

Session Title:

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Abstract title: DAC by Calcium Carbonate Concrete as White Carbon

Abstract text (within 100 words):

Concrete is an indispensable construction material for social capital development and the second largest consumed substance on earth after water. Production of cement which is a main raw material for concrete accounts for 8% of global CO₂ emission. Ca in concrete is a potential unused resource capable of capturing CO₂ with low energy. Calcium carbonate concrete (CCC), which is made of demolished concrete waste and CO₂ in the air, is being developed. At present, it is revealed that CCC has a necessary strength, can be carbon negative and recycled many times with low energy as an ideal construction material.