Now, bricks from waste sand to build homes



Bricks from foundry mould sand waste.

NIIST develops technique to turn waste foundry mould sand into bricks

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Think twice before dismissing something as 'waste'. It could be the building block for something useful.

Tonnes of waste foundry mould sand generated at the State Government undertaking Autokast Ltd will now be turned into bricks for the construction sector, courtesy a technique developed by the Council of Scientific and Industrial Research (CSIR)-National Institute for Interdisciplinary Science and

Technology (NIIST) at Pappanamcode here.

Autokast managing director Prasad Mathew and NIIST director A. Ajayaghosh signed an agreement for transfer of the know-how to Autokast in the presence of Industries Minister P. Rajeeve on Thursday. This ecofriendly technology can benefit housing schemes such as the LIFE Mission.

Cherthala-based Autokast, which manufactures ferrous castings components, generates 600 to 700 tonnes of foundry waste sand every month. Only a fraction of it could be reused, Autokast officials said. The rest would be discarded as waste.

Technique

NIIST developed the technology to make bricks from the silica sand through a simple, cement-bonded compression moulding technique, Dr. S. Ananthakumar, Chief Scientist, Ceramics Activity Materials Science and Technology Division at NIIST,

who headed the project, said. Under the agreement, NIIST will transfer the knowhow to Autokast where both the institutions will set up a brick manufacturing plant, designed to produce 4,000 bricks per day.

The cement bonding and compression moulding technique can produce highstrength bricks that meet the IS 1077 standards, according to NIIST scientists. The proiect was part of the 'Waste to Wealth' research gramme of the CSIR.