

(1) JOHNSON MATTHEY PLC

- AND -

(2) UNIVERSITY OF CHEMISTRY AND TECHNOLOGY, PRAGUE

PHD STUDENTSHIP AGREEMENT

This **AGREEMENT** is made the 1st day of October 2018

BETWEEN

- (1) **JOHNSON MATTHEY PUBLIC LIMITED COMPANY** of 5th Floor, 25 Farringdon Street, London EC4A 4AB, ("JM") of the first part; and
- (2) **UNIVERSITY OF CHEMISTRY AND TECHNOLOGY PRAGUE** of Technická 5, Prague 166 28, Czech Republic, ID No. CZ60461373 ("the University") of the second part..

each a "Party" and together "the Parties"

WHEREAS

- (A) The Student (as defined below) is a postgraduate at the University, appointed to undertake the Research (as defined below).
- (B) JM and the University wish to record the terms and conditions that will apply to the Research and its funding.

NOW IT IS HEREBY AGREED AS FOLLOWS:-

1. DEFINITIONS

In this Agreement:

- | | |
|------------------------------------|--|
| "Academic Supervisor" | means |
| "Arising Intellectual Property" | means any inventions whether or not patentable, designs, knowhow, information, data, results, findings and copyright material arising out of and in the course of performing the Research, whether or not made solely by the Student, employees of the University and/or other personnel engaged in the Research in any way; |
| "Background Intellectual Property" | means any inventions whether or not patented, designs, knowhow, information, data, results, findings and copyright material either existing at the date hereof or generated independently of the Research, which is made available by a Party hereto for use only in the Research; |
| "Confidential Information" | means information, samples, technical knowledge, technical drawings, specifications, know-how, |

	experience and data of a secret and confidential nature including such information samples, technical knowledge, technical drawings, specifications, know-how, experience and data within Arising Intellectual Property and/or Background Intellectual Property to the extent that the same is unpublished which is disclosed by the University or JM ("Disclosing Party") the other Party or the Student (each a "Receiving Party") for the progress of the Research;
"Effective Date"	Means 1 October 2018;
"Industrial Supervisor"	means
"JM Group"	means JM and its subsidiary companies (subsidiary being as defined in section 1159 of the UK Companies Act 2006);
"JM Site"	means JM's site at Chilton, Sonning Common, or Royston where some of the Research may be carried out;
"Materials"	means any material provided by JM for use in the Research;
"Research"	means research ; means ; means the bound copy of any thesis on the Research prepared by the Student.
"Student"	
"Thesis"	

2. PERFORMANCE OF THE RESEARCH

- 2.1 The Research shall commence on the Effective Date and shall continue for a period of four (4) years.
- 2.2 The Research shall be carried out by the Student at the University under the supervision of the Academic Supervisor. For the purposes of the Research, JM will be represented by the Industrial Supervisor to whom all invoices and correspondence should be addressed. The University shall be entitled to change its nominee for the position of Academic Supervisor with JM's prior written consent, such consent not to be

unreasonably withheld.

- 2.3 The Research shall be performed at the University, except that at the request of JM, the Student may spend up to ninety (90) days over the term of the Agreement (usually up to thirty (30) days per year) working on the Research at a JM Site at times which are convenient to JM.
- 2.4 The Student and any University personnel who visit any JM Site shall comply with JM's site rules and regulations currently in force governing the activities of those using JM premises, particularly those relating to JM's environment, health, safety and security standards and with any other instructions that may be given in this respect on JM's behalf.
- 2.5 The University shall use all reasonable endeavours to supply materials and equipment needed for those parts of the Research that are carried out at the University.
- 2.6 JM shall:
 - (i) use all reasonable endeavours to supply materials and equipment needed for those parts of the Research that are carried out at the JM Site; and
 - (ii) make available in confidence to the University and to the Student such Background Intellectual Property owned by JM as JM considers to be necessary for the efficient performance of the Research.
- 2.7 The University, JM and the Student shall take all reasonable steps to ensure satisfactory progress of the Research and its completion within four (4) years of the date of commencement of the Research.
- 2.8 The obligations of the University shall be limited to the making available of such Background Intellectual Property owned or controlled by the University as the University considers to be necessary for the efficient performance of the Research and the exercise of reasonable endeavours to ensure success of the Research. For the avoidance of doubt it is hereby declared that the University does not undertake that the Research will generate any particular information or guarantee that the Research will be successful in achieving any particular result.

3. PAYMENTS

- 3.1 By way of consideration for the obligations accepted by the University and the Student under the terms of this Agreement, JM shall pay sums to the University according to the following payment schedule, payment to be due in each case within 30 days of the receipt by JM of an appropriate invoice:

(i)

For the avoidance of doubt these amounts are exclusive of VAT which, if applicable, shall be charged by the University at the prevailing rate.

- 3.2 The University hereby undertakes to pay to the Student that portion of the invoiced sum which is due to the Student.
- 3.3 JM will pay reasonable travel expenses incurred by the Student or the Supervisor during any visits to the JM Site or other JM premises that either or both of them may make at JM's request.
- 3.4 Where the Student undertakes part of the Research at a JM Site and requires accommodation in the vicinity, JM shall at JM's discretion either (i) pay remuneration to the Student at the same rate which it would pay to other students at postgraduate level working at the JM Site, or (ii) make a one off payment or payments intended to cover or contribute to the costs of the Student's travel, board and lodgings or (iii) arrange, and pay for, accommodation locally.

4. REPORTS

JM shall have complete access to, and the University shall disclose to JM without restriction and without unreasonable delay, all experimental and other results and conclusions arising from the Research whether carried out at the University, at a JM Site or elsewhere. To this end, the Student and the Academic Supervisor shall maintain detailed records and shall provide JM with detailed progress reports on the Research at regular intervals to be agreed with the Industrial Supervisor but at least once every calendar quarter. The first of such reports is to be produced within three (3) months of the commencement of the Research. A detailed final written report shall be prepared by the Academic Supervisor and/or the Student and provided to JM within thirty (30) days of completion of the Research.

5. INTELLECTUAL PROPERTY

- 5.1 All Background Intellectual Property belonging to each Party is and shall remain the exclusive property of the Party owning it (or, where applicable, the third party from whom its right to use the Background Intellectual Property has derived).
- 5.2 Each Party grants the other Party a royalty-free, non-transferable, non-exclusive licence to use its Background Intellectual Property for the sole purpose of the performance of the Research.
- 5.3 Arising Intellectual Property shall vest and be owned as follows:
- (i) to the extent that the Arising Intellectual Property is generated or developed by JM alone then it shall vest in and be owned absolutely by JM;
 - (ii) to the extent that the Arising Intellectual Property is generated or developed by JM jointly with the Student or with any employee of the University, then it shall vest in and be owned jointly by JM and the University;
 - (iii) to the extent that the Arising Intellectual Property is generated or developed by the Student alone or with any employee of the University then it shall vest in and be owned absolutely by the University.
- 5.4 The University and the Student agree that in respect of any invention to which Clause 5.3 (i) or (ii) apply, they will do all things as may be necessary to enable JM (should it wish to do so) to apply for any intellectual property rights in the United Kingdom and elsewhere, and will, at JM's expense, make or co-operate in any such applications, execute all necessary documents and (in respect of any invention to which Clause 5.3 (i) applies) assign all rights therein to JM or as JM may direct. JM agrees that in respect of any invention to which Clause 5.3 (iii) applies, it will do all things as may be necessary to enable the University (should it wish to do so) to apply for any intellectual property rights in the United Kingdom and elsewhere, and will, at the University's expense, make or cooperate in any such applications, execute all necessary documents and assign all rights therein absolutely and beneficially to the University, or as the University may direct.
- 5.5 If the exploitation of any Arising Intellectual Property by JM is dependent upon Background Intellectual Property belonging to the University, then JM shall be entitled to a non-exclusive, worldwide license to use such Background Intellectual Property on fair and reasonable terms to be agreed.
- 5.6 JM hereby grants to the University a royalty-free irrevocable, non-transferable, non-exclusive licence to use its published Arising Intellectual Property for non-commercial activities such as teaching and scientific research.

- 5.7 The University hereby grants to JM a royalty-free, irrevocable, non-transferable, non-exclusive, right and licence including the right to sub-licence members of the JM Group to use the results of the Research and any associated Arising Intellectual Property owned by the University.
- 5.8 The University hereby grants JM an option to take an exclusive licence under any Arising Intellectual Property owned by the University. JM may exercise this option by giving notice in writing to the University at any time up to 2 years after completion of the Research.
- 5.9 The terms of any licence provided for in Clause 5.5 and/or 5.8 above shall be negotiated in good faith by JM and the University and shall contain all such terms and conditions which are usual and customary in a licence agreement, including but not limited to liability, audit provisions, termination, governing law provisions. The financial terms of any licence will be fair and reasonable commercial terms in the circumstances. Should JM and the University be unable to agree on the terms of such licence, the dispute shall be referred to an arbitrator appointed by the President of the Law Society for his opinion (or, if so agreed at the time of reference, his decision). The Parties will be guided by such opinion on a further attempt to resolve their dispute or, if a decision is requested and given, will agree to be bound by it.

6. PUBLICATIONS

- 6.1 The Research will form part of the actual carrying out of a primary charitable purpose of the University; that is, the advancement of education through teaching and research.
- 6.2 In accordance with normal academic practice, all employees, students, agents or appointees of the University (including the Student and any others who work on the Research) shall be permitted, following the procedures laid down in Clause 6.3, to publish Arising Intellectual Property, to discuss Arising Intellectual Property in internal seminars and to give instructions within the University on questions related to such work.
- 6.3 All proposed publications (including, but not limited to, scientific publications, patent applications and non-confidential presentations), shall be submitted in writing to the other of JM and the University for review at least thirty (30) days before submission for publication or before presentation, as the case may be. The reviewing Party may require the deletion from the publication of any Background Intellectual Property of the reviewing Party, or an amendment to the publication through which commercially sensitive Confidential Information is disguised to the satisfaction of the reviewing Party. The reviewing Party may also request the delay of the publication if in the reviewing Party's opinion the delay

is necessary in order to seek patent or similar protection for Arising Intellectual Property owned by the reviewing Party. Any delay imposed on publication shall not last longer than is reasonably necessary for the reviewing Party to obtain the required protection; and shall not exceed six (6) months from the date of receipt of the proposed publication by the reviewing Party. Notification of the requirement for delay in publication must be received by the publishing Party within thirty (30) days after receipt of the proposed publication by the reviewing Party, failing which the publishing Party shall be free to assume that the reviewing Party has no objection to the proposed publication.

- 6.4 Each Party agrees that any publication in a scientific/academic journal shall give due acknowledgement to the financial and/or intellectual contribution of the others in accordance with standard scientific practice.
- 6.5 Clause 6 does not apply to the submission of the Thesis, which is governed by Clause 7.

7. THESIS

- 7.1 This Agreement shall not prevent or hinder the Student from submitting for degrees of the University Theses based on the results of the Research, as outlined in the Schedule (as may be amended from time to time in accordance with Clause 7.2) nor from following the University's procedures for examination and for admission to postgraduate degree status.
- 7.2 During the Research, the Academic Supervisor, the Industrial Supervisor and the Student shall identify at the progress meetings any Background Intellectual Property of JM which the Student may wish to incorporate into the Research. JM shall decide whether or not to allow the identified Background Intellectual Property to be used in the Research. If this decision gives rise to a requirement to amend the description of the Research in the Schedule, such amendment shall be mutually agreed in principle between the Academic Supervisor, the Industrial Supervisor and the Student and forwarded to the contracting authorities of the University and JM for authorisation.
- 7.3 The Student shall follow the University's regulations for the submission of the Thesis or Theses for examination. In any event the Student shall submit a draft Thesis to the Academic Supervisor and Industrial Supervisor at least thirty (30) days prior to the date for submission for examination.
- 7.4 The Student may not, without JM's express written consent, include in any Thesis any Background Intellectual Property or Arising Intellectual Property belonging solely to JM which is not directly related to the Research. JM shall have the right to require that the thesis be placed on

restricted access for up to the maximum period permitted under the University's regulations if it contains any of the JM's Confidential Information or this is necessary in order to seek patent or similar protection for Arising Intellectual Property.

8. MATERIALS

During the term of this Agreement it may be necessary for JM to provide the University with various Materials for which the following terms will apply:

- 8.1 If JM provides any Materials to the University, the Materials will be provided solely for use in the Research, in the University's laboratories and/or on University premises only. The University undertakes that any Materials provided will be used only by the Academic Supervisor, the Student and such persons under the direct supervision of the Academic Supervisor as are required to perform the Research. The Materials will not be provided to any other scientist or institution (public or private) without prior written permission from JM.
- 8.2 The University accepts that certain Materials may be experimental in nature and will be provided without warranties of any kind expressed or implied. JM accepts no liability for damages which might arise in connection with their use, storage or disposal by the University. Furthermore, JM makes no representation that the use of the Materials provided by it will not infringe any patent, copyright, trademark or other proprietary rights.
- 8.3 On termination of the Agreement the University will discontinue use of the Materials and at the direction of JM any remaining Materials will be returned to JM or destroyed, and destruction certified by the University.
- 8.4 All experimental work within the Research and any destruction of Materials pursuant to Clause 8.3 above will be carried out in accordance with all applicable local, national and international legislation relating to the safe handling, use and disposal of potentially hazardous materials.
- 8.5 If JM considers it to be necessary for the efficient performance of the Research, JM may lend to the University free of charge such quantities of precious metal as it considers to be appropriate on the understanding that these Materials will be returned to JM on termination of the Agreement.

9. CONFIDENTIALITY AND RESTRICTED USE

- 9.1 The Receiving Party hereby undertakes:-
 - (i) to keep confidential all Confidential Information disclosed by the Disclosing Party;

- (ii) not to disclose the Disclosing Party's Confidential Information to any third party or individual not directly associated with the Research;
- (iii) to disclose the Disclosing Party's Confidential Information only to those of its employees who need to know such Confidential Information for the purposes of the Research; and
- (iv) not to use any Confidential Information for any purpose other than for the proper performance of the Research.

9.2 The provisions of Clauses 9.1 shall not apply to any Confidential Information:

- (i) which is already known to the Receiving Party at the date on which it arises or on which it is acquired or which the Receiving Party may subsequently obtain from a third party with good legal title thereto, provided in each case that the Receiving Party also has the right to disclose and/or make use of the same;
- (ii) which is generally available to the public at the date on which it arises or is acquired;
- (iii) which is independently developed by the Receiving Party without recourse to the Disclosing Party's Confidential Information,
- (iv) as from the date when such information becomes generally available to the public otherwise than as the result of a breach of this Agreement; or
- (v) which is required to be disclosed pursuant to the requirement of any law or regulation (provided, in the case of a disclosure under the Freedom of Information Act 2000, none of the exceptions to that Act applies to the information disclosed) or on the order of any Court of competent jurisdiction, and the Party required to make that disclosure has informed the other, within a reasonable time in advance of the requirement to disclose and the information required to be disclosed.

9.3 Clause 9.1 shall not preclude the Academic Supervisor or the Student from drawing on their retained knowledge of any new science, new techniques for executing research or general experience gained in the course of the Research in their future research activities. For the avoidance of doubt, "research" where used in this paragraph, shall mean only such academic research as is normally carried out within the University and specifically excludes any teaching or research done by any other entities such as University spin-out companies.

9.4 The University shall ensure any third party appointed to examine the Student accepts the same obligations of confidentiality as are accepted by the University under this Agreement in respect of the content of the Thesis.

- 9.5 The obligations of confidentiality, non-disclosure and restricted use as detailed in this Clause 9 shall remain in force for the duration of this Agreement and for ten (10) years after its expiry or termination.

10. TERMINATION

- 10.1 This Agreement will expire four (4) years from the Effective Date or upon the date of receipt by the University of the Thesis if such date is later than four (4) years from the Effective Date.
- 10.2 This Agreement may be terminated by either JM or the University by giving written notice to the other Party if the other Party commits a material breach of any term of this agreement and (if such breach is remediable) fails to remedy that breach within a period of thirty (30) days after being requested in writing to do so.
- 10.3 JM shall have the right to terminate this Agreement upon 30 days' notice in writing if the Academic Supervisor is unwilling or unable to continue to direct the Research and the University has not been able to provide a replacement acceptable to JM.
- 10.4 Completion or earlier termination of the Research shall not affect the rights granted or obligations accepted by virtue of this Agreement.

11. LIMITATION OF LIABILITY

- 11.1 The University makes no representation or warranty that advice or information given by the Student, the Academic Supervisor or any other of the University's employees, students, agents or appointees who works on the Research, or the content or use of any materials, works or information provided in connection with the Research, will not constitute or result in infringement of third-party rights.
- 11.2 The University accepts no responsibility for any use which may be made of any work carried out under or pursuant to this Agreement, or of the results of the Research, nor for any reliance which may be placed on such work or results, nor for advice or information given in connection with them.
- 11.3 JM undertakes to make no claim in connection with this Agreement or its subject matter against the Academic Supervisor or any other employee, student, agent or appointee of the University (apart from claims based on fraud or wilful misconduct). This undertaking is intended to give protection to individual researchers: it does not prejudice any right which JM might have to claim against the University.
- 11.4 The liability of any Party for any breach of this Agreement, or arising in any other way out of the subject matter of this Agreement, will not extend

to loss of business or profit, or to any indirect or consequential damages or losses.

- 11.5 The maximum liability of the University to JM under or otherwise in connection with this Agreement shall not exceed four times the value of the payments received under Clause 3.1. For the avoidance of doubt, nothing in this Clause 11 shall be deemed to exclude or limit in any way the University's liability for intentional wrongdoing or the University's statutory liability in respect fraud or of death or personal injury caused to any person as a result of the University's negligence.

12. MISCELLANEOUS

- 12.1 By signing this Agreement, the Student agrees to and accepts the provisions of Clauses 2, 4, 5, 7 and 9 hereof.
- 12.2 An amendment to this Agreement shall only be valid if it is in writing and signed by or on behalf of each Party.
- 12.3 This Agreement sets out the whole agreement and understanding between the Parties in relation to its subject matter and supersedes any arrangement, understanding or previous agreement between them relating to the same.
- 12.4 The failure by JM or the University at any time or for any period to enforce or exercise any term of this Agreement shall not constitute a waiver of such term and shall not affect the right later to enforce such term or any other term.
- 12.5 This Agreement and all disputes and claims arising out its subject matter shall be governed by and construed in accordance with English law and the Parties irrevocably submit to the exclusive jurisdiction of the English courts.
- 12.6 This Agreement may be executed in one or more counterparts by the parties by a person having authority to bind the party, each of which when executed and delivered by facsimile, electronic transmission or by mail delivery, will be an original and all of which shall constitute but one and the same Agreement.

Date: