MEMORANDUM OF UNDERSTANDING

between

UT-BATTELLE, LLC

and

LUXEMBOURG INSTITUTE OF SCIENCE AND TECHNOLOGY

regarding

Collaboration on the Project entitled "Imaging the Nanoworld: Correlative Ion-electron Spectroscopy on the Orion Helium Ion Microscope – HELION"

This Memorandum of Understanding (MOU) is between UT-Battelle, LLC (UT-Battelle) and Luxembourg Institute of Science and Technology (LIST), hereinafter collectively referred to as the "Participants." Oak Ridge National Laboratory (ORNL) is a Department of Energy (DOE) national laboratory, managed and operated by UT-Battelle, a limited liability company, organized and existing under the laws of the State of Tennessee, pursuant to DOE Contract No. DE-AC05-000R22725.

LIST is a facility located at 5, avenue des Hauts Fourneaux in L-4362 Esch-sur-Alzette, Grand Duchy of Luxembourg. LIST conducts interdisciplinary research in targeted research areas which have a sustainable impact on Luxembourg's economy and society.

I. BACKGROUND/PURPOSE

LIST has submitted a project entitled "Imaging the nanoworld: correlative ion-electron spectroscopy on the Orion Helium Ion Microscope — HELION," hereinafter referred to as "Project," to its national funding agency—the National Research Fund in Luxembourg.

The Participants are interested in basic science discussions on the subject of the Project. Therefore, UT-Battelle and LIST intend to cooperate in a mutually beneficial manner to pursue these objectives.

II. ROLES OF THE PARTICIPANTS

The Participants intend to:

- a. Organize meetings with an agenda set jointly by the Points-of-Contact specified in Section III.1 of this MOU; and
- b. Organize visits to discuss the Project and to promote potential future collaboration in this

III. GENERAL CONSIDERATIONS

1. **POINTS-OF-CONTACT.** The designated Points-of-Contact for implementation of this MOU are:

UT-BATTELLE, LLC

Name: David Joy

Title: Distinguished Scientist and Professor

Phone: (865) 574-6799

LIST

Name: Tom Wirtz

Title:

Phone: +352 470261 540

- 2. This MOU does not create any legally binding obligations between the Participants. Any commitment of funds, protection and allocation of intellectual property rights, disclosure of proprietary information, or commitment of other resources is to be made under a separate agreement. The Participants do not intend, or expect, to create intellectual property under this MOU. If it appears that cooperative activities under this MOU may result in the creation of intellectual property, the Participants should enter into a written agreement therefor or restructure the cooperative activities to avoid the creation of intellectual property.
- 3. Each Participant should conduct the activities under this MOU in accordance with the laws and regulations to which it is subject, and applicable international agreements to which its government is party.
- 4. Cooperation under this MOU may commence upon signature and continue until November 30, 2017, unless discontinued in accordance with paragraph 5 of this Section. This MOU may be extended or modified by mutual written consent of the Participants.

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The Participants may discontinue this MOU at any time by mutual consent in writing. Alternatively, a Participant that wishes to discontinue its participation in this MOU should endeavor to provide at least sixty (60) days advance notice in writing to the other Participant.

Signed in duplicate.

FOR	UT-BA	TTELLE	E, LLC:

Name: Michelle V. Buchanan

Title: Associate Laboratory Director,

Physical Sciences

Date: December 9, 2015

Place: Oak Ridge National Laboratory

LUXEMBOURG INSTITUTE OF FOR SCIENCE AND TECHNOLOGY:

Title: Director of MRT

Damien LENOBLE

Deputy Director MRT Department