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Fast neutron radiography observation of water absorption through porous media

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Abstract content (Max 300 words)
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Water concentration in porous media is an important aspect toward inferring the structural integrity of the building framework. A need exists to determine the water content of samples in order to infer the structural integrity of the time. A developmental approach was conducted at the PTB cyclotron making use of a 6.6 MeV fast neutron beam and fast neutron radiography system to follow the uptake of water through porous media. The observed benefit of fast neutrons as compared to the thermal neutron complement, is the ability to evaluate thicker samples. From the resulting images, the volume of water absorbed as well as the rate of absorption can be inferred, which will be presented here.

Apply to be considered for a student award (Yes / No)?

Yes

Level for award (Hons, MSc, PhD, N/A)?

PhD

Main supervisor (name and email) and his / her institution

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Would you like to submit a short paper for the Conference Proceedings (Yes / No)?

Yes

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