



Soviet-era science, translated into English

CORRECTION

Formula (9) should read:

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Source: Math-Net.Ru and CyberLeninka. Machine translation. Verify with the original.

Abstract

Full Text

CORRECTION

In my article published in *DAN*, vol. 102, No. 6, 1955 (F. I. Frankl, “An attempt at a semi-empirical theory of the motion of suspended sediments in a nonuniform flow”), the following corrections must be made.

Formula (9) should read:

$$R_y - \frac{d\Pi_{\psi ys}}{dy} = s(\rho_s - \rho)g.$$

The misprint made by the author does not affect the subsequent text or formulas.

Formula (12a) should read:

$$R_i = -\frac{9}{2} \cdot \frac{s\mu}{r^2} (u_{is} - u_i - v_{id}).$$

The concluding phrase on p. 1096 should read: “Since for fine sediments and small turbidities $\Pi_{\psi ys} \approx s \frac{\rho_s}{\rho} \Pi_{xy}$, and $\frac{1}{s} \frac{ds}{dy}$ is a small quantity, R_x is of order $si(\rho_s - \rho)g$. Consequently, $R_x : R_y \approx i$, whence, according to (12a), $(u_x - u_{xs}) : w \approx i$. Therefore the lag of the longitudinal motion of the particles behind the fluid is small in comparison with the settling velocity of the particle, i.e., close to zero, in agreement with experiment.”

F. Frankl

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Note: Figure translations are in progress. See original paper for figures.

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