LETTERS TO THE EDITOR

CORRECTIONS TO THE ARTICLE "SPREADING OF A LAYER OF NON-NEWTONIAN LIQUID UPON IMPACT" OF A. V. DUBOVIK AND V. K. BOBOLEV*

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The authors made a mistake at the end of the indicated report. The integral (2.7) should be written as follows:

$$\Theta = -\frac{(2n+1)(n+3)}{2n} \cdot \frac{p_x}{\rho c_p R^{n+1}} \int_{\delta_0}^{\delta} \frac{r^{n+1}}{\delta} \left(1 - \frac{2z}{\delta}\right)^{\frac{n+1}{n}} d\delta.$$

The dependence (2.9) cannot be expressed in elementary functions for an arbitrary n. The values of Θ/Θ_m were calculated on a computer with the value $\ln \beta = 2$. The dependence of the Θ/Θ_m curves is interpolated by the function $(1-\eta)^{(n+1)/n}$. Equation (2.10) has the form

$$T/T_m \approx (\Theta/\Theta_m)^{1/(\nu+1)} = (1-\eta)^{(n+1)/n(\nu+1)}.$$

The temperature curves 9/9m and T/T_m (with $\nu=3$) presented in our report in Figs. 2 and 3 are shown here in corrected form in Figs. 1 and 2, respectively. The conclusions of the report remain unchanged.

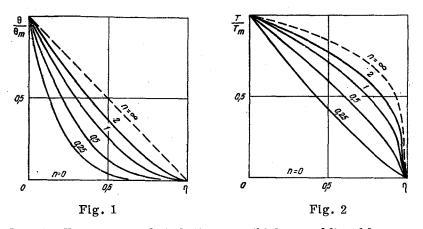


Fig. 1. Temperature distribution over thickness of liquid layer.

Fig. 2. Temperature distribution over thickness of layer with allowance for the temperature dependence of the viscosity.

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