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## Recycling of waste refractory bricks for the production of dense refractory

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The maintenance of cement ovens induces a waste discarded refractory bricks, recycling of this waste in the refractory industry may be a solution for the refractory market. In this experimental investigation, we present a study of dense refractory bricks elaborated based on waste refractory brick and kaolin at different ratio kaolin/waste refractory brick. The bricks elaborated with pressing were sintered at different temperatures ranging from 1100 up to 1400°C. The calcined samples have undergone a series of physical, mechanical and micro structural tests. The results show that the sample with a ratio of 50% kaolin and 50% waste refractory brick fries at 1400°C have the best mechanical and mineralogical performances.

### Biography

Bahia Rabehi is a lecturer at the materials engineering department, faculty of engineering science at Boumerdes University. The PHD obtained in 2013 at Boumerdes University/Algeria. Dr. Rabehi is a team member of research; Materials Ceramics and Refractories at research unit; materials, processes and environment. Dr. Rabehi has the scientific interests: ceramic and refractory materials, Wastes recycling in ceramics and concrete materials.

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