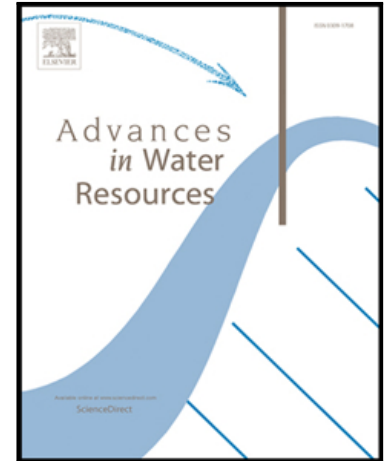


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Visualization of gas dissolution following upward gas migration in porous media: technique and implications for stray gas

Cole J.C. Van De Ven , Kevin G. Mumford

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Highlights

- CO₂ gas injected into an initially water-saturated sand-packed laboratory flow cell
- Light transmission visualization of dissolved gas using resazurin and hue
- Upward gas migration controlled by gravity and capillary forces
- Local gas trapping affected dissolved gas plume shape and longevity
- Gas dissolution influenced by heterogeneity and multicomponent mass transfer

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