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## physical oceanography

# POSTDOC OPPORTUNITIES

**mixed layers | submesoscale | internal waves | turbulence**

Four postdoctoral researcher opportunities to participate in analysis and interpretation of several data sets are available with the Applied Physics Laboratory at the University of Washington in Seattle. At least two years of funding is available for each of these positions.

**Horizontal restratification of the surface mixed layer.** Data were collected at 3 sites in the North Pacific Subtropical Front during March 2017 using O(1 km) arrays of chi-augmented EM-APEX profiling floats collecting repeated profiles of temperature, salinity, horizontal velocity and temperature microstructure, larger-scale repeated shipboard tow-yo and ADCP surveys and an air–sea flux buoy. Each site was sampled continuously for roughly one week. Results of this project aim to improve modeling of air–sea fluxes in coupled climate models.
*Scientists include James Girton (girton@apl.uw.edu) and John Mickett (mickett@uw.edu).*

**Storm-forced inertial waves and turbulent mixing** in forcing regions in the western North Pacific. Measurements were taken with EM-APEX floats during the 2016 and 2017 fall and winter storm seasons. These measurements are aimed at quantifying the dissipation of near-inertial waves at the near-field.
*A participating scientist is Ren-Chieh Lien (lien@apl.uw.edu).*

**Instabilities, internal waves, mixing and entrainment** at the base of the mixed layer near Ocean Station P in the Northeast Pacific. Two neutrally buoyant Lagrangian floats will be placed within the entrainment zone and measure shear and stratification on scales of cm's to many 10's of meters during the fall 2018 entrainment season. Results will be compared with LES model results with the aim of understanding the processes of entrainment. There will be opportunities for seagoing work. *Scientists include Eric D'Asaro (dasaro@apl.uw.edu), Andrey Shcherbina (ashcherbina@apl.uw.edu) and Ramsey Harcourt (harcourt@apl.uw.edu). See https://tinyurl.com/TLpostdoc*

**The horizontal wavenumber spectrum of water-mass tracers on isopycnals.** Submesoscale shipboard CTD chain and ADCP surveys to determine controlling dynamics will be conducted during July 2018. These measurements will also be used to test a recent spectral model for anisotropic stratified turbulence.
*A participating scientist is Ren-Chieh Lien (lien@apl.uw.edu).*

Interested qualified candidates are encouraged to contact any of the relevant scientists with questions, CVs, published and submitted articles, and references.

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