Memorandum of Understanding for Research Collaboration between

RIKEN Nishina Center for Accelerator-Based Science, Japan and

Faculty of Science, Chiang Mai University, Thailand

This Memorandum of Understanding for Research Collaboration (hereinafter referred to as "MOU") is entered into by and between RIKEN Nishina Center for Accelerator-Based Science, a research center of RIKEN, a National Research and Development Institute duly organized and existing under the laws of Japan, having its head office at 2-1, Hirosawa, Wako, Saitama, 351-0198, Japan (hereinafter referred to as "RNC") and Faculty of Science, Chiang Mai University, having its address at 239 Huaykaew Road, Tumbol Suthep, Amphur Muang, Chiang Mai 50200 THAILAND (hereinafter referred to as "FSCMU"). RNC and FSCMU hereinafter referred to collectively as the "Parties" and individually as a "Party".

Now, therefore, the Parties hereby agree as follows:

Article 1: Purpose and Collaborative Programs and Activities

The Parties in furtherance of their mutual interests in education and research, and as a contribution to increased international co-operation between them, hereby agree to implement, within the framework of the laws, regulations and guidelines which apply to each of the institutions and subject to the availability of resources, the following programs and activities (hereinafter referred to as "Collaborative Activities"):

- (i) Exchange of researchers and staff,
- (ii) Exchange of scientific and technological information, including delivering lectures and holding joint seminars and symposia,
- (iii) Exchange of students (in particular doctoral students),
- (iv) Exchange of scientific and technological research materials,
- (v) Joint research projects,
- (vi) Any other programs and activities incidental to the foregoing.

When implementing joint research projects or other specific programs, separate written agreements shall be entered into between the Parties.

Article 2: Liaison Offices

Each Party shall designate a liaison office for this MOU, to which the other Party shall give all notices and other communications under this MOU as follows:

For RNC:

Name: Dr. Hideki Ueno

Title: Director, Nuclear Spectroscopy Laboratory

Email: ueno@riken.jp

For FSCMU:

Name: Dr. Piyarat Nimmanpipug

Title: Assoc. Prof., Department of Chemistry, Faculty of Science, Chiang Mai University

Email: piyarat.n@cmu.ac.th

Article 3: Cost

As a general rule, each Party shall bear the costs relating to its contribution to the activities. However, costs for implementation of the activities shall be confirmed on a case-by-case basis after mutual consultation. The travel cost of sending representatives from one Party to the other shall be borne by the sending Party, while their living and accommodation expenses shall be borne by the host Party. The support of their living

and accommodation expenses by each Party is contingent upon the availability of funds. Each trip will be subject to the mutual consent of the Parties, regarding time, duration and planned activities. Transport costs related to equipment and materials shall be covered by the sending Party, unless the Parties agree on alternative arrangements.

Article 4: Facility

Each Party shall make its accelerator and experiment facilities available for use by the scientists from the other Party. The Parties shall use their respective reasonable efforts for customs clearance of a measuring instrument for joint experiments.

Article 5: Proprietary Information

All information and/or research materials held by one Party prior to the commencement of or outside the scope of any specific program or activity under this MOU and provided to the other Party in the course of such specific program or activity shall remain the property of the providing Party, and shall not be used for any purpose other than the specific program or activity hereunder without prior written approval from the providing Party. Specifically, the Parties hereby confirm and agree that none of the information and/or research materials received from the other Party shall be used for the development, manufacture, use, or storage of weapons of mass destruction (WMD) (which are defined as nuclear weapons, chemical or bacterial substance for military use, equipment used for spraying such substance, or rockets or unmanned air vehicles used for delivering them), conventional weapons, or materials, components, or products used in these weapons.

All written information (including research materials) marked or designated in writing as "Confidential" or similar by the Party providing the information shall be considered as confidential information (hereinafter referred to as the "Confidential Information"). Such Confidential Information shall be kept confidential by the receiving Party and shall not be disclosed to any third party without prior written approval from the providing Party. However, Confidential Information shall not include any information that is:

- (i) already known to the receiving Party at the time of disclosure hereunder; or
- (ii) now or hereafter becomes publicly known other than through acts or omissions of the receiving Party; or
- (iii) is disclosed to the receiving Party by a third party under no obligation of confidentiality to the providing Party; or
- (iv) independently developed by the receiving Party without reliance on the Confidential Information of the providing Party.

Notwithstanding any provision to the contrary herein, the receiving Party may disclose the providing Party's Confidential Information if required to do so in a legal proceeding or before a governmental body, provided that the receiving Party promptly notifies the providing Party of the requirement.

Article 6: Intellectual Property Rights

All intellectual property solely conceived and/or developed by RNC independently of FSCMU during the course of this MOU shall be owned by RIKEN. All intellectual property solely conceived and/or developed by FSCMU independently of RNC during the course of this MOU shall be owned by FSCMU. Intellectual property jointly conceived and/or developed by RNC and FSCMU shall be jointly owned by RIKEN and FSCMU. Each Party may use such property for research and scholarly purposes. RIKEN and FSCMU agree to collaborate in the protection and treatment of such jointly-owned intellectual property, if appropriate, and application of such intellectual property for commercial or other purposes. The terms for such collaboration for protection and treatment of the intellectual property shall be negotiated in good faith between the Parties in a co-ownership agreement before any industrial and/or commercial exploitation.

Article 7: Publication

The Parties shall jointly publish the result of their joint activities. In the event of sole publication by either Party, the prior written consent of the other Party shall be obtained; provided that such consent shall not

unreasonably be withheld. In such a case, the contribution of the other Party shall be acknowledged in accordance with internationally accepted practice.

Article 8 : Dispute Resolution

Any issues that are not addressed or stipulated in this MOU shall be agreed and resolved through negotiation in good faith, and such resolution may be incorporated as written amendments to this MOU by mutual agreement between the Parties. The Parties further agree that any dispute between the Parties will be settled as amicably as possible.

Article 9: Amendment

Any agreement to change the terms of this MOU in any way shall be valid only if the change is made and approved by mutual agreement in writing executed by authorised representatives of the Parties hereto.

Article 10: Duration of the MOU

This MOU shall be effective for a period of one (1) year commencing from October 1, 2024 to September 30, 2025, on the understanding that subject to review and mutual written agreement it may be renewed for another term of one (1) year upon each expiry.

However, this MOU may be terminated by either Party by giving six (6) months' prior written notice to the other Party. If this MOU is terminated for any reason, the Parties shall make all reasonable efforts to complete or put in place adequate arrangements to complete each Party's commitments to the various on-going specific programs or activities.

The provisions in Articles 5, 6 and 7 shall remain in force for three (3) years after the expiration or termination of this MOU. The provision in Article 8 shall remain in force indefinitely.

Article 11: Compliance with Laws, Regulations and Conventions

All research activities conducted in connection with the Collaborative Activities under this MOU shall be done in compliance with all applicable laws, regulations and guidelines of the countries or regions and institutions in which the research is conducted, and international conventions and protocols ratified by the country or region to which each Party belongs.

IN WITNESS WHEREOF the Parties hereto have caused this MOU to be duly executed by their authorised representatives in duplicate and each Party shall retain one (1) copy. In the event of any discrepancy in the text of the MOU held by both parties, this MOU shall be deemed invalid. In the case of using an electronic file, both parties shall send a file signed by their authorized representatives to each other, and the other party shall sign the signed file and retain it.

For RNC:

Hiroyoshi Sakurai

Director

Nishina Center for Accelerator-Based Science. RIKEN

Date: September 30th, 2024

For FSCMU:

Torranin Chairuangsri

Dean

Faculty of Science, Chiang Mai University

Date: September 30th, 2024