

MEMORANDUM OF UNDERSTANDING
BETWEEN
THE EGYPT-JAPAN UNIVERSITY OF SCIENCE AND TECHNOLOGY
AND
THE PACIFIC NORTHWEST NATIONAL LABORATORY OPERATED
BY BATTELLE MEMORIAL INSTITUTE
CONCERNING
COOPERATION IN THE AREA OF COSMIC RAY MUON DETECTION

I. PARTICIPANTS

This Memorandum of Understanding ("MOU") is between The Egypt-Japan University of Science and Technology ("E-JUST"), a research institute in Alexandria, Egypt, and the Pacific Northwest National Laboratory ("PNNL") operated by Battelle Memorial Institute under U.S. Department of Energy Contract No. DE-AC05-76RL01830, located in Richland, WA. U.S.A. E-JUST and PNNL are sometimes referred to in this MOU, collectively, as the "Participants" and each, individually, as a "Participant".

II. PURPOSE

The purpose of this MOU is to document the intention of the Participants to explore future cooperation to enhance the ability of the Participants to achieve their respective research missions through sharing of information and the cooperation of staff, to the extent contemplated in this MOU, and to promote the enhancement of the quality of science, technology, education, and industrial development in the area of muon detection technology.

III. AREAS OF COOPERATION

The Participants intend to cooperate in the area of muon detection technology including, but not limited to, the following selected topics:

- A. Application of existing muon detection technology to pyramid structure detection;
- B. Algorithm development for muon detection;
- C. Next generation muon detection design; and
- D. Construction of next generation muon detection systems.

IV. OBJECTIVES

The planned cooperative efforts may include, but are not limited to, the following:

- A. Communication and exchange between researchers;
- B. Planning for potential future collaborative research opportunities, with any specific future research and development collaboration to be implemented only pursuant to an appropriate mutually acceptable written agreement therefor;
- C. Holding workshops, joint lectures, and symposia; and
- D. Exchange of publicly available information and materials.

V. NON-BINDING COMMITMENTS

This MOU does not create any legally binding obligations between the Participants and shall not be construed to provide any cause of action for or by any person or entity. This MOU is neither a fiscal nor a funds obligation document. Nothing in this MOU authorizes or is intended to obligate the Participants to expend, exchange, or reimburse funds, services, or supplies, or transfer or receive anything of value. As the need may arise, specific details of support to be furnished by each of the Participants may be developed separately from this MOU in specific, mutually acceptable, agreements or contracts, subject to the availability of funds.

VI. INTELLECTUAL PROPERTY

The Participants do not anticipate the transfer of rights in intellectual property under this MOU and nothing in this MOU is to be construed as a transfer of any intellectual property rights. If the Participants decide that a particular activity may lead to the creation of intellectual property, they should consult with each other and make appropriate, mutually acceptable, written arrangements with respect thereto.

VII. PROPRIETARY AND NON-PUBLIC INFORMATION

In the event that any activities under this MOU would benefit from one Participant's use of another Participant's proprietary or non-public information, the Participants intend to enter into good faith negotiations to produce a mutually acceptable written agreement regarding the obligations and terms associated with the exchange of any such proprietary or non-public information.

VIII. DISCLAIMER

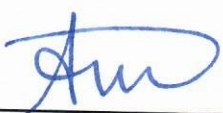
Neither Participant makes any representations or warranties, express or implied, with respect to any information disclosed in connection with this MOU or with respect to any activities conducted in connection with this MOU, including, without limitation, any representations or warranties as to the quality, accuracy, completeness or reliability of any information exchanged.

IX. DURATION, MODIFICATION, AND DISCONTINUATION

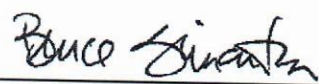
Cooperation under this MOU may commence upon signature by the Participants and may continue for 5 years unless discontinued in accordance with this Section. This MOU may be modified, extended, or discontinued upon mutual written consent of the Participants. If either Participant wishes to discontinue participation, they intend to endeavor to provide 30 days advance written notice to the other Participant.

Signed in duplicate.

On behalf of THE EGYPT-JAPAN
UNIVERSITY OF SCIENCE AND
TECHNOLOGY

By: 
Title: President, E-JUST
Date: 21.12.2020
Place: NBA, EGYPT

On behalf of THE PACIFIC
NORTHWEST NATIONAL
LABORATORY OPERATED BY
BATTELLE MEMORIAL INSTITUTE

By: 
Bruce Simanton
Title: Sponsored Programs Manager
Date: 11/20/20
Place: Richland WA