

Cynthia L. Chandler
Information Systems Associate II
Marine Chemistry and Geochemistry
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**Information Systems professional with over twenty-five years experience
integrating information systems technology with oceanographic research**

EDUCATION:

Cyber-infrastructure Summer Institute for Geoscientists ... August 2006, UCSD, CA
Introduction to Photoshop ... June 2006, Woods Hole Oceanographic Institution
Cascading Style Sheets and DreamWeaver Templates ... March 2005, WHOI
Cascading Style Sheets ... December 2004, Woods Hole Oceanographic Institution
Advanced XML and XSLT ... October 2004, Woods Hole Oceanographic Institution
Introduction to XML ... June 2004, Woods Hole Oceanographic Institution
MATLAB ... Spring 2002, Woods Hole Oceanographic Institution
JAVA Programming ... December 2001, Woods Hole Oceanographic Institution
Introduction to DreamWeaver ... November 2001, WHOI
Presenting Data and Information ... April 2001, Edward Tufte, Yale University
Perl Programming ... Spring 1998, Woods Hole Oceanographic Institution
UNIX Shell Programming ... Spring 1994, University of Massachusetts Lowell
Sun System Administration, Solaris 1.0 ... Fall 1993, Sun Educational Services
Various VAX/VMS Courses ... 1987-1989, Digital Educational Services
Computer Science and Programming II ... Spring 1982, WHOI
Marine Ecology ... June - August 1975, Harvard University/Marine Biological Laboratory
B.A., Zoology, SUNY at Geneseo, NY ... May 1975

PROFESSIONAL SKILLS:

experienced user of information technology systems;
database design and management; UNIX / linux / Windows System Administration
Programming/Coding: perl, UNIX shell (variety), MATLAB, HTML, XML/XSLT, C, JAVA
Applications: DreamWeaver, Fireworks, Live Access Server, ferret, GMT, Acrobat,
Photoshop, MATLAB, Microsoft Office, Open Office, EndNote, Web Services, MySQL,
Plone, variety of Text editors

PROFESSIONAL EXPERIENCE:

October 2006. Information Systems Associate II, Marine Chemistry and Geochemistry (MC&G), team member responsible for development of Biological and Chemical Oceanography Data Management Office (BCO DMO), and providing comprehensive information systems support: database design and management; management of Microsoft Windows, RedHat linux systems; data processing and quality control; Web site design and maintenance; collaboration with data managers from US and International ocean research projects and open source software development teams; and continued support for US JGOFS and OCB data systems.

May 2005. Information Systems Associate II, Marine Chemistry and Geochemistry (MC&G), responsible for supporting information systems needs of Ocean Carbon and Biogeochemistry Coordination and Data Management Office (OCB CDMO), including: database design and management, management of Microsoft Windows, IRIX UNIX and RedHat linux systems, data processing and quality control, Web site design and maintenance and collaboration with data managers from other ocean science projects and open source software development teams (<http://ocb.whoi.edu>).

September 2000. Information Systems Associate II, Marine Chemistry and Geochemistry (MC&G), responsible for supporting information processing needs of U.S. Joint Global Ocean Flux Study (JGOFS), including: database design and management, management of Microsoft Windows platforms and SGI IRIX and Sun Solaris UNIX and RedHat linux systems, data processing and quality control, Web site design and maintenance and collaboration with U.S. GLOBEC data management staff and software development teams based at PMEL in Seattle, WA and University of Rhode Island (<http://usjgofs.whoi.edu>).

October 1994. Information Systems Associate I, Marine Chemistry and Geochemistry (MC&G), responsible for supporting information processing needs of Dr. Jean Whelan's Petroleum Organic Geochemistry Group (POGG) including: database design and management, management of MacOS, Windows NT and Solaris UNIX systems, processing of organic geochemistry data, Web site design and maintenance (<http://dynatog.whoi.edu/>).

June 1993. Information Systems Associate I, Computer and Information Services (CIS). Member of Desktop and Workstation Services Team responsible for providing WHOI with technical assistance in selecting, using and maintaining UNIX workstations and related hardware and software.

March 1991. Information Systems Associate I, Information Systems Center (ISC). VAX/VMS Software Manager responsible for installation and support of operating system and layered software.

June 1987. Programmer II, Information Processing and Communications Laboratory (IPCL), Department of Applied Ocean Physics and Engineering. Assistant System Manager of VAX/VMS computer systems responsible for installation and support of operating system and layered software, development and maintenance of system software, system tuning and performance issues, security and consulting.

March 1986. Senior Research Assistant, Department of Physical Oceanography, Woods Hole Oceanographic Institution. Principal areas of responsibility: 1) DEC microVAX system manager, 2) software specialist and data analyst for the C-SALT (Caribbean Sheets And Layers Transects) and FASINEX (Frontal Air-Sea Interaction Experiment) oceanographic field research programs and 3) consultant to the WHOI CTD Group

January 1985. Senior Research Assistant, CTD Group, Department of Physical Oceanography, Woods Hole Oceanographic Institution: position involved similar areas of responsibility as previous RA III position, but with less supervision.

January 1981. Research Assistant III, CTD Group, Department of Physical Oceanography, Woods Hole Oceanographic Institution: position involved five main areas of responsibility: 1) software specialist - responsible for maintenance and some development of both shore-based and sea-going software systems associated with CTD data acquisition, processing and archiving, 2) system manager: Hewlett-Packard 1000 and 2000 series computer systems running Real Time Executive operating system, 3) principal data analyst responsible for overseeing quality of CTD data and accuracy of calibration efforts, 4) supervisor of shipboard operations responsible for training and supervision of CTD watch standers and 5) liaison between CTD Group and scientists

June 1979. Research Assistant, Data Processing II, CTD Group, Physical Oceanography, Woods Hole Oceanographic Institution: involved in acquisition and processing of Neil Brown Instrument Systems Conductivity Temperature Depth (NBIS-CTD) data ashore and at sea

September 1975-June 1979. Various positions as Biology Research Assistant at University of Massachusetts Lanesville Research Station, Gloucester, MA, Marine Biological Laboratory and Woods Hole Oceanographic Institution, Woods Hole, MA.

PROFESSIONAL AFFILIATIONS:

Member, American Society of Information Science and Technology (ASIS&T), 2003-2006.

RESEARCH INTERESTS:

ocean informatics, database design, data management, online data systems, development of marine ontologies, marine metadata standards, use of information technology to facilitate the process by which information becomes knowledge

PROFESSIONAL ACTIVITIES:

Co-chair, WHOI Women's Committee. Oct 2004 – Oct 2006

Information Systems Specialist, NSF LTER Review Panel, April 2006

Member, WHOI Data Portal Pilot Project Team. Feb 2006 – present

Co-coordinator, Woods Hole Data Mongers Technical Users Group, Feb 2006 – present

Founding member and Membership coordinator, WHOI Women Technical Staff CIG.

Nov 2005 – present

Member, WHOI Gender Equity Program Advisory Committee. May 2005 – present

Participant, Data Management / Data Policy Workshop, NSF, Washington, DC. May 2005

Member, WHOI Ocean Informatics and Cyber-infrastructure Steering Committee

and co-chair of the Data Portal Working Group, October 2004 – September 2005

Member, WHOI 75th Anniversary Steering Committee

and member of these 75th Anniversary sub-committees:

1. Science Symposium (late September 2005)

2. Public Open House (10 September 2005)

Instructor, Tutorial, Introduction to US JGOFS Live Access Server, WHOI, July 2002.

Leader, US JGOFS Final Data Report: Design Consideration Workshop, WHOI, July 2002.
Volunteer, Volunteer in Public Schools (Falmouth), 1994 – present
Judge, Falmouth Science Fair, 2000 – present

SUPERVISION AT WHOI:

Dave Schneider. September 2000 - May 2003. Data specialist with US JGOFS.
George Heimerdinger. September 2000 - May 2003. Data specialist, US JGOFS.
Terri MacEachern. June 2002 - May 2003. temporary employee hired to assist with publication of US JGOFS final data report series.

PAPERS IN REFEREED JOURNALS AND BOOKS:

Glover, D.M., C.L. Chandler, S.C. Doney, K.O. Buesseler, G. Heimerdinger, J.K.B. Bishop, and G.R. Flierl. 2006. The U.S. JGOFS Data Management Experience, *Deep-Sea Res., II*, 53(5-7), 793-802.

OTHER PUBLICATIONS:

United States JGOFS Final Data Report: Process Study Data 1989-1998. CD-ROM. volume 1, version 2, Woods Hole Oceanographic Institution, USA: U.S. JGOFS Data Management Office, April 2003.

United States JGOFS Final Data Report: Synthesis and Modeling Project Results: part 1. CD-ROM. volume 2, version 1. Woods Hole Oceanographic Institution, USA: U.S. JGOFS Data Management Office, June 2004.

United States JGOFS Final Data Report: Synthesis and Modeling Project Results: part 2. DVD-ROM. volume 3, version 1. Woods Hole Oceanographic Institution, USA: U.S. JGOFS Data Management Office, November 2005.

United States JGOFS Final Data Report: Synthesis and Modeling Project Results: part 3. DVD-ROM. volume 4, version 1. Woods Hole Oceanographic Institution, USA: U.S. JGOFS Data Management Office, December 2005.

JGOFS International Collection DVD, Volume 1: Discrete Datasets (1989-2000). JGOFS Data Management Task Team, WDC-MARE, Bremen/Bremerhaven, Germany, May 2003.

International Collection of JGOFS (Joint Global Ocean Flux Study)
Volume 2: Integrated Data Sets (1989-2003). Sieger, R et al., JGOFS DMTT & IPO, WDC-MARE Reports 0003, 15 pp with DVD-ROM, World Data Center for Marine Environmental Sciences, Bremen/Bremerhaven, Germany, 2005 (ISSN 1611-6577).

PRESENTATIONS and POSTERS at MEETINGS and INVITED LECTURES:**OCE-0097291**

(U.S. Joint Global Ocean Flux Study: Planning and Data Management)

Chandler, C. 2001. U.S. JGOFS DMO Status Report. presentation at U.S. JGOFS Steering Committee Meeting. Woods Hole, MA. October 2001.

Chandler, C. 2002. U.S. JGOFS DMO Status Report. US representative, presentation at JGOFS DMTT Meeting. Alexandria, VA. February 2002.

Chandler, C. 2002. U.S. JGOFS DMO: Activities Status Report. Presentation at US JGOFS SMP PI Workshop. Woods Hole, MA. July 2002.

Chandler, C. 2002. U.S. JGOFS DMO Final Status Report. presentation at U.S. JGOFS Steering Committee Meeting. Alexandria, VA. October 2002.

Chandler, C. 2003a. U.S. JGOFS DMO CD-ROM Status Report. US representative, presentation at JGOFS DMTT Meeting. Bremen, Germany. February 2003.

Chandler, C. 2003b. U.S. JGOFS U.S. JGOFS DMO Final Update. US representative, presentation at JGOFS DMTT Meeting. Bidston, UK. March 2003.

Chandler, C. 2003c. U.S. JGOFS DMO: Activities Update and Final Status Report. Presentation at US JGOFS SMP PI Workshop. Woods Hole, MA. July 2003.

Chandler, C. 2003d. Adventures in Data Management: The U.S. JGOFS Experience. Engineering and Research Briefs presentation. Woods Hole, MA. September 2003.

Chandler, C. 2003e. Making Use of Current Technology to Publish a Scientific Data Report or The 21st Century WHOI Blue Cover. Hole Information and Technology Seminar Series. Woods Hole, MA. September 2003.

Chandler, C. 2003f. U.S. JGOFS Data Management. poster at JGOFS Final Open Science Conference. Washington, DC. May 2003.

Chandler, C. 2003g. Ocean Informatics: the U.S. JGOFS Experience, invited speaker at Ocean Informatics Exchange Workshop I. SIO, San Diego, CA. December 2003.

Chandler, C. 2003h. JGOFS: Reflections on Challenges Past, Present and Future, invited speaker at Ocean Informatics Exchange Workshop I. SIO, San Diego, CA. December 2003.

Chandler, C. 2003i. Tools Developed and Implemented by the U.S. JGOFS Data Management Office, poster at AGU Conference, Session U04: New Advances in Data and Service Access for Support of Science Research and Decision Support. San Francisco, CA. December 2003.

Chandler, C. 2004a. U.S. JGOFS DMO: Activities Update and Final Status Report, presentation at U.S. JGOFS SMP Workshop. Woods Hole, MA. July 2004.

Chandler, C. 2004b. Data Management at WHOI ~ the U.S. JGOFS contribution, invited speaker and participant, Joint LDEO-WHOI-SIO-SDSC Workshop. SIO, San Diego, CA. November 2004.

Chandler, C. 2005a. U.S. JGOFS Data Management ~ a retrospective, Plenary Session, invited speaker, NACP Data Management Planning Workshop. New Orleans, LA. January 2005. (trip canceled due to NE blizzard; presentation contributed electronically)

OCE-0510046

(Coordination and Data Management for Ocean Carbon Cycle Research)

Chandler, C. 2005b. Reconstituting the Ocean: A Tale from U.S. JGOFS. Participant, CTD Team Leader, Featured Speaker. MMI Workshop: Advancing Domain Vocabularies. UCAR, Boulder, CO. August 2005.

Chandler, C. and D.M. Glover. 2006. U.S. JGOFS Data Management Lessons Learned ~ *Data Management in the Wild*. poster at OCB Workshop. WHOI, Woods Hole, MA. July 2006.

Chandler, C. 2006a. EDDIES data ~ *OCB database status update*. presentation at EDDIES PI Workshop. WHOI, Woods Hole, MA. August 2006.

Chandler, C. 2006b. VERTIGO data ~ *OCB database status update*. presentation at VERTIGO Final PI Workshop. National Academy of Sciences Jonsson Conference Center, Woods Hole, MA. October 2006.

OCEANOGRAPHIC RESEARCH CRUISES:

Summary: October 1979 – June 2000. experience comprises total of 468 days at sea on 18 different oceanographic research cruises aboard six different UNOLS vessels, sailing predominantly as scientific watch leader/CTD software technician doing CTD/XBT profiling, hydrography and mooring work

October 1979 (21 days) R/V KNORR 75, WH/WH, scientific watch stander, CTD software trainee, deep-sea mooring experiment and CTD profiling in the North Atlantic

March 1980 (28 days) R/V OCEANUS 78 leg IV, Recife, Brazil/Azores, Portugal, scientific watch leader/CTD software technician, CTD profiling, hydrography, helium/tritium sampling, Beta-spiral triangle study area in the mid-Atlantic

April 1980 (18 days) R/V OCEANUS 78 leg V, Azores/WH, scientific watch leader/CTD software technician, CTD profiling, hydrography, Labrador and Norwegian Sea

Sept-Oct 1980 (34 days) R/V ATLANTIS II 107 leg XI, Punta Arenas, Chile/Punta Arenas, scientific watch leader/CTD software technician, CTD profiling, hydrography, Southern Atlantic

June 1981 (31 days) R/V ATLANTIS II 109 leg I, WH/Cadiz, Spain, scientific watch leader/CTD software technician, CTD profiling, hydrography, west-east transect at 36 North

August 1981 (30 days) R/V ATLANTIS II 109 leg III, Las Palmas, Canary Is./WH, scientific watch leader/CTD software technician, CTD profiling, hydrography, east-west transect at 24 North

June 1982 (18 days) R/V KNORR 95, WH/WH, scientific watch leader/CTD software technician, CTD profiling, hydrography, Warm Core Rings Experiment, Gulf Stream

July-August 1982 (17 days) R/V THOMAS G. THOMPSON 169, Adak, Alaska/Adak, scientific watch leader/CTD software technician, CTD profiling, hydrography, Aleutian Trench in the North Pacific

March 1983 (32 days) R/V OCEANUS 133 leg V, Walvis Bay, SA/Recife, scientific watch leader/CTD software technician, CTD profiling, hydrography, east-west transect at 11 South

April-May 1983 (31 days) R/V OCEANUS 133 leg VII, Recife/WH, scientific watch leader/CTD software technician, CTD profiling, hydrography, south-north transect at 53 West

July-Sept 1983 (46 days) R/V KNORR 104, WH/Azores/Recife, scientific watch leader/CTD software technician, CTD profiling, hydrography, north-south transect along 35 West

Nov-Dec 1983 (28 days) R/V THOMAS G. THOMPSON 178, Midway Is./Guam Is., scientific watch leader/CTD software technician, CTD profiling, hydrography, deep-sea mooring deployment and recovery (ZONAL experiment)

Sep-Oct 1984 (28 days) R/V THOMAS G. THOMPSON 184, Honolulu, HI/Midway Is., scientific watch leader/CTD software technician, CTD pro-filing, hydrography, deep-sea mooring deployment and recovery (ZONAL experiment)

Nov-Dec 1984 (21 days) R/V THOMAS WASHINGTON 3 leg 9, Montevideo, Uruguay/Rio de Janeiro, Brazil, scientific watch leader/ CTD software technician, CTD/XBT profiling, hydrography, (Brazil Current Experiment)

Mar-Apr 1985 (18 days) R/V ENDEAVOR 128, Bridgetown, Barbados/Bridgetown, scientific watch leader/CTD software technician, CTD/XBT profiling, hydrography, mooring deployment, (C-SALT experiment)

Jun-Jul 1985 (35 days) R/V THOMAS G. THOMPSON 189, Guam Is./Guam, scientific watch leader/CTD software technician, CTD profiling, hydrography, pressure gauge deployment (WEPOCS-I experiment)

Nov-Dec 1985 (18 days) R/V KNORR 118, Bridgetown, Barbados/Bridgetown, scientific watch leader/CTD software technician, CTD/XBT profiling, hydrography, mooring deployment, (C-SALT experiment)

May-June 2000 (14 days) R/V KNORR 161-7, Recife, Brazil/Norfolk,VA, , scientific watch/CTD software technician, CTD profiling, CTD data processing, hydrography