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## Physical and mechanical properties of fibre reinforced concrete

Makhmud Kharun  
RUDN University, Russia

Fibre reinforced concrete has become intriguing nowadays for infrastructural and civil engineering applications, and is being used in the construction of high-rise buildings, bridges, airport runways and highway pavements etc. Some studies of fibre reinforced concrete has shown that the inclusion of some fibres in concrete enhance its compressive strength, some decrease, some improve the flexural properties. A study of the effect of basalt fibers (BF) on the physical and mechanical properties of high-strength concrete (HSC) was carried out. HSC specimens (without BF, and with 1 wt.% chopped BF) with the dimensions of 100x100x100 mm and 100x100x400 mm were produced. The compressive strength, the tensile strength at bending, the strength at axial tension and the cracking moment, at the curing periods of 7, 14, 28, 60 days, have been determined. The results showed that the inclusion of BF in HSC resulted in a decrease in the compressive strength, however, significantly enhanced its tensile behavior.

## Biography

Makhmud Kharun serves as an academician since September 2001. At the past, he served as a Civil Engineer in various construction projects in Singapore and Malaysia. He completed his Master of Science in Civil Engineering in 1992, and received his PhD in 2005 from Peoples' Friendship University of Russia. Construction Materials, Construction Technology, Structural Engineering etc. are the main fields of his research. He has published more than 30 research papers published in peer reviewed international journals. He is reviewer of some renowned Scopus and Web of Science indexed international journals published by Springer, Elsevier etc.

kharun\_m@pfur.ru