

Krill, jellyfish, play big roles in ocean mixing

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Krill

Israeli researchers have demonstrated that krill and jellyfish, as tiny as they may be, play a big role in ocean mixing.

Professors Alexander Leshansky and Leonid Pismen of the Faculty of Chemical Engineering have demonstrated that the currents caused by the swimming of these small fish contribute substantially to the mixing process, which is important for distributing heat, [nutrients](#) and gases throughout the ocean.

Their work furthered the research of California Institute of Technology professors who surprised oceanographers by declaring that [sea creatures](#) were important in churning the ocean's waters, and positing that small krill and copepods - migrating up from the ocean's depths, actually drag more water with them than do larger marine animals.

Profs. Leshansky and Pismen verified their predecessors' hypothesis by examining the hydrodynamics of currents created by creatures moving on their own versus those that are passively carried. "The large number of floating swimmers compensates for their tiny size," said Prof. Leshansky.

More information: The Technion research was highlighted in the November 10, 2010 issue of *Nature Physics*.

Provided by American Technion Society

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