

The author also clarifies the difference between the often confused quantities of pseudomomentum, Stokes drift, and the "bolus velocity" caused by a correlation between fluid density and wave orbital motion. For some waves (acoustic waves, for instance), all three quantities are indeed the same, but for many other waves, they are not; internal waves, for example, have pseudomomentum but no Stokes drift.

Waves and Mean Flows suffers slightly from a few typos and at least one case of an equation out of order: Equation 10.88 is referred to in the derivation of equation 10.69. However, those minor defects are not important and do not weaken the book's reader-friendly yet rigorous style. A class instructor, however, should be careful to augment the reference lists given at the end of each chapter, which seem rather focused on the cadre of Cambridge scientists. In particular, no reference is made to Alex Craik and Sidney Leibovich's foundational work in deriving what's commonly called the CL vortex force, which is due to the interaction of surface waves and currents; Leibovich's 1980 paper in the *Journal of Fluid Mechanics* even uses GLM! Although instructors and researchers alike should be aware of such omis-

sions, Bühler's book still performs admirably as a self-contained reference.

For anyone wishing to work seriously with the GLM approach, *Waves and Mean Flows* is indispensable.

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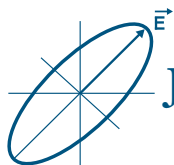
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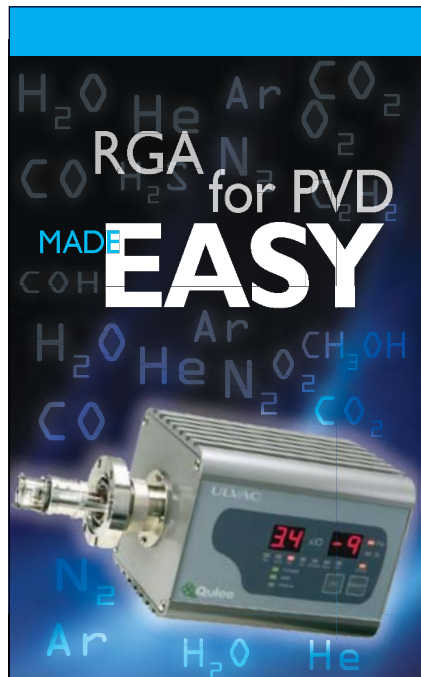
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