

## Accepted Manuscript

Simulating the mobility of micro-plastics and other fiber-like objects in saturated porous media using constrained random walks

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PII: S0309-1708(18)30198-2  
DOI: <https://doi.org/10.1016/j.advwatres.2018.08.011>  
Reference: ADWR 3184



To appear in: *Advances in Water Resources*

Received date: 5 March 2018  
Revised date: 17 August 2018  
Accepted date: 20 August 2018

Please cite this article as: Nicholas B. Engdahl, Simulating the mobility of micro-plastics and other fiber-like objects in saturated porous media using constrained random walks, *Advances in Water Resources* (2018), doi: <https://doi.org/10.1016/j.advwatres.2018.08.011>

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## 1 Highlights

- 2 • A method for simulating the transport of large fiber-like colloids in  
3 porous media is presented.
- 4 • The approach uses a bead-rod-chain to discretize a fiber and explicitly  
5 model its motion, while keeping the length of each fiber constant.
- 6 • The length of the fiber relative to the mean pore-opening is shown to  
7 be a control on fiber retardation relative to passive solutes.

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