
Departmental Seminar

Seminar Title	: Conference Return Seminar: Comprehensive Study on Development of Sustainable Pavement Quality Concrete for Rural Road Utilizing Coal Bottom Ash
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Supervisor	: Dr. M. Gattu
Venue	: Civil Engineering Seminar Hall
Date and Time	: 20 Nov 2024 (4:30 PM)
Abstract	: Pavement quality concrete (PQC) used in concrete pavement needs a large quantity of river sand. The river sand resources are being depleted yearly because of several construction, maintenance and other civil works, including land reclamation in specific areas. Hence, the non-availability of the correct sand quality and its high cost in many locations is a significant concern for construction works involving concrete. This research explores the use of coal bottom ash (CBA) in replacing river sand in PQC. An effort has been made to use CBA as a replacement for natural river sand for the PQC mix of M40 grade in concrete pavement. Five mixes were selected with 0%, 25%, 50%, 75%, and 100% CBA replacement levels and tested for mechanical strength. The results indicated that the mix with 50% CBA met the strength requirements for M40 grade PQC ultimately reducing design thickness and cost of construction of pavement.