

Clearly, higher water temperatures seem to lead to a more forceful explosion, and we plan to study this effect in more detail. Finally, extrapolation of the line for a water temperature of 21°C to a peak pressure of zero gauge pressure indicates that a minimum velocity of about 5 m/s is required to be successful in attaining vapor explosions. Higher inception velocities would be expected as the water temperature increases. These values are, however, not general and are certainly related to the specific geometry and impacting technique employed.

Our "map" showing explosive regions (including impact experiments) for the ethane-propane-n-butane ternary is shown in Figure 17 for 298 K water. A similar plot, showing the theoretical limits for the methane-ethane-propane system is shown in Figure 18.

In Part 3, we discuss other types of vapor explosions and summarize theories (other than superheated liquids) that have been proposed to explain their occurrence. □

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ChE letters

BOOK AUTHOR RESPONDS TO REVIEWER'S CRITICISMS

Sir:

I very much appreciated the detailed review of my book "Biomedical Engineering Principles" by Professor E. F. Leonard in the Spring 1978 issue. I would like to point out, however, that I was every bit as disturbed as Professor Leonard that the reproduction was by photo-offset means and that the list price was set so high (\$36.50). About the style of reproduction there was really no choice—it was a simple matter of being published in that form or not being published at all. Regarding the price, I am happy to report that my own displeasure encouraged the publisher to reduce the "classroom adoption price" (5 or more copies) to \$19.75.

Finally, I agree with Professor Leonard that the biomedical engineering field seems to lack a clear direction and sense of purpose. It is thus not surprising that the book reflects this to some degree. I struggled internally while writing the book to define a clear direction, and still continue to do so as I teach in the biomedical area. Unfortunately, in the continued absence of any significant job market in biomedical engineering, I (and I would guess most everyone else) remain at least a little unsure as to what the proper pedagogical approach should be.

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