Dean’s Faculty Meeting 5/7/13
providing science, technology and education to advance understanding of the ocean, Earth and planets...

... and
- solve energy and resource issues
- forecast our changing climate
- build and launch small satellites
- provide beach safety and vog alerts
- employ and train a high-tech workforce
- track sea level rise and coastal erosion
- preserve fisheries and coral reefs
- determine impacts of ocean acidification
The worlds TOP25 institutions in geoscience field

Number of papers published in geoscience field.
Web of Science, Summary of 2006 to 2011

JAMSTEC ranks in 20th place (2,351 articles)
SOEST Faculty Recognition

- David Karl
  National Academy of Sciences
  Alexander Agassiz Medal

- Paul Wessel
  Fellow of the AGU

- Jennifer Small Griswold
  NSF CAREER Award

- Bin Wang
  BoR Excellence in Research Award
inaugural

Denise B. Evans Fellowships in Oceanographic Research: Shimi Rii & Alice Colman
2013 Promotion & Tenure
- positive TPRC recommendations

G&G: Julia Hammer I5
OCE: Glenn Carter I4 & T
      Brian Powell I4 & T
      Niklas Schneider I5
HNEI: Jian Yu R5
HIMB: Megan Donahue R4 & T
      Robert Toonen R5
      Marc Lammers R4
HIGP: Kazu Nagashima S5
SeaGrant: Dolan Eversole A4
         Elizabeth Maynard A4
UH Sea Grant Leads the University of Hawai‘i at Mānoa in Coastal Sustainability

Seven New Talented Faculty Join UH Sea Grant through a Strategic Hiring Initiative

Rosie Alegado
Assistant Professor, Department of Oceanography & Center for Microbial Oceanography: Research and Education

Oceana Francis
Assistant Professor, Department of Civil and Environmental Engineering

Craig Nelson
Assistant Professor, Department of Oceanography & Center for Microbial Oceanography: Research and Education

Michael Roberts
Associate Professor, Department of Economics

Daniele Spirandelli
Assistant Professor, Coastal Policy and Community Development, Department of Urban Regional Planning

Mehana Vaughan
Assistant Professor, Sustainable Watershed and Coastal Management, Department of Natural Resources and Environmental Management

Wendy Meguro
School of Architecture
Comings and Goings

New tenure track faculty this year, and coming next year:

Leon Roose (HNEI)
Jennifer Small (MET)
Michael Bell (MET)
Anna Neuheimer (OCE)

Rosie Alegado
Craig Nelson
Ed DeLong
& offers made to 4 more
Emeritus

Roger Lukas (OCE)
Tony Clarke (OCE)
Klaus Keil (HIGP)

New SOEST Young Investigators:
Hollie Putnam (HIMB)
Brendan Hermalyn (HIGP)

Assistant Dean & Director, Strategic Initiatives & External Relations
Chris Ostrander
In Memoriam

- John Mahoney
- Klaus Wyrtki
- David Meunow
- Marlin Atkinson
Hawaii Space Flight Lab
ORS-4 launch: end Sept. 2013

- PMRF Mission Control
- 180kg to 400km Sun-synchronous orbit
- KestrelEye
- HiakaSat
- CubeSat
- Kokole Point Pad Work: 21 March 2013
- Rail-launched, 3-stage solid propellant motor stack
- Aerojet Motor Test: 14 August 2012

Luke Flynn
Drill two holes, 6000-6500 feet deep, to assess the groundwater resources available in the saddle region between Mauna Loa, Mauna Kea, and Hualalai.

Describe & archive the core for future scientific analyses.
Battery Energy Storage for Generation Smoothing & Frequency Regulation

Rick Rocheleau & Larry Cutshaw

• Testing and evaluation of emerging battery technologies (integrated testing from laboratory to field)

• Analyze impacts of battery deployment on grid performance
  
  • Wind smoothing on HELCO grid
  • Frequency regulation on HELCO grid
  • Solar smoothing
  • Voltage/VAR support on distribution line with high penetration PV
  • Smart Grid applications

1 MW / 250 kWh fast response
Lithium ion Titanate battery
2013 SOEST Dean’s Award for Research that Matters in service of the Community

Rhett Butler, Kwok Fai Chun, & Yoshiki Yamazaki, Tsunami studies
2013 SOEST Dean’s Award for Research that Matters in service of the Community

Steve Businger, Keith Horton, Tiziana Cherubini, VOG measurement and prediction
2013 SOEST Dean’s Award for Research that Matters in service of the Community

Nikolai Maximenko, Jan Hafner, & Gisela Speidel

Marine Debris

Source: Maximenko, Hafner IPRC/SOEST U. of Hawaii
2013 SOEST Dean’s Award for Research that Matters in service of the Community

Chip Fletcher, Matt Barbee, Coastal Inundation
2013 SOEST Dean’s Award for Research that Matters in service of the Community

Greta Aeby
Coral disease & resilience
2013 SOEST Dean’s Award for Innovation

Anupam Misra
Raman spectroscopy
Laser-induced breakdown spectroscopy
Fluorescence spectroscopy

Remote Raman+LIBS System (532 nm)
UHMC move:
Ships to pier 35
Boats to METC
summer 2014

$2.2 M 6km ROV

Coconut Island renovations

SOEST-CNS joint graduate degree program in Marine Biology
SOEST 25th Anniversary

Oceanography 50th Anniversary