

Fly ash, red mud may replace cement: IIT

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Bhubaneswar: An IIT Bhubaneswar research has found that the mixture of red mud and fly ash (both industrial wastes) can replace cement in construction works without compromising on quality.

Director R V Raja Kumar said, This is for the first time that any research has established the productive use of red mud, waste generated from aluminium plants. As far as fly ash bricks are concerned, they are commonly used now. "The institute is in the process of filing a patent for the technology, he added.

Hanumanth Rao, a faculty member involved in the research, said 80% fly ash and 20% red mud can form self-compacting concrete with strength similar to cement. "The findings were results of a Nalco-sponsored research at IITBBS started in 2014," he added.

R K Panda, head of research and development at the institute, said the mix can significantly

reduce construction cost as the two industrial wastes are freely available and industries are facing problems in its disposal.

The IIT director and the faculty members were interacting with media ahead of the institute's fifth annual convocation on Tuesday.

The IITBBS director said the recently launched start-up centre at the institute has invited at least 30 proposals in its first round. The institute will select the innovative ones soon and mentor them. The Toshali plaza premises occupied by IIT's administrative wing will be dedicated to the startup initiative, he said.

Kumar said the institute will soon launch an initiative to ensure that students in all technical institutions here as also some neighbouring states have ideas about how to start a small industry and funding opportunities available with banks and venture capitalists. The institute will confer seven doctorates, 55 MTech, 69 M.Sc and 110 BTech degrees during the convocation on Tuesday.