

9,198,645, titled "Controlled Vesicle Self-Assembly in Continuous Two Phase Flow Microfluidic Channels" (NIST Docket 04-003); and U.S. Patent 8,715,591, title "Microfluidic Apparatus to Control Liposome Formation" (NIST Docket 09-017). Further details about these patents are provided in the **SUPPLEMENTARY INFORMATION** section, below.

ADDRESSES: For further information about these patented inventions or other licensing and partnership opportunities, please contact Honeyeh Zube, CRADA and License Officer, National Institute of Standards and Technology's Technology Partnerships Office, by mail to 100 Bureau Drive, Mail Stop 2200, Gaithersburg, Maryland 20899, by electronic mail to honeyeh.zube@nist.gov, or by telephone at (301) 975-2209.

SUPPLEMENTARY INFORMATION: NIST's Patent 9,198,645, titled "Controlled Vesicle Self-Assembly in Continuous Two Phase Flow Microfluidic Channels" (NIST Docket 04-003) claims novel methods for the formation of liposomes that encapsulate reagents in a continuous two-phase flow microfluidic network with precision control of size, for example, from 100 nm to 300 nm, by manipulation of liquid flow rates are described. By creating a solvent-aqueous interfacial region in a microfluidic format that is homogenous and controllable on the length scale of a liposome, fine control of liposome size and polydispersity can be achieved.

NIST's Patent 8,715,591, title "Microfluidic Apparatus to Control Liposome Formation," (NIST Docket 09-017) is available for license and claims the apparatus and method of using a microfluidic device that controls the amount of delivery compound incorporated in a liposome on a nanometer size scale using laminar flow and miscible fluids, thereby increasing loading efficiency. The patent was filed on Apr. 19, 2010 and was issued on May 6, 2014. The invention was first published in Jahn, *et al.*, Microfluidic Directed Formation of Liposomes of Controlled Size, American Chemical Society Langmuir, 23 (11) pp 6289-6293. 2007.

The liposomes formed by the self-assembly process are characterized using asymmetric flow field-flow fractionation combined with quasi-elastic light scattering and multiangle laser-light scattering. The vesicle size and size distribution are tunable over a mean diameter from 50 to 150 nm by adjusting the ratio of the alcohol-to-aqueous volumetric flow rate. Liposome formation depends more strongly on the

focused alcohol stream width and its diffusive mixing with the aqueous stream than on the shear forces at the solvent-buffer interface. The inventions have application in drug delivery, gene therapy, and potential application for on-demand liposome-mediated delivery of point-of-care therapeutics. The inventions can obviate the need for post-processing in drug manufacturing.

NIST is authorized to license its rights in these inventions to organizations on a non-exclusive or exclusive basis for specified fields of use. The rights to these patents are available for exclusive or non-exclusive licensing by the authority granted to the NIST under 35 U.S.C. 209 and 37 CFR 404. NIST researchers are interested in potential collaborations with licensees to bring this invention to practical application and to promote innovation, enhance economic security and improve quality of life.

Kevin Kimball,
Chief of Staff.

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BILLING CODE 3510-13-P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

Submission for OMB Review; Comment Request

The Department of Commerce will submit to the Office of Management and Budget (OMB) for clearance the following proposal for collection of information under the provisions of the Paperwork Reduction Act (44 U.S.C. Chapter 35).

Agency: National Oceanic and Atmospheric Administration (NOAA).

Title: Implementation of Vessel Speed Restrictions to Reduce the Threat of Ship Collisions with North Atlantic Right Whales.

OMB Control Number: 0648-0580.

Form Number(s): None.

Type of Request: Regular (extension of a currently approved information collection).

Number of Respondents: 3,047.

Average Hours per Response: 5

minutes.

Burden Hours: 254.

Needs and Uses: This request is for an extension of a current information collection. On October 10, 2008, NMFS published a final rule promulgated under the Endangered Species Act implementing speed restrictions to reduce the incidence and severity of ship collisions with North Atlantic right whales (73 FR 60173). That final rule

contained a collection-of-information requirement subject to the Paperwork Reduction Act (PRA). Specifically, 50 CFR 224.105(c) requires a logbook entry to document that a deviation from the 10-knot speed limit was necessary for safe maneuverability under certain conditions.

In certain sea and weather conditions, a large ship may lose maneuverability at slow speeds. Therefore, under such conditions a ship, at the captain's discretion, may opt not to abide by the speed restrictions. If she/he chooses this option, she/he is required to make an entry into the ship's log, providing such information as: the reasons for the deviation, the speed at which the vessel is operated, the area, and the time and duration of such deviation.

Affected Public: Business or other for-profit organizations.

Frequency: On occasion.

Respondent's Obligation: Mandatory.

This information collection request may be viewed at reginfo.gov. Follow the instructions to view Department of Commerce collections currently under review by OMB.

Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to OIRA_Submission@omb.eop.gov or fax to (202) 395-5806.

Dated: November 3, 2016.

Sarah Brabson,

NOAA PRA Clearance Officer.

[FR Doc. 2016-27012 Filed 11-8-16; 8:45 am]

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DEPARTMENT OF DEFENSE

Office of the Secretary

[Docket ID: DOD-2016-OS-0062]

Submission for OMB Review; Comment Request

ACTION: Notice.

SUMMARY: The Department of Defense has submitted to OMB for clearance, the following proposal for collection of information under the provisions of the Paperwork Reduction Act.

DATES: Consideration will be given to all comments received by December 9, 2016.

FOR FURTHER INFORMATION CONTACT: Fred Licari, 571-372-0493.

SUPPLEMENTARY INFORMATION:

Title, Associated Form and OMB Number: Synchronized Predeployment and Operational Tracker Enterprise Suite (SPOT-ES); OMB Control Number 0704-0460.