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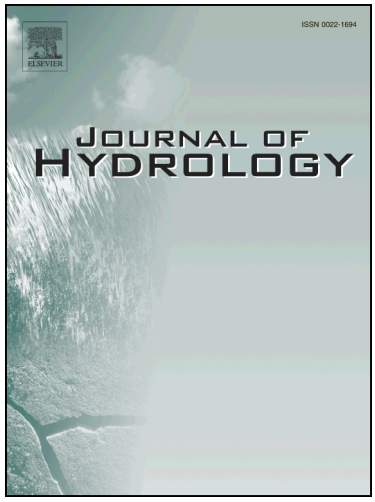

Research papers

A new simplified method for measuring the permeability characteristics of highly porous media

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A new simplified method for measuring the permeability characteristics of highly porous media

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Nomenclatures

Symbols	
ρ	Density, (kg/m^3)
A	Cross-sectional area, (m^2)
D	Diameter, (m)
u	Velocity, (m/s)
K	Permeability, (m^2)
B	Inertial resistance factor (m^{-1})
p	Pressure, (Pa)
κ	Pressure loss coefficient, (-)
κ_s	Pressure loss due to square reduction in circular pipe, (-)
h	Head difference in the Venturi tube, (m)
H	Head difference in the tilted tube, (m)
H'	Water head reading from the slant graduated glass tube, (m)
Re	Reynolds number, (-)
μ	Dynamics viscosity, (Pa·s)
g	The acceleration due to gravity, (m/s^2)
p_0	Atmospheric air pressure,(pa)
C	The longitudinal friction loss coefficient in the Venturi tube, (-)
θ	The tilt angle of the slant graduated glass tube, (rad)
Subscripts	
n	The narrow section of the Venturi tube
e	The expanding section of the Venturi tube
t	The top of the upside down truncated cone
b	The bottom of the upside down truncated cone
f	Friction coefficient
l	Liquid
g	Gaseous
50	50% percentage passing
w	Water

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