Long-term strengths of concrete with oil palm shell as coarse aggregate Abstract

Concrete using oil palm shell (OPS) as coarse aggregate has been found useful as structural lightweight concrete. Long-term investigation up to 365 days on compressive strength of OPS concrete for different curing environments has been carried out. A comparative study has also been conducted on control concrete using crushed stone as coarse aggregate. In the six types of curing that includes some of the field and laboratory conditions of curing, the compressive strengths of OPS concrete range from 20 to 24 N/mm2 for 28 days; this satisfies the strength requirement of structural lightweight concrete.