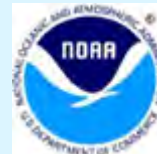




University-National Oceanographic
Laboratory System
~UNOLS~
**Deep Submergence Science
Committee Meeting
(DeSSC)**
December 11, 2016

**New User Program Presentations
Part II**



Enrique Arce

M.S. Candidate of The University of Texas at Austin

- I have a B.E. in Geophysics from National Autonomous University of Mexico.
- I am working with the Gulf Basin Depositional Synthesis (GBDS) Project on the southwestern Gulf of Mexico Neogene depositional systems. I am using recently reprocessed seismic data and other available geological and geophysical information to evaluate the extent of deep water deposits.
- I made my bachelor's thesis about the geomorphology of the Petacalco Canyon in the Mexico's Pacific Ocean. For that project I also acquired the data aboard R/V El Puma.
- I participated in the AAPG IBA 2014 and won the first place of Latin America.
- I participated in the SEG Challenge Bowl 2013 and won the second place in the finals.
- After finishing in spring, 2017. I am still undecided between study a PhD or find a job in the Oil and Gas Industry.



Nathaniel Harmon

- Current Institution: University of Hawaii Manoa
 - 1st year masters student
 - Advisor: Dr. Chris Measures
 - Current work: Chemical method development (PO_4 , Fe)
- Goals: Masters, Ph.D, Postdoc, Employment.
- Interests: Deep sea chemistry, teaching, extraterrestrial oceans?

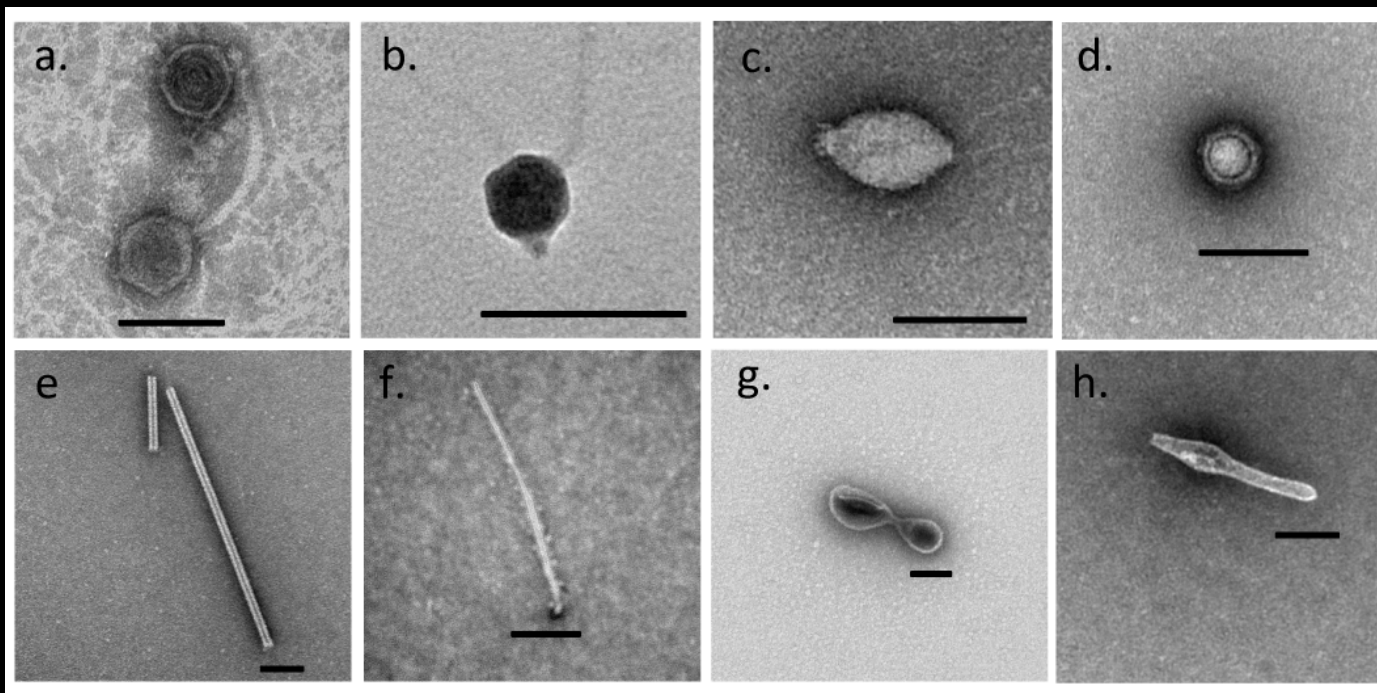
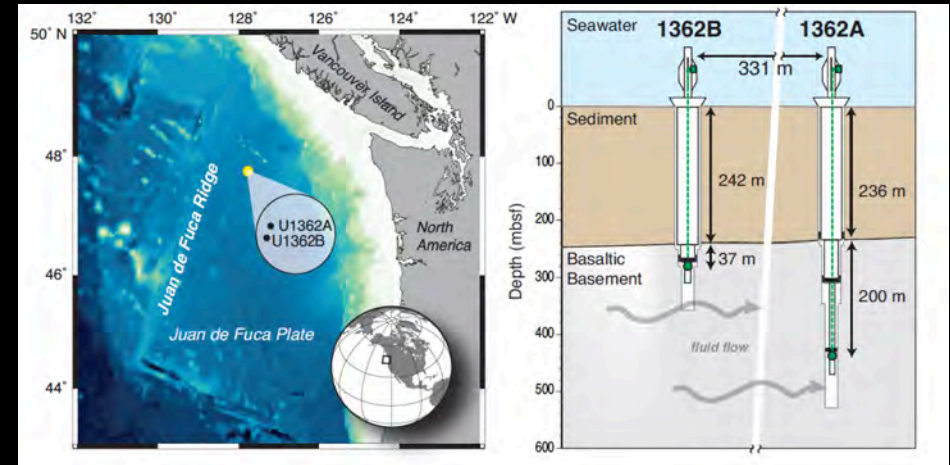
Deborah A. Leopo

Marine Biology/Earth Sciences

University of California, Santa Cruz

- **Future Research interests:** I am interested in understanding/studying the biogeochemistry of hydrothermal vent communities.
- **Interested in:**
 - Research Cruises
 - Internships
 - Graduate Schools (MS or PhD)

Olivia D. Nigro
Research Associate
Department of Oceanography
University of Hawaii at Manoa



Viral Ecology of the Deep Subsurface Environment

Alma Parada

I am a Post-doc at Stanford University.

Research Interests: activity of archaea in the marine water column and sediments



Logan Peoples

PhD Candidate

Scripps Institution of

Oceanography Lpeoples@ucsd.edu

Deep-sea microbiology

- Abyssal and hadal depths
- Community composition
- Pressure adaptation
- Activity as a function of pressure



Martin Rapa

Sr. Development Engineer

Scripps Institution of Oceanography
University of California San Diego



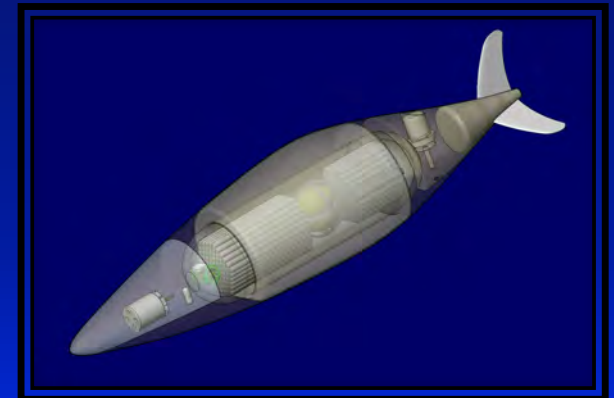
BACKGROUND:

- OCEAN ENGINEERING
- NAVY DEEP SUBMERGENCE UNIT
- OCEAN BOTTOM SEISMOLOGY
- OBSERVATORY INSTRUMENTATION



RESEARCH INTERESTS:

- DEEP SUBMERGENCE INSTRUMENT DEVELOPMENT
- REAL TIME OCEAN SEISMIC OBSERVATORIES (ACOUSTIC & CABLED)
- SEISMOMETER BURIAL METHODS



Ocean Bottom Seismology Laboratory
Institute for Geophysics and Planetary Physics

Darin Schwartz

Geochemistry and Volcanology

Research Cruises

-MAR 2016
Alvin/Sentry
R/V Atlantis

-Galapagos 2015
M/V Alucia
Telepresence:
E/V Nautilus

Projects

-*JdFR melt inclusions*
-*Galapagos seamounts*

PhD Candidate
Boise State University



R. Shaheen,
Associate Project Scientist IV
Department of Chemistry and Biochemistry,
University of California San Diego, USA.

Scientist+ Teacher in transition-----??
CHEM100A- Fall2016
Thematic Analytical Chemistry
Ocean Chemistry



Current Projects: Heterogeneous and Photochemical transformation on mineral surfaces using **Oxygen and Sulphur isotope anomalies** (Field and Lab experiments), Atmosphere-Hydrosphere-Biosphere interactions and **El-Nino Southern Oscillations**

Hobby: Mars meteorites (ALH84001) and NWA7034 (Black Beauty) to investigate past aqueous history and interaction with atmosphere.

Future Interest: K-Pg Boundary Layer O-S isotope Analysis to investigate Perturbations in Chemical composition of the atmosphere. **How do Dinosaur disappeared-Fingerprints of Impact Ejecta on the Atmosphere?** Contribution of CH₄ from Permafrost and its impact on CO₂ cycle especially free radical Chemistry at Greenland, Sources-Sinks estimation.

Education: Ph.D. Chemistry 2006 (Physical Chemistry), University of Heidelberg, Germany.

Thesis: Investigation of carbon dioxide and ozone triple isotope exchange via excited oxygen atom and implications for Stratosphere-Troposphere exchange.

DEA (M.Sc.) Analytical Chemistry 2002, Univ. of Geneva Switzerland.

Thesis: Capillary Gel Electrophoresis coupled with Laser Induced Fluorescence to study Polysaccharides in Lake Geneva.

Stephanie M. Sharuga, Ph.D.

Background:

Gulf Research Program Science Policy Fellow, The National Academies

Ph.D. Oceanography & Coastal Sciences, Louisiana State University

M.S. Environmental Management & Sustainability, Illinois Institute of Technology

B.Sc. Biology and Earth & Ocean Sciences, University of Victoria

Experience and training in...

- Submersible imagery & data collection and analysis; habitat classification; evaluating anthropogenic and natural environmental influences on megafaunal communities; marine & coastal conservation and restoration.
- Research using telepresence; marine & environmental education and outreach.
- Have been involved with research along the U.S. Pacific and Atlantic coasts, Gulf of Mexico, and Caribbean.

Research Interests:

Benthic community ecology, habitat mapping, environmental monitoring and management of deep-sea ecosystems, submersible technologies, marine management.

Future:

Looking for a postdoc or other research position. Also looking for research collaborators.

Contact – ssharuga@outlook.com (224) 688-0519 @DrStephSharuga

Clarisse Sullivan

- Graduate student at the University of Hawaii at Manoa in the Biological Oceanography M.S. program.
- Previous research experience:
 - Microbial DNA amplification and sequence analysis at the Bermuda Institute of Ocean Science
 - RNA gene expression analysis at Mystic Aquarium in Stonington, Connecticut
- Future research:
 - Bioinformatic analysis of DNA sequence datasets from the deep seafloor environment
 - Research cruise participant to North Pond in the Atlantic Ocean in 2017 to collect crustal fluid from borehole observatories

Phillip J Turner

3rd Year PhD – Duke University, Van Dover Lab

Research Interests

- Ecological importance of rare species
- Chemosynthetic ecosystem services
- Strategic Environmental Assessment, disseminating science to the International Seabed Authority

Samples from
East Coast Seeps?

Deep-Sea Red Crab
Chaceon quinquedens





Joseph B. Zambon

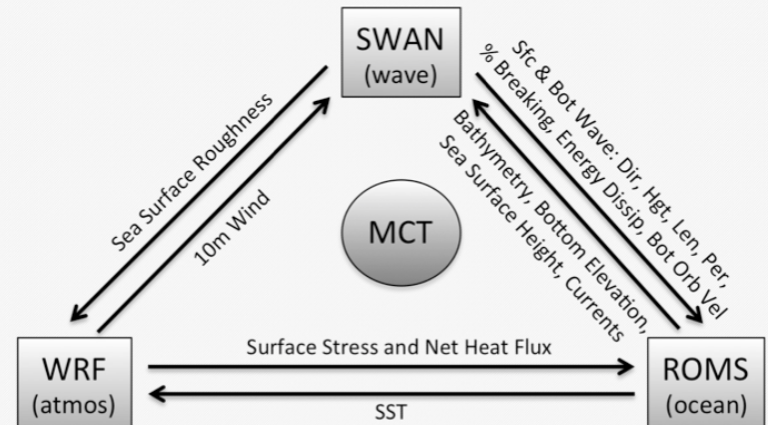
Research Assistant Professor (as of January 1)
jbzambon@ncsu.edu

NC STATE
UNIVERSITY

Research Interests:

- Physical Oceanography
- Coupled Numerical Modeling
- Air-Sea Interaction
- Tropical Cyclones
- Deep-Ocean Currents, Larval Transport
- Daily 72hr Nowcast/Forecast

Coupled Model Iteration for 72 Hour Forecast (08Z)



Water Column Information, Valid 17-July 00Z
Norfolk Canyon West: 36.868N, -74.488W, 1574m
NCSU COAWST USEast

