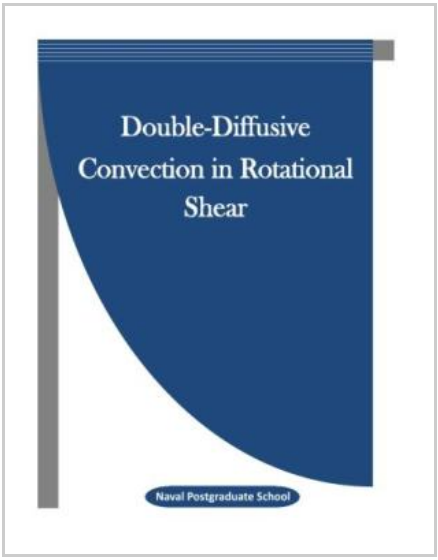

Double-Diffusive Convection in Rotational Shear (Paperback)

By Naval Postgraduate School

Createspace Independent Publishing Platform, United States, 2016. Paperback. Book Condition: New. 279 x 216 mm. Language: English . Brand New Book ***** Print on Demand *****.This book examined the effect a variety of induced velocity shears had on salt finger formation. Two harmonic, single frequency velocity profiles were utilized under varied shear strength and angular frequency. The third multi-frequency experiment employed a stochastic shear wave field. This model used frequencies that conformed to the GM spectral model for internal waves with an initial random phase distribution, modeling an environment representative of typical oceanic conditions. These shear profiles were incorporated in a double diffusion numerical model. The model resolved the formation and development of salt fingers and recorded the resultant salt and heat fluxes. The results showed that shear strength and direction influenced salt finger diffusion rates and structure alignment. For a stochastic environment, this effect is driven largely by near-inertial motions. The low-frequency waves align salt fingers, and the wax and wane of these waves impact the instantaneous diffusive rates. These internal waves reduced the salt and heat flux to that representative for un-sheared two-dimensional double diffusion simulation.

Reviews

It in a of the best publication. It really is rally intriguing throgh reading through period of time. You will not feel monotony at anytime of your own time (that's what catalogs are for relating to in the event you request me).

-- ***Dr. Pat Hegmann***

It in one of my favorite publication. It is among the most awesome publication i have go through. I am just quickly will get a delight of reading through a published publication.

-- ***Prof. Martin Zboncak DVM***