$C / B=0.438$
By calculation,

$$
\begin{aligned}
\frac{C}{B} & =1-\left\{1-\frac{9.98 \cdot 2}{\pi 10\left(2 \cdot 5^{2}+5^{2}\right)}\right\}^{\frac{1}{2}} \\
& =1-\left(1-\frac{9}{10}\right)^{\frac{1}{4}} \\
& =1-0.5624=0.4376
\end{aligned}
$$

With three linear measurements and a simple volume calculation, the chart should provide a fair approximation to the concentration-gradient curve required.

Eqn. 1, used above for cylinders, shows that $C / B$ varies with the height of the instantaneous liquid level to the height of the initial level. Cylinders had been considered; but clearly this is applicable to right prisms, hence widening the combinations of vessels that could be utilised, e.g. cuboid to cuboid, triangular prism to rectangular tank etc. In this event $a^{2}$ would be the sectional area of the second vessel and $b^{2}$ the sectional area of the first vessel.

Acknowledgment-The chart was produced by the programming services on the ICL 1903A installation at the Polytechnic, Wolverhampton.

## References

Alm, R. S., Tiselius, A. and Williams, R. J. P. (1952)
Gradient elution analysis. Acta Chem. Scand. 6, 826.

Baker, R. G., Ellis, D. A., Hawley, F. J., Taylor, S. N. and Vokes, B. J. (1969) A concentration gradient problem. Math. Gaz. 53 (386), 382.
Brown, E. G. (1962) The acid soluble nucleotides of mature pea seeds. Biochem. J. 85, 633.
Hurlbert, R. B., Schmitz, H., Brumm, A. F. and Potter, V. R. (1954) Nucleotide metabolism II chromatographic separation of acid-soluble nucleotides. J. Biol. Chem. 209, 23.
Wren, J. J. (1963) A simple general method for gradient elution using eluents of unequal density. J. Chromatography 12, 32.
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## Erratum

Toll, M. O. (1972) An isolated transient-free solidstate a.c. power switch. Med. \& Biol. Engng. 10, 532-535.

In the above paper, Fig. 2 should have appeared as shown here.

Fig. 2 Typical response of a.c. power switch as related to an input trigger pulse. Horizontal scale is $20 \mathrm{~ms} /$ division
(a) input-trigger pulse (10 V/division)
(b) triac voltage (200 V/division)
(c) load voltage (200 V/division)


