SHERI NEELAM WHITE
Senior Engineer, OOI/CGSN

Dept. of Applied Ocean Physics & Engineering
Woods Hole Oceanographic Institution
LOSOS Bldg., MS #57
Woods Hole, MA 02543

Tel: 508-289-3740
Cell: 831-325-9483
E-mail: swhite@WHOI.EDU

EDUCATION

B.S. AERONAUTICAL AND ASTRONAUTICAL ENGINEERING — *Dec 1993*
Purdue University — West Lafayette, IN

Ph.D. MARINE GEOLOGY & GEOPHYSICS — *Jun 2000*
Massachusetts Institute of Technology/Woods Hole Oceanographic Institution Joint Program in Oceanography — Cambridge, MA / Woods Hole, MA

PROFESSIONAL EXPERIENCE

SENIOR ENGINEER — *Jan 2010 - present*
Woods Hole Oceanographic Institution, Dept. of Applied Ocean Physics & Engineering

ASSISTANT SCIENTIST — *Jan 2005 - Jan 2010*
Woods Hole Oceanographic Institution, Dept. of Applied Ocean Physics & Engineering

POST-DOCTORAL FELLOW — *Jan 2002 - Dec 2004*
Monterey Bay Aquarium Research Institute, Dept. of Research and Development

POST-DOCTORAL INVESTIGATOR — *Jan 2001 - Dec 2001*
Woods Hole Oceanographic Institution, Dept. of Applied Ocean Physics & Engineering

GUEST INVESTIGATOR — *Aug 2000 - Jan 2001*
Woods Hole Oceanographic Institution, Dept. of Applied Ocean Physics & Engineering

POST-DOCTORAL INVESTIGATOR — *May 2000 - Jul 2000*
Woods Hole Oceanographic Institution, Dept. of Geology & Geophysics

GRADUATE RESEARCH ASSISTANT — *Jun 1994 - Apr 2000*
Woods Hole Oceanographic Institution, Dept. of Geology & Geophysics

ENGINEERING WORK EXPERIENCE

Woods Hole Oceanographic Institution, Woods Hole, MA

Data Team Lead, Coastal and Global Scale Nodes, OOI — *Oct 2018 - present*

- Lead a team of ~15 people to manage Asset Management, ingest data into the OOINet system, develop QA/QC processes, and address and annotate data issues.
- Participate in the OOI Data Management Working group and sub-gropus.
- Organized and oversaw an effort to review and update all metadata from OOI 1.0.

Lead Systems Engineer, Coastal and Global Scale Nodes, OOI — *Dec 2010 - present*

Assistant Systems Engineer, Coastal and Global Scale Nodes, OOI — *Jan 2010 - Dec 2010*

- Assist in directing a team of ~30 engineers (including MEs, EEs, SEs, and external consultants) in developing infrastructure for the OOI Program.
- Work with external PIs to integrate outside instrumentation and platforms into the OOI Infrastructure.
- Manage the Configuration Control Board and approval of Engineering Change Requests.

- Coordinate the OOI-wide Instrument Team, which includes personnel from WHOI, OSU and UW, and handles instrumentation issues, processes, and technical refresh.
- Lead the effort to manage requirements; including development, tracking, and testing.
- Coordinated the writing of technical specifications for instrument selection.
- Coordinated the development of test-bed infrastructure and modeling tools.
- Lead the effort to procure, test, accept and characterize OOI-selected instruments.
- Managed the systems engineering and design review process associated with the relocation of the Pioneer Array from the New England Shelf to the Mid-Atlantic Bight.

Assistant Project Scientist, Coastal and Global Scale Nodes, OOI *Jun 2009 - Dec 2009*

- Participated in program-wide review and update of OOI requirements.
- Participated in development of an OOI sensor database.

Monterey Bay Aquarium Research Institute, Moss Landing, CA *Jul 2002 - Dec 2003*

Project Manager for the Precision Underwater Positioner

- Directed a team of 8 in developing an ROV-deployable precision underwater positioner.

SHORT COURSES

PROJECT MANAGEMENT PRINCIPLES AND PRACTICE	*Jun 7 - 10, 2005*
UCLA Extension Short Course, Dr. Arnold Ruskin	Woods Hole, MA
PRINCIPLES OF SYSTEMS ENGINEERING	*Sep 1 - 4, 2009*
Raytheon Corporation	Aurora, CO
PERSONAL SURVIVAL TECHNIQUES	*Oct 23 - 24, 2018*
Northeast Maritime Institute	Fairhaven, MA

AWARDS/HONORS

Tau Beta Pi – National Engineering Honor Society	1993
Sigma Gamma Tau – National Aerospace Engineering Honor Society	1993
MBARI Post-doctoral Fellowship	2002 - 2004
WHOI Linda Morse-Porteous Award	2018

PROFESSIONAL AFFILIATIONS

American Institute of Aeronautics and Astronautics		1990 - 1996
Society for Applied Spectroscopy		2006 - 2012
American Geophysical Union		1994 - present
IEEE	[*Senior Member Feb 2022 - present*]	2005 - present
The Oceanography Society (TOS)	[*JEDI Councilor 2023-present]*	2022 - present

RESEARCH INTERESTS

Development and operations of ocean observing platforms and systems; and integration of sensor suites. Development of *in situ* instrumentation for making measurements in the deep ocean.

PROFESSIONAL ACTIVITIES

WHOI

Strategic Facilities Assessment 2.0 Advisory Group	2022 - present
WHOI Workplace Climate Committee Co-Chair	2021 - present
WHOI Tech GeMs Organizer & co-lead	2017 - present

WHOI Chief People Office Search Committee	2022
WHOI Committee for Diversity and Inclusion (Community Building WG)	2020 - 2021
WHOI Technical Staff Committee (Chair, 2020 - 2021)	2019 - 2022
WHOI Workplace Climate Committee	2018 - 2020
WHOI Advisory Committee on Ethics, Conflicts and Security	2016 - 2020
WHOI Diversity Committee	2007 - 2009
AOPE Safety Committee	2006 - 2009
WHOI Women's Committee	2005 - 2007
In Situ Sensors Group Organizer	2005 - 2008

Outside WHOI

TOS Justice, Equity, Diversity and Inclusion (JEDI) Councilor	2023 - present
GLOW chair/co-chair	2007 - present
OCEAN OBSERVATORIES INITIATIVE FACILITIES BOARD	Mar 2017 - Oct 2018
ORION SENSORS COMMITTEE	2006 - 2008

Reviewer for *Talanta* and *Experiments in Fluids*, *Optics Express*, *Marine Chemistry, Oceanography* and NSF-OTIC, NSF-Antarctic Organisms & Ecosyst.

PARTICIPATION IN EDUCATION PROGRAM

Principles of Oceanographic Instrument Systems (MIT 2.688) Spring 2005, 2006, 2007, 2008;
Guest lecture on Chemical Sensors Fall 2009

Environmental Chemistry and Sensors in Cape Cod Bay (MIT 12.097) Jan 2006
MIT undergraduate IAP course, co-taught with Liz Kujawinski (WHOI), Franz Hover (MIT)

Chair of Thesis Committee Jul 27, 2007
Anna Michel

Communicating Ocean Sciences (MIT 12.754) Spring 2008
MIT/WHOI Joint Program course, co-taught with Lauren Mullineaux

Fundamentals of Engineering Design: Explore Space, Sea, Earth (MIT 2.00AJ) Apr 7, 2009
Guest lecture on ocean exploration

Oceanography (Lafayette College, GEOL 205) Apr 16, 2009
Guest lecture on hydrothermal systems, ocean technology and ocean exploration

Woods Hole Partnership Education Program (PEP) Jun 19, 2020; Jun 11, 2021; Jul 3, 2023
Advanced Topics Lecture on the Ocean Observatories Initiative

Principles of Oceanographic Instrument Systems (MIT 2.688) Fall 2018; Spring 2022, 2023
Guest lecture/tour on OOI

SUPERVISION AT WHOI

Irene Duran (*Engineering Assistant III, OOI*)	Sep 2020 - present
Andrew Reed (*Research Specialist, OOI*)	Nov 2018 - present
Rebecca Travis (*Information Systems Associate III, OOI*)	Jun 2016 - present
Jennifer Batryn (*Engineer II, OOI*)	Aug 2015 - present
Allen Smith (*Senior Engineering Assistant I, OOI*)	Aug 2016 - May 2023
Denise Manchester (*Sr Engineer Assist I, OOI*)	Mar 2014 - May 2014, Aug 2017 - Jul 2020
Aidan Alai (*Engineer II, OOI*)	Aug 2014 - May 2017

Mark Horn (*Engineer I, OOI*)	Aug 2014 - May 2016
Neil McPhee (*Senior Engineering Assistant II, OOI*)	Mar 2014 - Jan 2018
Brian Kelly (*Senior Engineering Assistant I, OOI*)	Mar 2014 - May 2014
John Lund (*Research Engineer, OOI)*	Jan 2013 - Oct 2016
Kathleen McMonagle (*Engineer II, OOI*)	Feb 2011 - Jan 2012
[Not her direct supervisor but directed her work.]	
Svetlana Morozova (Cornell; *Engineer Assistant II, OOI*)	Dec 2009 - Jan 2010, Jun - Aug 2010
Kaitlyn McCartney (MIT; *WHOI Summer Student Fellow*)	Jun - Aug 2008
John A. "Chip" Breier (*NSF RIDGE 2000 Post-doctoral Fellow*)	Oct 2006 - Oct 2008
Abitha Murugeshu (LSU; *WHOI Summer Student Fellow*)	May - Aug 2006

CRUISE PARTICIPATION

Shipboard scientist on six research cruises to investigate mid-ocean ridge hydrothermal systems using crewed submersibles. Deployed instruments to measure ambient light at vents for thesis research; participated as a scientific observer on eight *DSV Alvin* dives.

August/September 1995	*DSVSS Laney Chouest (DSV Sea Cliff)*	Juan de Fuca Ridge
April 1996	*R/V Atlantis II (DSV Alvin)*	9°N East Pacific Rise
November/December 1997	*R/V Atlantis (DSV Alvin)*	9°N East Pacific Rise
June/July 1998	*R/V Atlantis (DSV Alvin)*	Juan de Fuca Ridge
June 2000	*R/V Atlantis (DSV Alvin)*	Juan de Fuca Ridge
July 2001	*R/V Atlantis (DSV Alvin)*	Mid-Atlantic Ridge

Shipboard scientist on multiple ROV research cruises to investigate processes related to CO_2 sequestration and gas hydrates, and to develop a laser Raman spectrometer and precision underwater positioner for making *in situ* measurements in the deep sea.

Feb 19/20, 2002	*R/V Point Lobos (ROV Ventana)*	Monterey Bay
Mar 4, 2002	*R/V Point Lobos (ROV Ventana)*	Monterey Bay
Apr 1 - 5, 2002	*R/V Western Flyer (ROV Tiburon)*	Monterey Bay
Apr 16 - 20, 2002	*R/V Western Flyer (ROV Tiburon)*	Monterey Bay
Apr 29 - May 2, 2002	*R/V Western Flyer (ROV Tiburon)*	Monterey Bay
Jun 12/13, 2002	*R/V Point Lobos (ROV Ventana)*	Monterey Bay
Aug 22/23, 2002	*R/V Point Lobos (ROV Ventana)*	Monterey Bay
Oct 16, 2002	*R/V Point Lobos (ROV Ventana)*	Monterey Bay
Dec 11 - 13, 2002	*R/V Western Flyer (ROV Tiburon)*	Monterey Bay
Apr 21 - May 11, 2003	*R/V Western Flyer (ROV Tiburon)*	Gulf of California
Aug 20 - 22/25, 2003	*R/V Point Lobos (ROV Ventana)*	Monterey Bay
Nov 5/7/10, 2003	*R/V Point Lobos (ROV Ventana) – Chief Sci.*	Monterey Bay
Dec 16 - 18, 2003	*R/V Western Flyer (ROV Tiburon) – Chief Sci.*	Monterey Bay
Jul 15 - 25, 2004	*R/V Western Flyer (ROV Tiburon)*	Gorda, Hydrate Ridges
Sep 27/28, 2004	*R/V Point Lobos (ROV Ventana) – Chief Sci.*	Monterey Bay
Oct 5/6, 2005	*R/V Point Lobos (ROV Ventana)*	Monterey Bay
Nov 17 - 21, 2005	*R/V Western Flyer (ROV Tiburon)*	Monterey Bay

Shipboard scientist on ROV research cruise to investigate hydrothermal vent processes and biological communities. Deployed and operated instruments/samplers to measure particles and processes in hydrothermal plumes.

May 16 - Jun 8, 2009	*R/V Thompson (ROV Jason)*	Lau Basin

Shipboard participant for OOI infrastructure deployment. Documented cruise activities and participated in water sampling; Chief Scientist or Co-Chief Scientist*.

Nov 20 - 26, 2013	*R/V Knorr*	Pioneer Array Deployment 1
Oct 3 - 11, 2014	*R/V Knorr*	Pioneer Array Deployment 3 Leg 1
May 6 - 14, 2015	*R/V Atlantis*	Pioneer Array Deployment 4 Leg 2
Aug 5 - Sep 1, 2015	*R/V Atlantis*	Irminger Array Deployment 2
May 26 - Jun 2, 2016	R/V *Neil Armstrong*	Pioneer Array Deployment 6, Leg 3
Jun 28 - Jul 26, 2016	R/V *Neil Armstrong*	Irminger Array Deployment 3
May 30 - Jun 20, 2017	R/V *Neil Armstrong*	Pioneer Array Deployment 8
Nov 23 - Dec 9, 2017	RVIB *Nathaniel B. Palmer*	Southern Ocean Array Deployment 4*
Mar 23 - Apr 13, 2018	R/V *Neil Armstrong*	Pioneer Array Deployment 10*
Jun 5 - 24, 2018	R/V *Neil Armstrong*	Irminger Array Deployment 5
Nov 28 - Dec 14, 2018	RRS *Discovery*	Southern Ocean Array Deployment 5*
Aug 2 - 25, 2019	R/V *Neil Armstrong*	Irminger Array Deployment 6*
Sep 25 - Oct 15, 2019	R/V *Neil Armstrong*	Pioneer Array Deployment 13*
Jan 16 - 26, 2020	RRS *Discovery*	Southern Ocean Array Deployment 6*
Oct 28 - Nov 11, 2020	R/V *Neil Armstrong*	Pioneer Array Deployment 15*
Oct 29 - Nov 15, 2021	R/V *Neil Armstrong*	Pioneer Array Deployment 17*
Jun 20 - Jul 17, 2022	R/V *Neil Armstrong*	Irminger Array Deployment 9*

PAPERS IN REFEREED JOURNALS

White, S. N., A. D. Chave, and J. H. Filloux, A look at galvanic distortion in the Tasman Sea and the Juan de Fuca Plate, *J. Geomag. Geoelectr.*, 49:1373-1386, 1997.

White, S. N., S. E. Humphris, and M. C. Kleinrock, New observations on the distribution of past and present hydrothermal activity in the TAG area of the Mid-Atlantic Ridge (26°08' N), *Mar. Geophys. Res.*, 20:41-56 (and Erratum 20;139), 1998.

White, S. N., A. D. Chave, G. T. Reynolds, E. J. Gaidos, J. A. Tyson, and C. L. Van Dover, Variations in ambient light emission from black smokers and flange pools on the Juan de Fuca Ridge, *Geophys. Res. Lett.*, 27: 1151-1154, 2000.

White, S. N., A. D. Chave, G. T. Reynolds, Investigations of ambient light emission at deep-sea hydrothermal vents, *J. Geophys. Res.*, 107 (B1), 10.1029/2000JB000015, 2002.

White, S. N., A. D. Chave, G. T. Reynolds, and C. L. Van Dover, Ambient light emission from hydrothermal vents on the Mid-Atlantic Ridge, *Geophys. Res. Lett.*, 29 (15), 10/1029.2002GL014977, 2002.

Brewer, P. G., G. Malby, J. D. Pasteris, **S. N. White**, E. T. Peltzer, B. Wopenka, J. Freeman, and M. O. Brown, Development of a laser Raman spectrometer for deep-ocean science, *Deep Sea Res. I*, 51, 10.1016/j.dsr.2003.11.005, 2004.

Pasteris, J. D., B. Wopenka, J. Freeman, P. G. Brewer, **S. N. White**, E. T. Peltzer, G.E. Malby, Raman spectroscopy in the deep ocean: successes and challenges, *Appl. Spectrosc.*, 58 (7), 195A-208A, 2004.

White, S. N., W. J. Kirkwood, A. D. Sherman, M. O. Brown, R. Henthorn, K. Salamy, P. Walz, E. T. Peltzer, and P. G. Brewer, Development and deployment of a precision underwater positioning system for *in situ* laser Raman spectroscopy in the deep ocean, *Deep Sea Res.*, 52: 2376-2389, 2005.

Hester, K. C., **S. N. White**, E. T. Peltzer, P. G. Brewer, and E. D. Sloan, Raman spectroscopic measurements of synthetic gas hydrates in the ocean, *Mar. Chem.*, 98, 304-314, 2006.

White, S. N., P. G. Brewer, and E. T. Peltzer, Determination of gas bubble fractionation in the deep ocean by laser Raman spectroscopy, *Mar. Chem.*, 99, 12-23, 2006.

White, S. N., R. M. Dunk, P. G. Brewer, E. T. Peltzer, and J. J. Freeman, *In situ* Raman analyses of deep-sea hydrothermal and cold seep systems (Gorda Ridge & Hydrate Ridge), *Geochem. Geophys. Geosys.*, 7, doi:10.1029/2005GC001204, 2006.

Hester, K. C., R. M. Dunk, **S. N. White**, P. G. Brewer, E. T. Peltzer, and E. D. Sloan, Gas hydrate measurements at Hydrate Ridge using Raman spectroscopy, *Geochem. Cosmochem. Acta,* 71, 2947-2959, 2007.

White, S. N., Laser Raman spectroscopy as a technique for identification of seafloor hydrothermal and cold seep minerals, *Chem. Geol.*, 259, 240-252, 2009.

Moore, C., A. Barnard, P. Fietzek, M. R. Lewis, H. M. Sosik, **S. N. White**, O. Zelinski, Optical tools for ocean monitoring and research, *Ocean Sci.*, 5, 661-684, 2009.

*Breier, J. A., C. R. German, and **S. N. White**, Mineral phase analysis of deep-sea hydrothermal particulates by a Raman spectroscopy expert algorithm: towards autonomous *in situ* experimentation and exploration, *Geochemistry, Geophysics, and Geosystems*, 10, Q05T05, doi:10.1029/2008GC002314, 2009.

*Breier, J. A., C. R. Rauch, K. McCartney, B. M. Toner, S. Fakra , **S. N. White**, and C. R. German, A suspended-particle rosette multi-sampler for discrete biogeochemical sampling in low-particle-density waters, *Deep Sea. Res. I*, 56, 1579-1589, 2009.

*Breier, J. A., **S. N. White**, and C. R. German, Mineral-microbe interactions in deep-sea hydrothermal systems: a challenge for Raman spectroscopy, *Phil. Trans. R. Soc. A*, 368, 3067-3086, 2010.

White, S. N., Qualitative and Quantitative analysis of CO_2 and CH_4 dissolved in water and seawater using Laser Raman Spectroscopy, *Appl. Spec.*, 64, 819-827, 2010.

*Breier, J. A., B. M. Toner, S. C. Fakra, M. A. Marcus, **S. N. White**, A. M. Thurnherr, C. R. German, Sulfur, sulfides, oxides and organic matter aggregated in submarine hydrothermal plumes at 9° 50' N East Pacific Rise, *Geochem. Cosmochem. Acta*, 88,216-236, doi:10.1016/J.GCA.2012.04.003, 2012.

Thompson, C. M., E. W. North, **S. N. White** and S. M. Gallagher, An analysis of bivalve larval shell pigments using micro-Raman spectroscopy, *J. Raman Spectrosc.*, 45:349-358, 2014.

Thompson, C. M., E. W. North, V. S. Kennedy, and **S. N. White**, Classifying bivalve larvae using shell pigments identified by Raman Spectroscopy, *Anal. Bioanal. Chem.*, 407:3591-3604, doi:10.1007/s00216-015-8575-8, 2015.

Smith, L. M., K. Yarincik, L. Vaccari, M. Kaplan, J. A. Barth, G. S. Cram, J. P. Fram, M. Harrington, O. E. Kawka, D. S. Kelley, P. Matthias, K. Newhall, M. Palanza, A. J.

Pluddemann, M. F. Vardaro, **S. N. White**, R. A. Weller, Lessons Learned from the U. S. Ocean Observatories Initiative, *Front. Mar. Sci.*, 5:494, doi: 10.3389/fmars.2018.00494, 2019.

*Advisee

OTHER PUBLICATIONS

White, S. N., J. W. Bailey, C. L. Van Dover, and A. D. Chave, Measurements of Light at Hydrothermal Vents, *RIDGE Events*, vol. 7, no. 2, July 1996.

White, S. N., and A. D. Chave, ALISS in Wonderland, *Oceanus,* 41:14-17, 1998.

White, S. N., NEPTUNE dry test-bed modeling, Internal report (Ref # 10083), Dec. 4, 2001.

Brewer, P. G., J. D. Pasteris, G. E. Malby, E. T. Peltzer, **S. N. White**, J. Freeman, B. Wopenka, M. Brown, D. Cline, Laser Raman spectroscopy used to study the ocean at 3600 m depth, *EOS*, vol. 83: 469-470, 2002.

White, S. N., R. M. Dunk, P. G. Brewer, E. T. Peltzer, A. D. Sherman, M. O. Brown, and J. J. Freeman, First In Situ Raman Spectroscopic Measurements at Hydrothermal Vents – Sea Cliff Hydrothermal Field, Gorda Ridge, *RIDGE Events*, vol. 3, 31-34, 2005.

White, S. N., P. G. Brewer, and W. J. Kirkwood, Raman instrumentation for deep sea *in-situ* analyses: design and implementation of the Deep Ocean Raman *In Situ* Spectrometer with the Precision Underwater Positioner, *Sea Technology*, vol. 47, no. 2, 17-26, 2006.

OOI DOCUMENTATION AND REPORTS

1410-00012	RFI for Short-Range Velocity Profile Instruments
1410-00013	RFI for Plankton Imaging Instruments
1410-00014	RFI for Particle Size Analyzer Instruments
1410-00015	RFI for Turbidity Instruments
3103-00020	Pioneer Surface Mooring Sampling and Configuration Plan
3103-00022	Global Surface Mooring Sampling and Configuration Plan
3161-10000	CGSN Instrument Test Plan
3201-00007	CGSN Site Characterization: Southern Ocean Array
3202-00007	CGSN Site Characterization: Irminger Sea Array
3203-00007	CGSN Site Characterization: Station Papa Array
3206-00007	CGSN Site Characterization: Argentine Basin Array
3201-00401	Southern Ocean 4 Cruise Plan (as Chief Scientist)
3201-00403	Southern Ocean 4 Cruise Report (as Chief Scientist)
3201-00501	Southern Ocean 5 Cruise Plan (as Chief Scientist)
3201-00503	Southern Ocean 5 Cruise Report (as Chief Scientist)
3201-00601	Southern Ocean 6 Cruise Plan (as Chief Scientist)
3201-00603	Southern Ocean 6 Cruise Report (as Chief Scientist)
3202-00202	Irminger 2 Cruise Quick Look Report (as Documentation Lead)
3202-00203	Irminger 2 Cruise Report (as Documentation Lead)
3202-00302	Irminger 3 Cruise Quick Look Report (as Documentation Lead)
3202-00503	Irminger Sea 5 Cruise Quick Report (as Documentation Lead)
3202-00503	Irminger Sea 5 Cruise Report (as Documentation Lead)
3202-00601	Irminger Sea 6 Cruise Plan (as Chief Scientist)
3202-00603	Irminger Sea 6 Cruise Report (as Chief Scientist)

3202-00901	Irminger Sea 9 Cruise Plan (as Chief Scientist)
3202-00903	Irminger Sea 9 Cruise Report (as Chief Scientist)
3204-00802	Pioneer 8 Leg 1 Cruise Quick Look Report (as Documentation Lead)
3204-00803	Pioneer 8 Leg 2 Cruise Quick Look Report (as Documentation Lead)
3204-00804	Pioneer 8 Leg 3 Cruise Quick Look Report (as Documentation Lead)
3204-00805	Pioneer 8 Cruise Report (as Documentation Lead)
3204-01001	Pioneer 10 Cruise Plan (as Chief Scientist)
3204-01004	Pioneer 10 Cruise Report (as Chief Scientist)
3204-01301	Pioneer 13 Cruise Plan (as Chief Scientist)
3204-01304	Pioneer 13 Cruise Report (as Chief Scientist)
3204-01501	Pioneer 15 Cruise Plan (as Chief Scientist)
3204-01503	Pioneer 15 Cruise Report (as Chief Scientist)
3204-01701	Pioneer 17 Cruise Plan (as Chief Scientist)
3204-01703	Pioneer 17 Cruise Report (as Chief Scientist)
3211-00001	At-Sea Test 3 (AST3) Test Plan
3304-00026	History of Global Profiling Glider Instrumentation
3305-00021	CGSN Instrument Sparing Strategy White Paper
3305-00028	ADCP Compass Verification Testing
3305-00031	Ultra Short-Range Velocity Profiler Instrument Specification
3305-00032	Plankton Imaging Instrument Specification
3305-00033	Particle Size Analyzer Instrument Specification
3305-00034	Optical Turbidity Instrument Specification
3310-00019	Global Surface Piercing Profiler Trade Study
3312-10000	OOI DISA Card Procedure
3408-00501	CGSN Data Annotation Procedure
3404-00010	OOI/CGSN Water Sampling Strategy

PUBLISHED ABSTRACTS

White, S. N., A. D. Chave, and J. H. Filloux, Large scale MT distortion: a comparison of the Tasman Sea and the Juan de Fuca Plate, *Eos Trans. AGU*, 76, F168, 1995.

W. K. Stewart, **White, S. N.**, S. E. Humphris, and M. C. Kleinrock, Geotectonic setting of past and present hydrothermal activity in the TAG area of the Mid-Atlantic Ridge (26° 08' N), *Eos Trans., AGU*, 77, F767-768, 1996.

White, S. N., A. D. Chave, J. W. Bailey, C. L. Van Dover, and G. T. Reynolds, Measurements of light at hydrothermal vents, 9° N East Pacific Rise, *Eos Trans., AGU*, 77, F404, 1996.

White, S. N., A. D. Chave, J. W. Bailey, C. L. Van Dover, G. T. Reynolds, and E. Gaidos, Images of ambient light at deep-sea hydrothermal vents, 9° N East Pacific Rise, *Eos Trans. AGU*, 79, S166, 1998.

White, S. N., A. D. Chave, J. W. Bailey, C. L. Van Dover, G. T. Reynolds, E. Gaidos, and J. A. Tyson, Images of ambient light at high-temperature black smokers and flange pools, Endeavour Segment, Juan de Fuca Ridge, *Eos Trans. AGU*, 79, F858, 1998.

Peltzer, E. T., P. G. Brewer, P. M. Walz, **S. N. White**, Progress in small-scale studies of direct ocean sequestration of carbon dioxide, *Eos Trans. AGU,* 83(47), Fall Meet. Suppl., Abstract U22A-03, 2002.

White, S. N., P. G. Brewer, E. T. Peltzer III, G. E. Malby, and J. D. Pasteris, Development of a Laser Raman Spectrometer for *In Situ* Measurements in the Deep Ocean, *Eos Trans. AGU,* 83(47), Fall Meet. Suppl., Abstract OS21B-205, 2002.

Pasteris, J. D., P. G. Brewer, **S. N. White**, E. T. Peltzer, B. Wopenka, J. Freeman, Development of *in situ*, real-time Raman analysis of clathrate hydrates on the seafloor, Geol. Soc. Amer. Abstracts with Programs, 35, 534, 2003.

Kirkwood, W. J., **S. N. White**, M. O. Brown, S. Jensen, R. Henthorn, K, Salamy, P. G. Brewer, and E. T. Peltzer, Development of a precision underwater positioner for *in situ* spectrographic applications, *Eos Trans. AGU,* Fall Meet. Suppl., Abstract OS32A-0236, 2003.

White, S. N., P. G. Brewer, E. T. Peltzer, W. J. Kirkwood, J. D. Pasteris, and N. Nakayama, First expeditionary deployments of the Deep Ocean Raman In Situ Spectrometer, *Eos Trans. AGU,* Fall Meet. Suppl., Abstract OS32A-0235, 2003.

Peltzer, E. T., **S. N. White**, R. M. Dunk, P. G. Brewer, A. D. Sherman, K. Schmidt, K. C. Hester, and E. D. Sloan, *In situ* Raman analyses of natural gas and gas hydrates at Hydrate Ridge, Oregon, *Eos Trans. AGU*, Fall Meet. Suppl., Abstract OS34B-01, 2004.

Brewer, P. G., R. M. Dunk, **S. N. White**, E. T. Peltzer, B. Bowie, and P. Walz, First attempts at direct Raman detection of the oceanic carbonate system, *Eos Trans. AGU*, Fall Meet. Suppl., Abstract OS43B-557, 2004.

White, S. N., R. M. Dunk, P. G. Brewer, E. T. Peltzer, A. D. Sherman, and J. J. Freeman, *In situ* Raman spectra from the Sea Cliff Hydrothermal Field (Gorda Ridge), *Eos Trans. AGU*, Fall Meet. Suppl., Abstract OS43B-558, 2004.

*Breier, J. A., C. R. German, and **S. N. White**, Development of an optically compatible Suspended Particulate Rosette (SuPR) multi-sampler and a Raman Spectroscopy Expert Algorithm (RaSEA) for quantitative point counting and *in situ* analysis of deep-sea hydrothermal minerals, Mantle to Microbe: Integrated Studies at Oceanic Spreading Centers, Portland, OR, March 25-26, 2008.

Gallager, S. M., A. D. York, Y. Longonje, and **S. N. White**, Larval shell formation: requirement for Sr may be explained by amorphous calcium carbonate as a precursor phase for aragonite, National Shellfisheries Association Meeting, Providence, RI, April 7-10, 2008.

White, S. N., Laser Raman Spectroscopy as a tool for *in situ* bio-geo-chemical analyses in the deep ocean, Goldschmidt Conference 2010, *Geochim. Cosmochim. Acta*, vol. 74, iss. 11, suppl. 1, A1129, June 2010.

Kaplan, M., J. A. Barth, E. Dever, J. Fram, O. Kawka, D. S. Kelley, P. Matthias, K. Newhall, M. Palanza, A. Plueddemann, L. M. Smith, J. Trowbridge, M. Vardaro, **S. N. White**, R. Weller, K. Yarinick, Lessons Learned from the U. S. Ocean Observatories Initiative, OceanObs'19, Honolulu, HI, September 16-20, 2019.

Clinton-Bailey, G. S., A. D. Beaton, M. D. Patey, E. L. Davey, S. E. Fowell, A. P. Martin, **S. N. White**, A. J. Birchill, M. C. Mowlem, 'Lab-on-Chip' Sensor for *in situ* Determination of Silicate in Natural Waters, *Goldschmidt Abstracts*, 2019.

*Advisee

PAPERS PRESENTED AT MEETINGS

Maffei, A. R., A. D. Chave, G. Massion, **S. N. White**, J. Bailey, S. Lerner, A. Bradley, D. Yoerger, H. Frazier, R. Buddenberg, NEPTUNE Gigabit Ethernet Submarine Cable System, Proceedings of Oceans 2001 Conference, Honolulu, HI, November 2001.

Kirkwood, W. J., **S. N. White**, M. Brown, R. Henthorn, S. Jensen, K. A. Salamy, E. T. Peltzer, P. G. Brewer, Precision underwater positioning for *in situ* laser Raman spectrographic applications, IEEE/MTS Oceans 2003, IEEE Press, San Diego, CA, September 2003.

White, S. N., W. J. Kirkwood, A. D. Sherman, M. O. Brown, R. Henthorn, K. A. Salamy, E. T. Peltzer, P. Walz, and P. G. Brewer, Laser Raman spectroscopic instrumentation for *in situ* geochemical analyses in the deep ocean, IEEE/MTS Oceans 2004, IEEE Press, Kobe, Japan, November 2004.

Farr, N., A. Chave, L. Freitag, J. Preisig, **S. N. White**, D. Yoerger, and P. Titterton, Optical modem technology for seafloor observatories, IEEE/MTS Oceans 2005, IEEE Press, Washington, D.C., September 2005.

Farr, N., A. D. Chave, L. Freitag, J. Preisig, **S. N. White**, et. al., Optical modem technology for seafloor observatories, IEEE 4th International Workshop on Scientific Uses of Submarine Cables & Related Technologies, Dublin, Ireland, 2006.

White, S. N., R. Camilli, A. P. M. Michel, and J. Whelan, Spectroscopic sensor technology for *in situ* seafloor analyses, IEEE 4th International Workshop on Scientific Uses of Submarine Cables & Related Technologies, Dublin, Ireland, 2006.

White, S. N., E. R. Sholkovitz, and N. Farr, Visible reflectance spectroscopy on a buoy-mounted aerosol sampler: development of a sensor for quantifying the deposition of mineral dust to the oceans, IEEE/MTS Oceans 2006, IEEE Press, Boston, MA, September 2006.

White, S. N., Laser Raman spectroscopy as a tool for *in situ* mineralogical analyses on the seafloor, IEEE/MTS Oceans 2006, IEEE Press, Boston, MA, September 2006.

White, S. N., Laser Raman spectroscopic analyses of dissolved gasses, IEEE/MTS Oceans 2007, IEEE Press, Vancouver, BC, September 2007.

A. Reed, **White, S. N.**, A. J. Plueddemann, Quality Control & Validation of OOI Carbon System Measurements in the Irminger Sea, Ocean Sciences Meeting 2022, AGU/ASLO/TOS, Virtual, 24 February - 4 March, 2022.

White, S. N., A. Reed, A. J. Plueddemann, Event Detection using QARTOD Quality Control Flags: Examples from OOI Argentine Basin and Irminger Sea Arrays, Ocean Sciences Meeting 2022, AGU/ASLO/TOS, Virtual, 24 February - 4 March, 2022.

INVITED LECTURES

CARNEGIE INSTITUTION OF WASHINGTON, WASHINGTON, DC — *Jun 26, 2000*
Light Emission at Deep-Sea Hydrothermal Vents

WOODS HOLE OCEANOGRAPHIC INSTITUTION, WOODS HOLE, MA — *Jun 12, 2003*
A Laser Raman Spectrometer for the Deep Ocean

UNIVERSITY OF CONNECTICUT, AVERY POINT, CT — *Jul 17, 2003*
Laser Raman Spectroscopy in the Deep Ocean

SCRIPPS INSTITUTE OF OCEANOGRAPHY, LA JOLLA, CA — *Jan 24, 2008*
Visible Reflectance & Laser Raman Spectroscopy:
Techniques for Monitoring Ocean Processes Top to Bottom

LAFAYETTE COLLEGE, EASTON, PA — *Apr 17, 2009*
Illuminating the Deep: Using Laser Raman Spectroscopy to Explore Seafloor Environments

MASSACHUSETTS MARINE EDUCATOR'S ASSOCIATION, WOODS HOLE, MA — *Apr 30, 2022*

The Ocean Observatories Initiative (OOI): Collecting Long-Term Data Time Series in the Coastal and Global Oceans (Annual meeting Keynote address)

PATENTS

U. S. Patent 7,953,326, Systems and methods for underwater optical communication, Farr, N., Freitag, L., Preisig, J., Yoerger, D., **White, S. N.**, Chave, A., Filed Feb 6, 2006, Awarded May 31, 2011.

U. S. Patent 9,294,201 B2, Optical communication system and methods, Farr, N., Freitag, L., Preisig, J., Yoerger, D., **White, S. N.**, Chave, A., Filed May 12, 2015, Awarded Mar 22, 2016.

WORKSHOPS/SYMPOSIA ATTENDED

JUAN DE FUCA RESULTS SYMPOSIUM — *Nov 7 - 9, 1999*
RIDGE, Seattle, WA

THE NEXT GENERATION OF IN SITU BIOLOGICAL AND CHEMICAL SENSORS — *Jul 13 - 16, 2003*
Woods Hole Oceanographic Institution, Woods Hole, MA

FRONTIERS IN RAMAN SPECTROSCOPY — *Oct 28, 2004*
ACS Western Regional Meeting, Sacramento, CA

IEEE 4TH INTL. WKSHP ON SCIENTIFIC USES OF SUBMARINE CABLES AND RELATED TECHNOLOGIES
Dublin, Ireland — *Feb 8 - 10, 2006*

ORION DESIGN & IMPLEMENTATION WORKSHOP — *Mar 27 - 31, 2006*
Salt Lake City, UT

COMMUNICATING OCEAN SCIENCES INSTRUCTORS WORKSHOP — *Oct 19, 2007*
Woods Hole, MA

OCEAN SENSORS 2008 — *Mar 31 - Apl 4, 2008*
Warnemünde, Germany

OOI COASTAL ARRAYS WORKSHOP — *Jan 5 - 7, 2016*
Arlington, VA

OCEAN OBSERVING INFRASTRUCTURE AND SENSING WORKSHOP — *Sept 23 - 26, 2016*
Moss Landing, CA — Steering Committee Member

OOI LESSONS LEARNED WORKSHOP — *May 2 - 3, 2018*
Oregon State University, Corvallis, OR

OCEANHACKWEEK — *Aug 20 - 27*, 2018
University of Washington, Seattle, WA

SOCIETY FOR WOMEN IN MARINE SCIENCE FALL 2018 SYMPOSIUM — *Sep 22, 2018*
Woods Hole Oceanographic Institution, Woods Hole, MA

MARIA MITCHELL WOMEN IN SCIENCE SYMPOSIUM — *Oct 5 - 6, 2018*
Babson College, Wellesley, MA

MARIA MITCHELL WOMEN IN SCIENCE SYMPOSIUM — *Oct 2, 2020*
Virtual

IEEE WOMEN IN ENGINEERING INTERNATIONAL LEADERSHIP CONFERENCE — *Apr 27 - 30, 2021*
Virtual

MARIA MITCHELL WOMEN IN SCIENCE SYMPOSIUM *Sep 22-23, 2022*
Virtual

OUTREACH

HARVARD UNIVERSITY, CAMBRIDGE, MA *Feb 4, 2017*
Women Engineers Code (WECode) 2017
Exploring Our World from Oceans to Out Space with Tech Panel

WHSTEP WINTER MEETING, BOURNE, MA *Mar 6, 2017*
Ocean Observatories Initiative (OOI) Overview (invited talk)

SWMS FALL SYMPOSIUM, WOODS HOLE, MA *Sep 22, 2018*
"Building Community" Panel Discussion, "Tech and Engineering Careers" Breakout Session

PRINCIPLES OF OCEANOGRAPHIC INSTRUMENT SYSTEMS (MIT 2.688) *Oct 4, 2018, Nov 14, 2019,*
OOI/LOSOS tour for WHOI/MIT Joint Program class *Feb 3, 2022*

WHOI KNOW YOUR OCEAN SCIENCE CHAT, WOODS HOLE, MA *Aug 27, 2019*
"Deploying and Maintaining the OOI's Irminger Sea Array" (invited talk)

WHOI SUMMER SEMINAR SERIES, WOODS HOLE, MA (VIRTUAL) *Jun 16, 2021*
"The Ocean Observatories Initiative (OOI): Building and deploying moorings to make long term measurements in the ocean" (invited talk)

REFERENCES

Derek Buffitt	WHOI, Woods Hole, MA
Dennis McGillicuddy	WHOI, Woods Hole, MA
Al Plueddemann	WHOI, Woods Hole, MA
Libby Signell	WHOI, Woods Hole, MA
Lee Freitag	WHOI, Woods Hole, MA