



BILLING CODE 3510-DS-P

DEPARTMENT OF COMMERCE

International Trade Administration

University of Minnesota-Twin Cities, et al.

Notice of Consolidated Decision on Applications  
for Duty-Free Entry of Scientific Instruments

This is a decision pursuant to Section 6(c) of the Educational, Scientific, and Cultural Materials Importation Act of 1966 (Pub. L. 89-651, as amended by Pub. L. 106-36; 80 Stat. 897; 15 CFR part 301). Related records can be viewed between 8:30 A.M. and 5:00 P.M. in Room 3720, U.S. Department of Commerce, 14<sup>th</sup> and Constitution Ave, NW, Washington, D.C.

Comments: None received. Decision: Approved. We know of no instruments of equivalent scientific value to the foreign instruments described below, for such purposes as each is intended to be used, that was being manufactured in the United States at the time of its order.

Docket Number: 13-034. Applicant: University of Minnesota-Twin Cities, Minneapolis, MN 55455. Instrument: Diode-Pumped Solid-State Femtosecond Laser. Manufacturer: Light Conversion, Lithuania. Intended Use: See notice at 78 FR 64916, October 30, 2013. Comments: None received.

Decision: Approved. We know of no instruments of equivalent scientific value to the foreign instruments described below, for such purposes as this is intended to be used, that was being manufactured in the United States at the time of order. Reasons: The instrument will be used to study non-equilibrium materials processes ranging spatially from the atomic-scale up to micrometers and temporally from femtoseconds to seconds, including thermal transport, energy conversion (e.g., light to heat), crystallization, melting, phase transformations, fracture, and other dynamic events. The unique characteristics of the instrument required for the research objectives include a variable repetition rate from single-shot to 1 MHz controlled with TTL input for external triggering or via computer interface, 0.2 mJ/pulse (<30 kHz), 6 Watts at 1 MHz, collinear output from a harmonics module of fundamental (1030 nm), second harmonic (515 nm), and third

harmonic (343 nm) with additional optics for operation at low and high repetition rates.

Docket Number: 13-036. Applicant: UChicago Argonne, Lemont, IL 60439. Instrument: High pressure crystal growth furnace with Siemens programmable logic controller. Manufacturer: SCIDRE-Scientific Instruments, Germany. Intended Use: See notice at 78 FR 64916, October 30, 2013. Comments: None received. Decision: Approved. We know of no instruments of equivalent scientific value to the foreign instruments described below, for such purposes as this is intended to be used, that was being manufactured in the United States at the time of order. Reasons: The instrument will be used to create transition metal oxides, including oxides of iron, manganese, copper, cobalt, vanadium, iridium, ruthenium, rhenium, titanium, nickel, and zinc. It will also be used to grow crystals of intermetallic phases, which are non-oxides of these same transition metals, alloyed with lanthanide metals and/or main group metals (e.g., Al, Si, Bi). These materials will be created to understand a variety of physical phenomena including superconductivity, metal-insulator transitions, and magnetism. With the crystals grown on the instrument,

a variety of tests will be performed including magnetic measurements, structural determination by x-ray or neutron scattering, and electrical transport. The unique characteristics of this instrument required for the research objectives include operation at pressures of oxygen or inert gases up to 150 atm, measurement of image zone using pyrometric probes, and cleansing of inert gas stream to better than  $10^{-12}$  ppm oxygen with monitoring during process.

Docket Number: 13-037. Applicant: Georgia Health Sciences University, Augusta, GA 30912. Instrument: Imaging System/Digital Microscope and Accessories. Manufacturer: Till Photonics, Germany. Intended Use: See notice at 78 FR 649161, October 30, 2013. Comments: None received. Decision: Approved. We know of no instruments of equivalent scientific value to the foreign instruments described below, for such purposes as this is intended to be used, that was being manufactured in the United States at the time of order. Reasons: The instrument will be used for fluorescence imaging of cellular organelles and calcium flux, photo-activation and photo-bleaching fluorescent proteins to study cellular organelles

(mitochondria) and intracellular ion flux. The unique characteristics of the instrument include fast wavelength change, a dichromotome system, and two different light sources that are incorporated and readily switchable, incorporated into a single unit of a wide field fluorescence microscope.

Gregory W. Campbell,  
Director,  
Subsidies Enforcement Office,  
Enforcement and Compliance.

March 7, 2014 \_\_\_\_\_  
Date