

Revision Date: July 2013

#### UNIVERSITY-NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM

Graduate School of Oceanography – University of Rhode Island
215 South Ferry Road, Narragansett, Rhode Island 02882
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#### **Application for Membership**

**Membership in UNOLS** is open to those institutions that use, or operate and use, sea-going facilities and maintain an academic program in marine science. It is intended that UNOLS institutions make substantial contributions to the national oceanographic program. Both individual institutions and consortia of such institutions may be members of UNOLS for purposes of attending UNOLS meetings, receiving UNOLS information, and other non-voting UNOLS activities.

Each UNOLS institution shall designate a representative with authority to speak and act for the institution in UNOLS matters. UNOLS representatives may authorize alternates. Addition of members shall be by application to and majority action by the existing membership.

Whereas according to the UNOLS Charter, the below named organization hereby submits application for membership in the University-National Oceanographic Laboratory System. In doing so the applicant fully understands and agrees to work towards the objectives set forth in the UNOLS Charter (<a href="http://www.unols.org/info/ucharter.html">http://www.unols.org/info/ucharter.html</a>).

**Instructions:** Please complete all sections of this application and submit to the UNOLS Office at <office@unols.org>.

Name of Institution: George Mason University

#### **Delegate to act as Representative to UNOLS:**

Name: Leila J. Hamdan

Title: Assistant Professor

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# General information on oceanographic, Sea Grant and other marine science programs:

Number of Faculty in Marine Science Programs: 16

Number of Oceanographic Researchers: 6

Number of Professional Marine Personnel (Facility support individuals): 1

Number of Oceanographic Graduate Students: 30

Approximately how many of your institution's scientists are sea-going researchers? 8

How many years has your institution been in existence? 42

# Describe your institution, its marine science research, and academic programs in marine science. (Additional details can be provided by attachment.)

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George Mason University (GMU) is the largest public university in the State of Virginia (~34K students) with a proven commitment to teaching and research. GMU offers 76 undergraduate and 123 graduate programs. Nearly one third of GMU's students are enrolled in Graduate programs.

Marine research at GMU is housed within the College of Science and is focused in two departments: Environmental Science and Policy (ESP) and Atmospheric, Oceanic and Earth Sciences (AOES).

Marine research in ESP centers on the study of conservation, population ecology, biodiversity and molecular phylogenetics in oceanic, coastal and estuarine environments. In addition, program expertise and research exist for marine spatial planning and development of environmental policy. The ESP department has PhD, MS and BS degree programs. The BS program offers a concentration in Marine, Estuarine and Freshwater Ecology. In addition, the department has two research centers, the Microbiome Analysis Center, with a significant history of extramurally funded marine research, and the Potomac Environmental Research and Education Center (PEREC) dedicated to the study of estuarine environments. PEREC maintains a fleet of small boats for estuarine studies and teaching.

Marine research in the AOES department is centered on the study of climate dynamics and modeling, geology and earth science disciplines. The AOES department offers a PhD program in Climate Dynamics which focuses on the interaction of atmosphere, ocean, and land surface to regulate climate. Tools in the program include cutting-edge climate models, computing facilities, sophisticated statistical techniques, and comprehensive data sets. In 2013, the department merged with Center for Ocean-Land-Atmosphere Studies (COLA). COLA is an national center for climate research with a long association with the Climate Dynamics PhD Program and AOES. The department also offers BS and BA programs with concentrations in Oceanography and Estuarine Science.

# Please provide a list of the research vessels that have been or are commonly used by your institution's scientists. (Additional details can be provided by attachment.)

Past vessels: R/V Cape Henlopen, R/V Clifford Barnes, OSV Vidal Gormaz (Chilean Navy), R/V Tangaroa (NIWA), R/V Cape Hatteras, R/V Hugh Sharp, USCGC Polar Sea, Current vessels: R/V Rachael Carson, R/V Pelican

### Please explain your reasons for wanting to become a UNOLS member institution (Additional details can be provided by attachment.)

Current and past research and education programs at GMU have been possible through availability and accessibility of UNOLS vessels. Thus, the university has a vested interest in providing support to UNOLS to secure the future of marine science infrastructure. GMU's interest in membership is in alignment with the objectives of UNOLS. GMU students benefit from experiential learning on oceanographic and coastal research vessels and membership will assist with facilitating opportunities. In addition, teaching across departments offering marine and estuarine science curriculum is enhanced by discoveries resulting from research supported by UNOLS.

Provide a list of your institution's oceanographic faculty and researchers. If the list is available on-line, please provide the URL in the space below; otherwise provide the faculty/researcher list as an attachment.

URL: AOES Faculty: <a href="http://aoes.gmu.edu/people/faculty\_directory">http://aoes.gmu.edu/people/faculty\_directory</a>

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ESP Faculty: <a href="http://esp.gmu.edu/faculty-staff/directory/">http://esp.gmu.edu/faculty-staff/directory/</a>
COLA Personnel: <a href="http://www.iges.org/people/people.html">http://www.iges.org/people/people.html</a>

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	l(s) greater than 75-feet LOA ow	<u>-</u>
Name:		Size:
Other oceanog	raphic facilities owned and/or op	erated by your institution:
Description:	Potomac Environmental Research and Education Center – 45,000 square foot, LEED gold environmental research and education facility on the Potomac River. The center includes water front buildings, wet and teaching labs, lecture faculties and small research vessels for estuarine, riverine and lacustrine studies.	
Description:	23'Sea Ox boat	
Description:	19' Polar Kraft boat	
Description:	14' Boston Whaler boat	
Description:	25' Carolina Skiff boat	
Description:	33' Well Craft boat	
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Please provide programs.	the URL(s) for your institution,	marine facilities or marine
Description:	Department of Environmental Science	and Policy
URL:	http://esp.gmu.edu	
Description:	Atmospheric, Oceanic and Earth Sciences Program	
URL:	http://aoes.gmu.edu	
Description:	Potomac Environmental Research and Education Center	
URL:	http://perec.gmu.edu/	
Description:	Microbiome Analysis Center (Funded research programs in marine ecology)	
URL:	http://mbac.gmu.edu	
Description:	Center for Ocean-Land-Atmosphere studies (located within the AOES dept.)	
URL:	http://www.iges.org	
Submitted by,		
Zaziniecu zy,	Signature: Name: ( Please Print)	Leila J. Hamdan
	Title:	Assistant Professor, Environmental Science and Policy Dept.
	Date:	07/09/2014

Applications should be sent to the UNOLS Office at office@unols.org.