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**Biography** 

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Dr. Md. Habibur Rahman Sobuz Associate Professor Research Area Structural and Material Engineering Education

Ph.D. in Structural Engineering

The University of Adelaide, Australia (2012-2016)

Thesis Title: The Manufacture and Compressive Ductility of Ultra-high Performance Fiber Reinforced Concrete M.Sc. in Structural Engineering University Malaysia Sarawak , Malaysia (2009-2011)

Thesis Title: Flexural and Time-dependent Deflection Behavior of Reinforced Concrete Beams Strengthened with CFRP Laminate

### **B.Sc. in Civil Engineering**

Khulna University of Engineering and Technology ,Bangladesh(2002-2006)

Study on Salinity of Brick Manufactured by Conventional Technique and itâ€<sup>™</sup>s Removal Process HSC

- Shahzadpur Govt. College ,Bangladesh(2001)Group: Science, SSC

Shahzadpur Pilot High School ,Bangladesh(1999)Group: Science,

## Service Records

- Structural Design Engineer The Civil and Structures From 01-01-1970 to 01-01-1970
- Working Area: Structural Engineering Structural Design Engineer Tarique Hasan and Associate Limited From 01-01-1970 to 01-01-1970 Working Area:Structural Engineering
- **Research Assistantships** Department/Section: Civil Engineering University Malaysia Sarawak From 01-01-1970 to 01-01-1970 Working Area:Structural Engineering
- **Teaching Assistanship** Department/Section: School of Civil, Environment and Mining Engineering The University of Adelaide From 01-01-1970 to 01-01-1970 Working Area: Civil Engineering
- Research Fellow Department/Section: School of Civil, Environment and Mining Engineering The University of Adelaide From 01-01-1970 to 01-01-1970 Working Area:Structural Engineering
- Assistant Professor Department/Section: Building Engineering and Construction Management Khulna University of Engineering and Technology From 01-01-1970 to 01-01-1970 Working Area:Structural Engineering

## **Research Interest**

#### **Structural and Material Engineering**

- Time dependent behavior of reinforced concrete structures and strengthening with FRP
- Reinforced concrete structures â€" flexural and strength and ductility behavior
- Retrofitting of reinforced concrete using fibre reinforced polymer (FRP) materials
- New generation ultra-high performance fiber reinforced concrete (UHPFRC)
- $\hat{a}$ €¢ Development of ultra-high performance self-consolidating concrete (SCC)
- Concrete sustainability, concrete durability and concrete materials
- Recycling of low cost light weight aggregate concrete

• Sustainable concrete production from waste materials

# Publication

#### Books

1. Ahmed, E. and Zin, H. R. S. a. B. F. (2011) , **Time-Dependent Deflection of Palm Shell Aggregate RC Beams** , ISBN:978-3-8443-9595-2, Lap Lambert Academic Publishing GmbH & Co. KG, Heinrich-BA¶cking-StraAŸe 6, 66121 SaarbrA¾cken, Germany

#### Journals

25. Hasan,M. J. R. M. R., Sobuz,M. H. R. and (2020),V. W. Y. T. )., "Impact assessment of window to wall ratio on energy consumption of an office building of subtropical monsoon climatic country Bangladesh," *International Journal of Construction Management*, Taylor & Francis, Published Online 24 August 2020

24. Rana,M. J., Hasan,M. R., Sobuz,M. H. R. and (2020),N. M. S.)., "Evaluation of passive design strategies to achieve NZEB in the corporate facilities: the context of Bangladeshi subtropical monsoon climate," *International Journal of Building Pathology and Adaptation (In press)*, Emerald Insight, Published Online 11 November 2020

23. Shohana,S. A. and (2020),M. I. H. a. M. H. S. ). , " Experimental investigation on hardened properties of recycled coarse aggregate concrete," *Advances in Concrete Construction*, Techno Press, vol10, no.5, pp.369-379

22. , " Challenges to Implementing Lean Construction in the Construction Industry in Bangladesh," *Smart and Sustainable Built Environment*, Emerald Insight, vol9, no.2, pp.174-207

21. Saha, A. , Sobuz, H. R. , Hoque, M. I. and (2020), a. R. M. ). , " Influence of Waste Glass Aggregates on the Rheological Properties of Self-Compacting Concrete (SCC)," *Australian Journal of Civil Engineering*, Taylor & Francis , vol18, no.2, pp.272-285

20. Hasan, N. M. S., Visintin, P., Oehlers, D. J. and (2019), T. B. a. M. H. R. S. )., "Time dependent deflection of RC beams allowing for partial interaction and non-linear shrinkage," *Materials and Structures*, Springer Link, vol52, no.52

Sobuz,H. R., Visintin,P., Ali,M., Singh,M. and Sheikh,M. G. a. A. H. (2016. (Impact factor = 2.29)), "Manufacturing Ultra-high Performance Concrete Utilising Conventional Materials and Production Methods," *Construction and Building Materials*, Elsevier Ed., vol111, pp.251-261
Hasan,N. M. S., Sayed,M. S. and Ioannou,H. R. S. a. C. (2011), "Effects of Non Sway and Sway Methods for Analysis and Design of RC Frames for Multi-Storied Building," *International Journal of Physical Science*, vol6, no.17, pp.4294–430

17. (2017), " A Sustainable Approach of Demolition, Reconstruction, Reuses and Recycling construction materials in Bangladesh," **BAUET Journal**, Bangladesh Army University of Engineering and Technology, vol01, no.01, pp.83-90

16. Islam,M. S. , Hamdan,S. , Hassan,A. , Talib,Z. A. and Sobuz,H. R. (2014) , " The Chemical Modification of Tropical Wood Polymer Composites," *Journal of Composite Materials*, SAGE Publications and Published on behalf of American Society for Composites, vol48, no.7, pp.783-789

15. Islam, M. S. , Hamdan, S. , Sobuz, H. R. and Ahmed, M. R. R. a. A. S. (2013) , "Thermal and Decay-Resistance Properties of Tropical Wood Plastic Composites," *Journal of Composite Materials*, SAGE Publications and Published on behalf of American Society for Composites, vol47, no.12, pp.1493-1500

14. Sobuz,H. R. ,Hasan,N. M. S. and Islam,N. T. a. M. S. (2014) , " Structural Light-weight Concrete Production by using Oil Palm Shell (OPS)," *Journal of Materials*, Hindawi Publishing Corporation, vol2014, pp.1-6

13. Ahmed, E. and Lee, H. R. S. a. J. B. H. (2010), "Flexural and Cracking Performance of Reinforced Concrete Beams Strengthened with Ferrocement Laminates," **ASEAN Journal on Science Engineering and Technology for Development (AJSTD)**, vol27, no.2, pp.51-60

12. Sutan, N. M. , Hamdan, S. , Sobuz, H. R. and Islam, V. L. a. L. a. M. S. (2011) , " Porosity and Strength of Pozzolan Modified Cement," *Concrete Research Letters*, vol2, no.4, pp.326-335

11. hasan, N. M. S. , Sobuz, H. R. and Islam, M. S. S. a. M. S. (2012) , " The Use of Coconut Fiber in the Production of Structural Lightweight Concrete," *Journal of Applied Sciences*, Science Alert, vol12, no.9, pp.831-839

10. Hasan, N. M. S. , Sobuz, H. R. , Tamanna, N. and Islam, M. S. T. a. M. S. (2014) , " Properties of Concrete by using Bagasse Ash and Recycle Aggregate," *Concrete Research Letters*, vol5, no.2, pp.768-785

9. Hasan, N. M. S., Sobuz, H. R. and Auwalu, N. T. a. A. S. (2015), " Investigation into the Sutability of Kenaf Fiber to Produce Structural Concrete," *Advanced Materials Letters*, VBRI Publishing, vol6, no.8, pp.731-737

7. (2011) , " Immediate and Time-Dependent Behavior of Carbon Fiber Reinforced Polymer (CFRP) Concrete Beams," *Key Engineering Materials*, Trans Tech Publications, vol471-472, pp.73-78

6. (2011) , " Flexural Performance of RC Beams Strengthened with Different Reinforcement Ratios of CFRP Laminates," *Key Engineering Materials*, Trans Tech Publications, vol471-472, pp.79-84

5. Uddin, M. A., Hossain, J., Sobuz, H. R., Hasan, N. M. S. and Ullah, S. I. a. A. (2013), "Experimental Study on Strength Gaining Characteristics of Concrete Using Portland Composite Cement," *Korean Society of Civil Engineering (KSCE)*, Springer, vol17, no.4, pp.789-796

4. Sobuz,H. R., Oehlers,D. J., Visintin,P., Hoque,N. M. S. H. M. I. and Akid,a. A. S. M. (2017), "Flow and Strength Characteristics of Ultra-high Performance Fiber Reinforced Concrete: Influence of Fiber Type and Volume-fraction," *Journal of Civil Engineering and Construction*, Tech Reviews Ltd, vol6, no.1, pp.15-21

3. (2011) , " Flexural and Time-Dependent Performance of Palm Shell Aggregate Concrete Beams," *Korean Society of Civil Engineering (KSCE)*, Springer, vol15, no.5, pp.859-865

2. Sobuz,H. R., Ahmed,E., Sutan,N. M., Hasan,N. M. S. and Uddin,M. A. U. a. M. J. (2012), "Bending and Time-dependent Responses of RC Beams Strengthened with Bonded Carbon Fiber Composite Laminates," *Construction and Building Materials*, Elsevier Ed., volVol. 29, pp.597-611

#### Conference

10. Sobuz,H. R. ,Ahmed,E. and Voon,N. M. S. H. a. L. Y. (13th - 16th June 2010) , "A Comparative Study of Time-Dependent Performance of RC Beams using Oil Palm Shell (OPS) and Normal Weight Aggregates (NWA)," *7th International Materials Technology Conference and Exhibition (IMTCE2010)* 

9. Sobuz, H. R. and Voon, E. A. a. L. Y. (2nd - 5th August 2010), "Performance of Oil Palm Shell (OPS) as a Replacement Coarse Material in the Structural Concrete Production," *Engineering Conference 2010 (EnCon2010)*, University Malaysia Sarawak

8. (1st - 2nd December 2010), "Study on Long-term Deflections of RC Beams Strengthened with CFRP Subjected to Sustained Loading," **4th** International Conference on Built Environment in Developing Countries (ICBEDC 2010), University Sains Malaysia

7. Sobuz,H. R. ,Islam,M. S. and Hasan,M. A. S. a. N. (13th - 16th June 2010) , "Clay Bricks Salinity Removal Process in the Production of Conventional Structural Bricks," **7th International Materials Technology Conference and Exhibition (IMTCE2010)** 

6. Hasan, N. M. S. and Apac, H. R. S. a. G. J. M. (6th – 7th December 2011) , "High Performance Concrete Made with Steel and Polypropylene Fibres Concrete," **5th International Conference on Built Environment in Developing Countries (ICBEDC 2011)**, University Sains Malaysia

5. (14th - 15th April 2010 ), "Time-dependent Deflection and De-bonding Behavior of Reinforced Concrete Beams Strengthening with FRP Laminates," *Engineering Conference 2010 (EnCon 2010)*, University Malaysia Sarawak

4. (2nd - 5th August 2010 ), "An Analytical Investigation on Deflection Performance of RC Beams Strengthened with CFRP Sheets," **World Engineering Congress 2010, Conference on Engineering and Technology Education**, pp.pp. 92-97

3. Ahmed, E. and Voon, H. R. S. a. L. Y. (2nd - 5th August 2010), "Deflection of Oil Palm Shell (OPS) Aggregate Concrete Beams Under Sustained Loading," *World Engineering Congress 2010*, pp.pp.160-165

2. Sobuz,H. R. and Hasan,E. A. a. N. M. S. (21-23 November 2011) , "Effectiveness of CFRP Composites Laminates in Long-term Deformations Performance of RC Beams," *3rd Regional Symposium on Engineering and Technology* 

1. (25-27 July 2011), "Behavior of CFRP Strengthened Creep and Shrinkage Deformations of RC Beams under Sustained Loads," **ASEAN** Australian Engineering Congress (AAEC)