MOHD AMIRUL BIN MOHD SNIN

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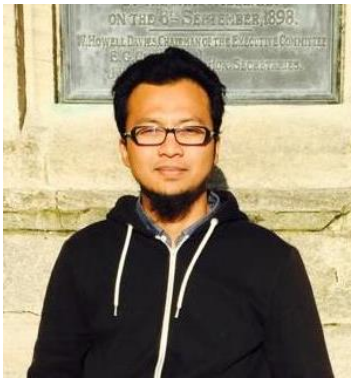

PROFESSIONAL EXPERIENCE

September 2021 – Present: Lecturer – Structural Engineering
Engineering Campus, Universiti Sains Malaysia, Nibong Tebal, Penang.

Role and responsibilities:

- Teaching civil engineering subjects for undergraduate students
- Applying internal/external grants as principal investigators
- To publish ISI journal
- To present the paper at conference proceeding

Skills and experiences:

- Teaching civil engineering materials, structure and civil engineering laboratory, statics and dynamics, Strength of Materials and Structural Analysis subjects for undergraduate students
- Applying the Fundamental Research Grant Scheme (FRGS) (Grant from government) with the research related on the timber-concrete composite structures.
- Submitting ISI paper with the title of “Screw Connection Systems in Timber-Concrete Composite Structures: A Literature Review” in journal *Tehnicki Vjesnik.*
- Submiting ISI indexed paper with the title of “Novel use of scanning methods to investigate the performance of screw connections in timber-concrete composite structures, Advance in Civil Engineering.
- Submitting and presenting the conference paper with the title of “The use of silica fume, coated expanded polystyrene beads and powder free latex glove in fabricating the hollow concrete blocks” and will be presenting it at 7th International Conference On Recent Advances In Materials, Minerals & Environment, 19-20 July 2022, Universiti Sains Malaysia,Penang, Malaysia.
- Supervised three final year students of Bachelor of Civil Engineering to do their thesis in the tittle related to timber-concrete composite structures.
- Supervising four final year students of Bachelor of Civil Engineering to do their thesis in the tittle related to bamboo structures.
- Appointed as committee member in Outcome-based education (OBE) to do the tasks related to the curriculum in civil engineering school.

June 2020 – August 2021: Research Officer – Structural Engineering
Engineering Campus, Universiti Sains Malaysia, Nibong Tebal, Penang.

Role and responsibilities:

- Lead and manage research and development (R&D) projects.
- Communicate regularly with research partners and manage their expectations throughout the project.
- Collect all the experiment data from laboratory works
- Support undergraduate students and research partners in the team.
- Provide analysis expert service to other research partners

Skills and experiences:

- Proposing the two new research projects under Malaysian Timber Industry Board (MTIB) grant. Those two projects are related to the sustainable materials such as timber and bamboo as main structural sources and have been approved by MTIB.
- Publishing one article indexed by Scopus from the project of treated sago waste as replacement materials in fabricating concrete bricks. In this project, I have compared the treated sago waste as replacement in brick fabrication to another alternative wastes proposed by other researchers.
- Provide technical data of bamboo properties and the methodology of the bamboo connections testing.
- Reviewed the background of bamboo as main structural materials in constructions to figure out the current issues in the connection design.
- Reviewed the background of the timber hybrid houses in Malaysia to determine the best IBS system that can be used as new alternative in housing construction in Malaysia.

October 2015 – July 2021: PhD researcher funded by Malaysian Government
Department of Civil Engineering, University of Bristol, UK

Role and responsibilities:

- Carry out research project for developing the new empirical model of the timber to concrete connection design.
- Communicate the work progress and results to supervisor through regular meetings and reports.

Skills and experiences:

- Research methods, including literature review, theoretical hypothesis, testing and validations.
- Fabricating the timber-concrete composite connections in small scale double shear specimens.
- Have experience in setting up the double shear testing of timber-concrete connections using cyclic test by referring to the Eurocode standard.
- Have experience with the 2-dimensional and 3-dimensional scanner machine (FARO Model 1400) to analyze the plastic hinges of the screws after the test of double shear.
- Using the Matlab software to generate the scan imagery from the FARO model machine in 2D and 3D views.
- Expert in using the multiple linear regression to analyze the significant effects of the material properties on the strength and stiffness of the connections in timber-concrete composite structures.

Jan 2010– Jan 2014: MSc researcher funded by Malaysian Government
Department of Civil Engineering, Universiti Putra Malaysia, Serdang, Selangor

Role and responsibilities:

- Carry out research project for bond slip model between concrete to carbon fibre reinforced polymer (CFRP) plates.
- Communicate the work progress and results to supervisor through regular meetings and reports.
- Part-time undergraduate lab tutor in the department for finite element software (LUSAS). This covers assisting student in completing their tasks, and assessment of their work upon completion.

Skills and experiences:

- Research methods, including literature review, theoretical hypothesis, testing and validations.
- Using multiple linear regression to derive the empirical model of shear stress between concrete and CFRP surfaces.
- Finite element analysis (FEA) simulation of the interaction of concrete to CFRP surfaces.
- Design and carry out experiments for theoretical validations.
- Communication of the work and results through journal publications.

EDUCATION AND AFFILIATION

Oct 2015 - July 2021: University of Bristol (UOB)
PhD in Civil Engineering.
Thesis title: Development of the empirical model of shear strength and stiffness of the screw connections in timber-concrete composite structures.
Supervisor: Professor Crewe, A. (Main Supervisor) & Dr. Vardanega, P. (Supervisor)

Sept 2010 – Jan 2014: Universiti Putra Malaysia (UPM)
Master of Science in Structural Engineering. Thesis title: Bond slip model of FRP -to-concrete surfaces
Teaching assistant in LUSAS software for undergraduate students.
Supervisor: Associate Professor Farah Nora Aznieta (Main Supervisor) & Dr. Nor Azizi Safiee (Co-supervisor)

July 2005– Jan 2010: Universiti Teknologi Malaysia (UTM)
Bachelor of Civil Engineering (First class honour). Final year project title: Effects of the compaction of stabilized soil on the permeability.
Supervisor: Associate Professor Kamarudin Ahmad

TRAINING AND COURSES COMPLETED

- Mendeley Course for researchers and students, University of West England, 2018.
- Laboratory training in timber-concrete composite structure, November 2015 in Trento University, Italy.
- Research training course in Universiti Sains Malaysia, 2010

OTHER RELEVANTS SKILLS

- Competent with Microsoft Office package including Microsoft Project.
- Familiar with LUSAS software.
- Have experience with MATLAB and Solidworks.
- Clean full Malaysian driving license. Comfortable travelling for business.

RESEARCH GRANTS

Title: Localized strain measurement on the shear plane of the screw connections in timber-concrete composite structures. Short Term Grant. Year 2022 (Active until Nov 2024).
Principal Investigator: Dr. Mohd Amirul Bin Mohd Snin
Co-researcher : Prof Dr. Megat Azmi Megat Johari
: Dr. Mustafasanie
: Ir. Ts. Dr. Izwan Johari

Title: Manual of Construction of Pre-fabricated Timber Hybrid Houses. External Grant.Year 2021-2022.
Principal Investigator: Ir. Ts. Dr. Izwan Johari
Co-researcher: Dr. Mohd Amirul Bin Mohd Snin

Title: Investigation of Mechanical Properties, Jointing and the Sound Attenuation of the Malaysian Bomboo Species. External Grant. Year 2021-2022
Principal Investigator: Ts. Ir. Dr. Izwan Johari
Co-researcher : Dr. Mohd Amirul Bin Mohd Snin
: Dr. Herni Halim

PUBLICATIONS

M.S. Mohd Amirul, M.R. Raizal Saifulnaz*, N.A. Farah, S. Norazizi, (2014). Bond slip model of FRP-to-concrete surfaces,.*International Journal of Sustainable Materials and Structural Systems (IJSMSS),* **Vol. 1**, No. 4. https://dx.doi.org/10.1504/IJSMSS.2014.068809 **Main Author (Google Scholar)**

Izwan B. Johari*, Md Azlin Md Said, **Mohd Amirul B. Mohd Snin**, Nur Farah Aqilah Bt. Ayob, Nur Syafiqah Bt. Jamaluddin and Mohamad Rohaidzat Bin Mohamed Rashid, (2021). "Effect of Treated Sago Pith Waste Ash and Silica Fume to the Mechanical Properties of Fly Ash-Based Geopolymer Brick" *Key Engineering Materials,* **Vol. 879**, pp 100-114. https://www.scientific.net/KEM.879.100 **Co-Author (SJR Q3) Scopus**

Izwan B. Johari, **Mohd Amirul B. Mohd Snin***, Syahrul Fithry B. Senin and Mohamad Rohaidzat B. Mohamad Rashid, (2023). Connection Systems in Timber-Concrete Composite Structures: A Literature Review, *Tehnicki Vnesnik.* **Vol.30,** No. 4. **Corresponding Author (SJR Q3, JCR Q4 with IF = 0.9) scopus ISI**

Mohd Amirul B. Mohd Snin* and Moustafa Moufid Kassim, (2023). Novel use of scanning methods to investigate the performance of screw connections in timber-concrete composite structures, **Volume 2023**. **Coressponding and Main Author (SJR Q3, JCR Q3 with IF = 1.9) Scopus and ISI**

Mohd Amirul B. Mohd Snin, Izwan B. Johari*, Nuratikah Ahmad Nordin, Noor Nabila Aznan and Nurulfatin Aqilah Mohd Yazid, (2023). The use of silica fume, coated expanded polystyrene beads and powder free latex glove in fabricating the hollow concrete blocks, *Key Engineering Materials. (REVISED).* **Main Author (SJR Q3) Scopus**

CONFERENCE AS PRESENTER

7th International Conference on Recent Advances in Materials, Minerals & Environment.
Title: The use of silica fume, coated expanded polystyrene beads and powder free latex glove in fabricating the hollow concrete blocks.
Date: 19-20th July 2022

INVITED SPEAKER

Luncheon Webinar at themed series April 2022, Megajati Academy.
Theme: Concrete in Buildings Construction.
Title: Timber-concrete composite structures.
Date: 20th April 2022 (11 am – 13.00 pm)

BOOKS

Title: Development of Characteristic Data, Structural Joint And Lapping Strength, And Sound Attenuation Of Malaysian Bamboo Species.
Authors: Ts. Ir. Dr. Izwan Johari, **Dr. Mohd Amirul Bin Mohd Snin** and Dr. Herni Halim
Year: October 2022 **(Completed)**

Title: Manual of Construction of Pre-fabricated Timber Hybrid Houses
Authors: Ir. Ts. Dr. Izwan Johari, **Dr. Mohd Amirul Bin Mohd Snin**, Dr. Herni Halim, Dr. Nik Azimatolakma and Dr. Rosnani Al-Karimiah.
Year: December 2022 **(Completed)**

REVIEWING JOURNAL ARTICLES

Title: Compressive Strength and Water Absorption of Cement-Locust Bean Waste Ash Blend For Latcrete Blocks Production.
Article: Journal of Civil Engineering, Science and Technology
Publisher: Unimas Publisher (2022)

Title: Effect of Hollow Bodies on the Strength and Density of Bubble Concrete
Article: Awam International Conference on Civil Engineering 2022 (AICCE 2022)
Publisher: Lecture Notes in Civil Engineering

Title: Self-Compacting Concrete using Eggshell Ash and Rice Husk Ask as Partial Cement Replacement

Article: Awam International Conference on Civil Engineering 2022 (AICCE 2022)
Publisher: Lecture Notes in Civil Engineering

Reference

1.

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2.

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Surname	Vardanega
Relationship to you	PhD supervisor
Position	Associate Professor
Employers name	University of Bristol
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