

# **SELF-COMPACTING CONCRETE (SCC) OR SELF-LEVELING CONCRETE (SLC)**

By Tarun R. Naik and Rakesh Kumar

Report No. CBU-2001-24

## **ABSTRACT**

Development of self-compacting concrete is a very desirable achievement in the construction industry for overcoming problems associated with cast-in-place concrete. Self-compacting concrete is not affected by the skill of workers, and shape and amount of reinforcing bar arrangement of a structure. Due to high-fluidity and resisting power of segregation of self-compacting concrete, it can be pumped longer distances. Self-compacting concrete extends the possibility of use of various mineral by-products in its manufacturing. All types of structural construction is possible with this concrete. The use of SCC not only shortens the construction period but also ensures quality and durability of concrete. This non-vibrating concrete allows faster placement and less finishing time leading to improved productivity. Until now (2001) date, there is no universally adopted standardized test method for evaluation of self-compactability of this concrete. Currently, the use of self-compacting concrete is being rapidly adopted in many countries. Use of this concrete should overcome concrete placement problems associated with the concrete construction industry. However, there is a need for conducting more R & D work for the measurement and standardization of the methods for the evaluation of the self-compacting characteristics of SCC.