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$$N_{Fr} = \frac{V^2}{g m} \quad (6)$$

Equations for the viscous flow of liquid films down a vertical plate have been established by Nusselt (20). Using his expressions for the mean velocity of the film, V , and the average film thickness, m , one obtains

$$N_{Fr} = \frac{\rho^2 g m^3}{9 \mu^2} = \frac{1}{3} \frac{Q}{\nu} \quad (7)$$

There are two definitions of Reynolds number in common use:

$$N_{Re}' = \frac{Q}{\nu} \quad (8a)$$

and

$$N_{Re} = \frac{4Q}{\nu} \quad (8b)$$

When Equations (7) and (8b) are combined, the Reynolds number may be expressed in terms of the Froude number as

$$N_{Re} = 12 N_{Fr} \quad (9)$$

The above expression gives a very simple relationship between the Reynolds and Froude numbers. It has been derived by combining Equations (7) and (8b) and is therefore valid when these expressions are applicable. Equations (7) and (8b) are applicable when the flow is laminar.

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of solids-ductility, flexibility, strength, stress-strain relationships, and related subjects. Chapter 6 treats the various magnetic properties which are exhibited by materials at low temperatures. Chapter 7 is concerned with thermal and transport properties, such as, heat capacity, coefficient of expansion, and thermal and electrical conductivity. Chapter 8 deals with superconductivity, first describing the phenomenon and then presenting the BCS (after authors Bardun, Cooper, and Schrieffer) theory, which appears to offer the best explanation of this amazing phenomenon. The final chapter considers briefly some of the practical applications of cryogenics. The applications discussed cover the fields of rocketry, the life sciences, the use of bubble chambers in high-energy particle physics, the production of high-strength magnetic fields, and the use of low temperatures in infrared detectors, masers, lasers, and cryotrons.

The book is well written, authoritative, and readable and might be recommended to anyone interested in gaining a broad, descriptive picture of the field of cryogenics as it exists today.

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ERRATA

In Equation (14) of the article, "The Application of Boundary-Layer Theory to Power-Law Pseudoplastic Fluids: Similar Solutions" by W. R. Schowalter, which appeared on page 24 of the March, 1960, issue of the *A.I.Ch.E. Journal*, the second term should read

$$\frac{g^{n+1} W^0}{(U^0)^n} \frac{\partial U^0}{\partial z^0} [F' G' - 1]$$

The subsequent analysis for three-dimensional boundary layers which possess similar solutions is affected. One is led to the conclusion that if W^0 and U^0 are proportional, similar solutions are possible for those classes of potential flows which yield similar solutions in two-dimensional flow.

The author is grateful to Professor J. N. Kapur, who brought this error to his attention.

The article, "Behavior of Non-Newtonian Fluids in the Inlet Region of a Channel" by Morton Collins and W. R. Schowalter, which appeared on page 98 of the January, 1963, issue of the *A.I.Ch.E. Journal* contains an error on page 102. The eleventh line of the first column of that page should read, "found to be 0.069 and 0.68"