slightly in this zone; the changes in the temperatures of the phases may be substantial within the zone. Thus, it is incorrect to attempt to find a solution by linearizing the initial system of differential equations in the neighborhood of the final state. This approach can lead to errors which cannot be predicted. One consequence of this in particular might be inadequancy of the regions of existence of the solution in [1, 6]. This could in fact explain the differences seen in calculations of the rate of propagation of combustion in the hexane—oxygen system. The reliability of the analysis in [1] was proven in [3] by wave structure calculations performed on a computer.

In conclusion, we note that the assertion made in [6] regarding the error of the analysis of wave stability supposedly performed in [1, 2] is also untenable. In fact, the problem of the stability of nucleate combustion was never rigorously addressed in [1, 2]. The authors of the latter studies qualitatively analyzed only steady-state solutions, and they reserved the term "unstable" for one of the solutions that did not make sense physically. In later publications on the same subject (such as [8]), this term was generally avoided.

There was also no error in the heat-conduction equation for the liquid in [2]. In accordance with the notation adopted in [2], in the conductive term of this equation we introduced the effective thermal conductivity of the liquid phase λ. This quantity is related to the physical value of this parameter λ^0 by the obvious equality $\lambda = (1 - \varphi)\lambda^0$, where φ is the volume content of the gas phase.

LITERATURE CITED

1. G. S. Sukhov and L. P. Yarin, "Combustion waves in bubbly media," Dokl. Akad. Nauk SSSR, 256, No. 2 (1981).
2. G. S. Sukhov and L. P. Yarin, "Laws of combustion of bubbly media," Fiz. Goreniya Vzryva, No. 3 (1981).
3. V. N. Likhachev, G. S. Sukhov, and L. P. Yarin, "Certain laws governing combustion waves in bubbly media," in: Chemical Physics of Combustion and Explosion Processes. Combustion of Condensed Systems [in Russian], Chernogolovka (1986).
4. P. L. Gusika, "Theory of preparation of a polymerization front in a suspension," Khim. Fiz., No. 2 (1982).
5. P. L. Gusika, "Existence and uniqueness of the steady-state solution of a problem on the propagation of an exothermic wave in a two-phase medium," Fiz. Goreniya Vzryva, No. 6 (1982).
6. G. V. Zhizhin, "Self-similar preparation of chemical reactions in disperse media," Prikl. Mekh. Tekh. Fiz., No. 6 (1988).
7. Ya. B. Zel'dovich, G. T. Barenblatt, V. B. Librovich, and G. M. Makhviladze, Mathematical Theory of Combustion and Explosion, Nauka, Moscow (1980).
8. L. P. Yarin and G. S. Sukhov, Principles of a Theory of Combustion in Two-Phase Media [in Russian], Énergoatomizdat, Leningrad (1987).

ERRATUM

In the article "Shock Wave Front from an Underground Explosion," published in Vol. 32, No. 6, November-December, 1991, on p. 843, the first part of Eq. (2.1) should read:

$$\int_{r_3}^{R} \rho r^2\, dr = \frac{\rho_0\left(R^3 - a_3^3\right)}{3k}, \qquad (2.1)$$

On p. 846, the y axis of Fig. 6 should read p_2, GPa.