-performance-fiber reinforced concrete binder content using the response surface method", *Materials and Design*, 52 (2013), 957-965.
- Aldahdooh, M.A.A., Muhamad Bunnori, N., **Megat Johari, M.A.**, "Damage evaluation of reinforced concrete beams with varying thickness using the acoustic emission technique", *Construction and Building Materials*, 44 (2013), 812-821.
- Tayeh B.A., Abu Bakar B.H., **Megat Johari M.A.**, Ratnam, M.M., "The relationship between substrate roughness parameters and bond strength of ultrahigh-performance fiber concrete", *Journal of Adhesion Science and Technology*, 27 (16) (2013), 1790-1810.
- Tayeh B.A., Abu Bakar B.H., **Megat Johari M.A.**, "Characterization of the interfacial bond between old concrete substrate and ultra high-performance fiber concrete repair composite", *Materials and Structures*, 46 (5) (2013): 743-753.
- Altwair, N.M., **Megat Johari, M.A.**, Saiyid Hashim, S.F., "Flexural performance of green engineered cementitious composites containing high volume of palm oil fuel ash", *Construction and Building Materials*, 37 (2012), 518-525.
- Tayeh B.A. Abu Bakar B.H., **Megat Johari M.A.**, Voo, Y.L., "Mechanical and permeability properties of the interface between normal concrete substrate and ultra high-performance fiber concrete overlay", *Construction and Building Materials*, 36 (2012), 538-548.
- Halim A.A., Aziz H.A., **Megat Johari M.A.**, Ariffin K.S., Bashir, M.J.K., "Semi-aerobic landfill leachate treatment using carbon-minerals composite adsorbent", *Environmental Engineering Science*, Vol. 29, 5 (2012), 306-312.
- **Megat Johari, M.A.**, Zeyad, A.M., Muhamad Bunnori, N. and Ariffin, K.S., "Engineering and transport properties of high-strength green concrete containing high volume of ultra-fine palm oil fuel ash", *Construction and Building Materials*, 30 (2012), 281-288.
- Abu Bakar B.H., Ramadhansyah P.J., **Megat Johari M.A.**, "Effect of rice husk ash fineness on the chemical and physical properties of concrete", *Magazine of Concrete Research*, 63, 5, (2011), 313-320.
- **Megat Johari M.A.**, Brooks J.J., Shahid Kabir and Rivard P. "Influence of supplementary cementitious materials on engineering properties of high strength concrete", *Construction and Building Materials*, 25 (2011) 2639-2648.
- Azhar Abdul Halim, Hamidi Abdul Aziz, **Megat Azmi Megat Johari**, Kamar Shah Ariffin, "Comparison study of ammonia and COD adsorption on zeolite, activated carbon and composite materials in landfill leachate treatment", *Desalination*, 262 (2010) 31-35.
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