

**MEMORANDUM OF UNDERSTANDING**  
**On the Collaboration between**  
**RIKEN, Japan**  
**and**  
**Alexander Butlerov Institute of Chemistry,**  
**Kazan (Volga region) Federal University, Russia**

RIKEN and Alexander Butlerov Institute of Chemistry, Kazan (Volga region) Federal University (hereafter referred to as 'KFU'; both hereafter referred to as 'Parties' collectively or 'Party' individually),

in reference to the Memorandum of Understanding between Alexander Butlerov Institute of Chemistry and Organic Chemistry Department, Kazan Federal University and RIKEN entered into on September 9, 2013 and

in recognition of the significant scientific collaboration in the field of organic chemistry between RIKEN and KFU, and the desire of the scientists of both Parties to conduct collaborative research,

hereby agree to conclude this Memorandum of Understanding on collaboration (hereafter referred to as 'MOU') to expand and strengthen scientific collaboration between the Parties, including the establishment of the Biofunctional Chemistry Laboratory as a KFU-RIKEN Joint Laboratory, as follows:

**Article 1: Purpose of this MOU**

The purpose of this MOU is to expand and advance research activities of mutual interest in the field of organic chemistry. The Biofunctional Chemistry Laboratory will be established at KFU in order to promote this collaboration.

## **Article 2: Collaborative Activities**

Under this MOU, the following collaboration activities (hereafter referred to as 'Collaborative Activities') will be promoted.

- a) Joint research projects conducted by scientists of both Parties including the operation of the Biofunctional Chemistry Laboratory
- b) Exchange of scientists, undergraduate and graduate students between the Parties
- c) Scientific exchanges in the form of seminars, workshops and symposia
- d) Educational programs conducted by RIKEN scientists including the RIKEN-KFU joint lecture course
- e) Other forms of cooperation based on mutual written agreement

When a proposition is made by either Party to implement a Collaborative Activity that is not covered by this MOU but that is considered acceptable by the other Party, both Parties will negotiate and agree in writing on the terms and conditions of such Collaborative Activity.

## **Article 3: Location for the Activities and Responsibilities**

The Collaborative Activities shall take place at RIKEN and KFU. To promote joint research projects focused on organic chemistry including the development of innovative glycoconjugate and biofunctional chemistry at KFU, the Biofunctional Chemistry Laboratory shall be established at KFU.

KFU: KFU shall provide the appropriate space, human resources and best technical support for the Biofunctional Chemistry Laboratory.

RIKEN: A scientist from RIKEN shall co-supervise and support this laboratory.

To accomplish a joint research project to develop innovative glycoconjugates that selectively recognize target organs or tumors, three sub-projects will be carried out: the Glyco-Synthetic project will be carried out at both KFU and RIKEN, the Glyco-Targeting project will be conducted at KFU, and the Glyco-Interaction project will be carried out at RIKEN. Additional research in other areas of biofunctional chemistry will be performed at both KFU and RIKEN.

Each Party shall bear the costs relating to its contribution to the Collaborative Activities.

However, in the event that Russian Government Program of Competitive Growth of Kazan

Federal University ('PCG') is applicable in the performance of this MOU, PCG provisions shall take precedence.

#### **Article 4: Educational contribution and exchange of scientists, undergraduate and graduate students**

As part of the Collaborative Activities, contribution to the educational programs and active exchange of scientists, undergraduate and graduate students are encouraged.

For this purpose, RIKEN scientists may provide a RIKEN-KFU joint lecture course for students at KFU, starting with the field of chemistry. Lectures will be given either at KFU or by videoconferencing. All expenses incurred by RIKEN scientists to visit for this lecture course will be borne by KFU.

Undergraduate and graduate students of KFU may visit and stay at RIKEN as interns or International Program Associates (IPA). In the case of interns, all expenses shall be borne by KFU. RIKEN laboratory heads may also apply to host KFU graduate students as IPAs, in which case the costs for accepting such graduate students will be basically borne by RIKEN.

#### **Article 5: Confidentiality and Intellectual Property Rights**

5-1. All information held by one Party prior to or outside the Collaborative Activities and provided to the other Party in the course of the Collaborative Activities shall remain the property of the supplying Party, shall be kept confidential by the receiving Party, and shall not be disclosed to any third party or used for any purpose other than for the Collaborative Activities hereunder without prior written approval from the supplying Party.

5-2. The results obtained or generated from Collaborative Activities (hereinafter referred to as the "Results") shall in principle become the joint property of the Parties. Neither Party shall disclose the Results to a third party without prior written consent from the other Party, and such consent shall not unreasonably be withheld.

5-3. Intellectual property rights generated from Collaborative Activities (hereinafter referred to as the "Intellectual Property Rights") shall be jointly owned by the Parties unless



otherwise agreed upon between the Parties in writing. Any application for Intellectual Property Rights (hereinafter referred to as the "Application"), unless otherwise agreed upon, shall be jointly filed by the Parties hereto. The Parties shall have interests and shares in the Intellectual Property Rights in proportion to their contributions to the Collaborative Activities which generated such Intellectual Property Rights, and shall share in the costs and expense of protecting such Intellectual Property Rights in the same proportion, unless otherwise agreed upon between the Parties.

5-4. Each Party hereto shall not commercially exploit the Results or assign or grant a license to a third party under Intellectual Property Rights or Applications thereof without prior written consent of the other Party; such consent shall not unreasonably be withheld.

#### **Article 6: Publication**

The Parties shall jointly publish the Results. In the event of sole publication by either Party, the prior written consent of the other Party shall be obtained; 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 7: 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 under this MOU will be settled as amicably as possible.

All differences and disputes which cannot be resolved or settled between the Parties will be finally settled by arbitration under the rules of conciliation and arbitration of the International Chamber of Commerce, by one or more arbitrators appointed in accordance with the said rules. The award of the arbitrator(s) shall be final and binding on both Parties.

#### **Article 8: Amendment**

This MOU may be amended by the mutual written agreement of both Parties.

#### **Article 9: Duration**

9-1. This MOU shall become effective upon signature by both Parties and remain valid for a period of five (5) years thereafter, unless either Party chooses to terminate it sooner having first given ninety (90) days written notice of this intention to the other Party.

9-2. This MOU may be extended for a further five (5) year term by mutual written agreement with the same terms, including the right of renewal.


9-3. The provisions in Articles 5 and 6 shall remain in force for five (5) years after the expiration or termination of this MOU. The provision in Article 7 shall remain in force indefinitely.

#### **Article 10: Compliance with Laws and Regulations**

All research activities conducted in connection with the Collaborative Activities shall be done in compliance with all applicable laws, regulations and guidelines of the countries and institutions (including those relating to export controls) in which the research is conducted.

Each Party shall sign two identical copies of this MOU, and shall retain one copy.

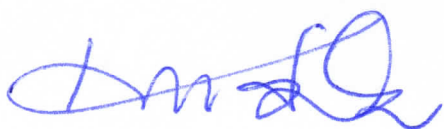
On behalf of RIKEN



KAWAI Maki

Executive Director

Date: June 11<sup>th</sup>, 2014

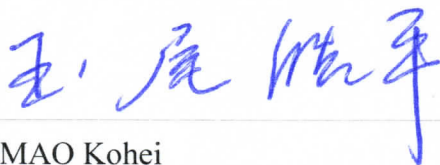


TANAKA Katsunori

Associate Chief Scientist

Date: June 17<sup>th</sup>, 2014

Witness



TAMAO Kohei

Director

RIKEN Global Research Cluster

On behalf of KFUP



GAFUROV Ihsat

Rector

Date: June 17<sup>th</sup>, 2014



KURBANGALIEVA Almira

Associate Professor

Date: June 17<sup>th</sup>, 2014



GALKIN Vladimir

Director

Alexander Butlerov Institute of Chemistry