

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4594612

<b>SUBMISSION TYPE:</b>	RESUBMISSION
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>RESUBMIT DOCUMENT ID:</b>	504500022
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
KWUN LUN CHO	10/26/2015
FRANK CARUSO	10/28/2015
SANDRA ELIZABETH KENTISH	10/27/2015
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	THE UNIVERSITY OF MELBOURNE
<b>Street Address:</b>	PARKVILLE
<b>City:</b>	VICTORIA
<b>State/Country:</b>	AUSTRALIA
<b>Postal Code:</b>	3010
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15550560
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(404)815-6550
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
<b>Phone:</b>	404-815-6500
<b>Email:</b>	husmith@kilpatricktownsend.com
<b>Correspondent Name:</b>	KILPATRICK TOWNSEND & STOCKTON LLP MAILS
<b>Address Line 1:</b>	1100 PEACHTREE STREET
<b>Address Line 2:</b>	SUITE 2800
<b>Address Line 4:</b>	ATLANTA, GEORGIA 30309
<b>ATTORNEY DOCKET NUMBER:</b>	062496-1058501
<b>NAME OF SUBMITTER:</b>	HUI CHIN SMITH
<b>SIGNATURE:</b>	/Hui Chin Smith/
<b>DATE SIGNED:</b>	09/14/2017
<b>Total Attachments: 30</b>	
source=1058501 Deed of Assignment - Dr Kwun Lun Cho to Univ Melbourne#page1.tif	
source=1058501 Deed of Assignment - Dr Kwun Lun Cho to Univ Melbourne#page2.tif	

source=1058501 Deed of Assignment - Dr Kwun Lun Cho to Univ Melbourne#page3.tif  
source=1058501 Deed of Assignment - Dr Kwun Lun Cho to Univ Melbourne#page4.tif  
source=1058501 Deed of Assignment - Dr Kwun Lun Cho to Univ Melbourne#page5.tif  
source=1058501 Deed of Assignment - Dr Kwun Lun Cho to Univ Melbourne#page6.tif  
source=1058501 Deed of Assignment - Dr Kwun Lun Cho to Univ Melbourne#page7.tif  
source=1058501 Deed of Assignment - Dr Kwun Lun Cho to Univ Melbourne#page8.tif  
source=1058501 Deed of Assignment - Dr Kwun Lun Cho to Univ Melbourne#page9.tif  
source=1058501 Deed of Assignment - Dr Kwun Lun Cho to Univ Melbourne#page10.tif  
source=1058501 Deed of Assignment - Frank Caruso to Univ Melbourne#page1.tif  
source=1058501 Deed of Assignment - Frank Caruso to Univ Melbourne#page2.tif  
source=1058501 Deed of Assignment - Frank Caruso to Univ Melbourne#page3.tif  
source=1058501 Deed of Assignment - Frank Caruso to Univ Melbourne#page4.tif  
source=1058501 Deed of Assignment - Frank Caruso to Univ Melbourne#page5.tif  
source=1058501 Deed of Assignment - Frank Caruso to Univ Melbourne#page6.tif  
source=1058501 Deed of Assignment - Frank Caruso to Univ Melbourne#page7.tif  
source=1058501 Deed of Assignment - Frank Caruso to Univ Melbourne#page8.tif  
source=1058501 Deed of Assignment - Frank Caruso to Univ Melbourne#page9.tif  
source=1058501 Deed of Assignment - Frank Caruso to Univ Melbourne#page10.tif  
source=1058501 Deed of Assignment - Sandra Elizabeth Kentish to Univ Melbourne#page1.tif  
source=1058501 Deed of Assignment - Sandra Elizabeth Kentish to Univ Melbourne#page2.tif  
source=1058501 Deed of Assignment - Sandra Elizabeth Kentish to Univ Melbourne#page3.tif  
source=1058501 Deed of Assignment - Sandra Elizabeth Kentish to Univ Melbourne#page4.tif  
source=1058501 Deed of Assignment - Sandra Elizabeth Kentish to Univ Melbourne#page5.tif  
source=1058501 Deed of Assignment - Sandra Elizabeth Kentish to Univ Melbourne#page6.tif  
source=1058501 Deed of Assignment - Sandra Elizabeth Kentish to Univ Melbourne#page7.tif  
source=1058501 Deed of Assignment - Sandra Elizabeth Kentish to Univ Melbourne#page8.tif  
source=1058501 Deed of Assignment - Sandra Elizabeth Kentish to Univ Melbourne#page9.tif  
source=1058501 Deed of Assignment - Sandra Elizabeth Kentish to Univ Melbourne#page10.tif



## DEED OF ASSIGNMENT

THIS DEED is executed on the day of *22 January 2016*

BETWEEN

THE UNIVERSITY OF MELBOURNE (ABN 84 002 705 224) a body politic and corporate established in 1853 and constituted under the University of Melbourne Act 2009 (Vic) of Melbourne, Victoria, 3010

(University)

AND

Dr. Kwun Lun Cho

Address: 16 Haid-Und-Neu-Str. Karlsruhe 76131 Germany

E-mail: cho.lun@partner.kit.edu

(Assignor)

### RECITALS.

- A. The Assignor has contributed to the development of the Technology as an employee of the University.
- B. The Assignor wishes to acknowledge that any Intellectual Property Rights subsisting in the Technology, to the extent that the Assignor contributed to the development of the Technology, vest in the University pursuant to the Assignor's contract of employment and the University Statute in force at the relevant time.
- C. To the extent that the Assignor retains or continues to hold any right, title or interest in the Intellectual Property Rights subsisting in the Technology, the Assignor wishes to assign such Intellectual Property Rights to the University.
- D. The University and the Assignor wish to record their understanding in accordance with this Deed.

## **AGREED TERMS**

### **1. DEFINITIONS AND INTERPRETATION**

---

#### **1.1 In this Deed:**

**Business Day** means, when used to determine when a Notice is received, an obligation must be or is fulfilled, or a right must be or is exercised, a day in the place in which that notice is received, obligation must be or is fulfilled or right must be or is exercised (as the case may be) other than a Saturday, Sunday, public holiday or (in the case of a notice received by, obligation fulfilled by or right exercised by the University) a University holiday as indicated on the University calendar (as amended from time to time) in that place.

**Claim** means any claim, demand, action or proceeding of any nature however it arises and whether it is present or future, fixed or unascertained, actual or contingent.

**Commercialise**, in relation to the Technology, means:

- (a) to use, manufacture, sell, hire, promote, import, or otherwise exploit a Product or to provide a service utilising any part of the Technology;
- (b) to use or disclose any Technical Information and other confidential information comprised in the Technology;
- (c) in respect of a copyright work or other subject matter in which copyright subsists, to exercise any of the rights of a copyright owner in relation to any work or other subject matter comprised in the Technology; or
- (d) to conduct clinical trials or any other research, development and testing required to establish commercial viability of a Product;

including licensing any person to do any of the above, or to assign to any person or otherwise dispose of the Technology, and Commercialisation has a corresponding meaning.

**Deed** means this Deed of Assignment.

**Encumbrance** means a mortgage, charge, pledge, lien or title retention arrangement, a right of set off or right to withhold payment of a deposit or other money, or any easement, restrictive covenant, caveat or similar restriction over property, or an agreement to create or to allow any of them to exist.

**Intellectual Property Rights** means all rights in the field of intellectual property and industrial property including:

- (a) copyright, rights in respect of inventions (including patents) registered and unregistered trademarks (including service marks), rights in designs plant varieties, circuit layouts and Know How and any right to have information kept confidential;
- (b) any application or right to apply for registration of the rights referred to in paragraph (a); and
- (c) all rights or forms of protection of a similar nature or having equivalent or similar effect to any of the rights in paragraph (a) or (b) which may subsist anywhere in the world.

**Invention** means the invention described in Schedule 1.

**Know How** means all information not in the public domain including inventions, drawings, design, circuit diagrams, computer programs, data, formulae, specifications, methodologies and techniques, design procedures and procedures for experiments and tests, results of experiments and tests, and information relating to the design, assembly, manufacture, supply or use of any Products and Materials.

**Materials**, in relation to the Technology, means any chemical or biological substances including any: organic or inorganic element or compound; nucleotide or nucleotide sequence including DNA and RNA sequences; gene; vector or construct including plasmids, phages, bacterial vectors, bacteriophages and viruses; host organism including bacteria, fungi, algae, protozoa and hybridomas; eukaryotic or prokaryotic cell line or expression system or any development strain or product of that cell line or expression systems; protein including any peptide or amino acid sequence, enzyme, antibody or protein conferring targeting properties and any fragment of a protein or a peptide enzyme or antibody; drug or pro-drug; assay or reagent; any other genetic or biological material or micro-organism or any transgenic animal; and any physical property rights relating to any of the foregoing.

**Moral Rights** has the meaning ascribed in the Copyright Act 1968 (Cth), as amended, and similar rights in jurisdictions outside Australia.

**Notice** has the meaning given to it in clause 7.

**Patents** mean the patents and patent applications claiming and/or relating to the Invention, including Australia 2015900431 filed on 11/02/2015 entitled Chlorine Resistant Polyelectrolyte multilayer membranes for desalination, and all applications and granted patents or other similar forms of protection anywhere in the world claiming priority with or from such patents including utility model and design patents and certificates of invention and all divisionals, continuations, continuations-in-part, reissues, renewals, extensions, additions, supplementary protection certificates or equivalent to any such patent applications and patents.

**Product** means any material, product, kit, method or use which:

- (a) uses or is manufactured using or otherwise incorporates any part of the Technology; and/or
- (b) the manufacture, sale, method or use of which, is the subject of or falls within any claim of any of the Patents.

**Technical Information** means Know How developed by the Assignor which is necessary for or useful to the Commercialisation of the Technology.

**Technology** has the meaning given to it in Schedule 1.

**University Statute** means The University of Melbourne Statutes.

1.2 In this Deed:

- (a) a reference to the Technology includes a reference to any part of the Technology;
- (b) the singular includes the plural and vice versa;

- (c) a reference to a clause, paragraph or schedule is to a clause, paragraph or schedule to this Deed;
- (d) a reference to a party is to a party to this Deed;
- (e) a reference to a person includes a natural person, partnership, body corporate, association, governmental or local authority or agency or other entity;
- (f) a reference to a statute or other law includes regulations and other instruments under it and consolidations, amendments, re-enactments or replacements of any of them;
- (g) the meaning of general words is not limited by specific examples introduced by including, for example or similar expressions;
- (h) nothing in this Deed is to be interpreted against a party solely on the ground that the party prepared or put forward the Deed or any part of it; and
- (i) headings are for reference only and do not affect interpretation.

## **2. COMMENCEMENT**

---

- 2.1 This Deed will take effect on and from the date on which the last party signs this Deed.

## **3. ACKNOWLEDGEMENT AND ASSIGNMENT OF INTELLECTUAL PROPERTY RIGHTS**

---

- 3.1 The Assignor acknowledges that any Intellectual Property Rights subsisting in the Technology, to the extent that the Assignor contributed to the development of the Technology, vest in the University pursuant to the Assignor's contract of employment and the University Statute in force at the relevant time (including Statute 14.1 of the University Statute).
- 3.2 To the extent that the Assignor retains or continues to hold any right, title or interest in the Intellectual Property Rights subsisting in the Technology notwithstanding the acknowledgement in clause 3.1, the Assignor assigns to the University such right, title and interest in those Intellectual Property Rights (including future Intellectual Property Rights) subsisting in the Technology, including:
- (a) the Patents;
  - (b) Technical Information;
  - (c) copyright in the Technology;
  - (d) the Materials;
  - (e) the absolute right to apply for registration as the proprietor of any Intellectual Property Rights subsisting in the Technology anywhere in the world; and
  - (f) the absolute right to do anything in relation to ownership, protection and use of any Intellectual Property Rights subsisting in the Technology anywhere in the world.

- 3.3 The Assignor must do all things and execute all documents necessary to give effect to this Deed and render all assistance reasonably required by the University for the purpose of confirming, recording or perfecting the assignment under clauses 3.2.
- 3.4 The Assignor acknowledges that the University owns all physical property rights in the Materials.

#### **4. CONSIDERATION**

---

- 4.1 The University agrees and acknowledges that:
- (a) upon the assignment of the Intellectual Property Rights subsisting in the Technology to the University; and
  - (b) to the extent that the Intellectual Property Rights subsisting in the Technology is licensed, or assigned by the University, to a third party in which the Assignor does not have a shareholding interest,

the University will pay to the Assignor a share of the net royalties received by the University derived from Commercialisation of the Intellectual Property Rights subsisting in the Technology or otherwise reward the Assignor for the Assignor's contribution to the development of the Technology (as the case may be) in accordance with Statute 14.1 of the University Statute and any applicable policies pursuant to the University Statute in force at the time this Deed is executed.

#### **5. ASSIGNOR'S WARRANTIES AND CONSENT**

---

- 5.1 The Assignor warrants to the University that:
- (a) the Assignor is entering into this Deed in the Assignor's personal capacity and not as an employee of the University; and
  - (b) the Assignor has received independent legal advice in relation to this Deed or has decided not to obtain independent legal advice.
- 5.2 To the best of the Assignor's knowledge, the Assignor warrants to the University that:
- (a) the Assignor contributed to the creation, implementation or development of the Technology in the performance of the Assignor's role and duties as an employee of the University;
  - (b) to the extent that the Assignor assigns any right, title or interest in or to Intellectual Property Rights in clause 3.2, the Assignor is a legal and beneficial owner of the Intellectual Property Rights subsisting in the Technology (including the Patents, Technical Information and any copyright in the Technology);
  - (c) the Intellectual Property Rights subsisting in the Technology (including the Patents, Technical Information and any copyright in the Technology) do not infringe the Intellectual Property Rights of any other person;
  - (d) the Assignor has not knowingly granted any licences or Encumbrances in relation to the Intellectual Property Rights subsisting in the Technology;

- (e) the Assignor has not received any notice of any Claim in respect of the Technology or the Intellectual Property Rights subsisting in the Technology;
  - (f) the Assignor has disclosed all agreements and arrangements, whether or not formal or informal with third parties, including but not limited to material transfer agreements, collaboration agreements, consultancies and all sources of funding contributions pertaining to the Technology and its development;
  - (g) the Assignor has notified the University of all public disclosures, either written or oral, including but not limited to publications, abstracts, articles, presentations, journal submissions, thesis (including the final PhD oration presentation) containing or describing the Technology of which the Assignor is aware;
  - (h) the Assignor has notified the University of any other person or party that contributed to the development of the Technology; and
  - (i) the Assignor has not done or failed to do anything whereby the whole or any part of the rights assigned under this Deed might be invalidated or registration of them refused.
- 5.3 The Assignor consent to acts or omissions that would otherwise infringe the Assignor's Moral Rights in any copyright subsisting in the Technology including as a result of any use of such copyright in the Patent.
- 5.4 To the extent that the Technology is not in the public domain as at the effective date of this Deed, the Assignor agrees to maintain the confidentiality of the Technology (including the Technical Information) until the Technology becomes part of the public domain other than as a result of a breach of confidence by the Assignor.
- 5.5 If, at any time on or after the date of this Deed, the Assignor becomes aware of any fact, matter or circumstance which may materially affect the University's Intellectual Property Rights subsisting in the Technology, the Assignor must promptly notify the University in writing of the relevant particulars.

## **6. ASSIGNOR'S INDEMNITY**

---

- 6.1 The Assignor indemnifies the University against any losses, costs, actions, claims, demands, expenses, judgements, court orders or other liabilities arising out of or in connection with any negligent or deliberate breach by the Assignor of the warranties or undertakings contained in clause 5.

## **7. NOTICE**

---

- 7.1 Any notice, demand, consent, approval or communication given pursuant to the provisions of this Deed (Notice) will be deemed to have been properly given if delivered, in writing, in person, or mailed by registered mail to the following addresses, or another address as may be designated in writing by the receiving Party from time to time during the term of this Deed:

Name: University of Melbourne

Address: University of Melbourne, Parkville, VIC 3010



Fax number: +61 (0) 3 9810 3268

Attention: Chief Financial Officer

Name: **Dr. Kwun Lun Cho**

Address: 16 Haid-Und-Neu-Str. Karlsruhe 76131 Germany

Email address: cho.lun@partner.kit.edu

7.2 A Notice given in accordance with this clause takes effect when taken to be received (or at a later time specified in it), and is taken to be received:

- (a) if hand delivered, on delivery;
- (b) if sent by prepaid post, on the second Business Day after the date of posting (or on the seventh Business Day after the date of posting if posted to or from a place outside Australia);
- (c) if sent by facsimile, when the sender's facsimile system generates a message confirming successful transmission of the entire Notice unless, within eight Business Hours after the transmission, the recipient informs the sender that it has not received the entire Notice,

but if the delivery, receipt or transmission is not on a Business Day or is after 5.00pm on a Business Day, the Notice is taken to be received at 9.00am on the next Business Day.

## **8. GENERAL**

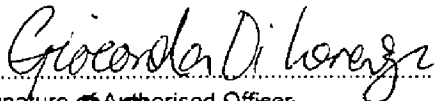
---

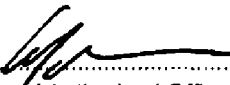
- 8.1 This Deed contains the entire agreement between the parties with respect to its subject matter and supersedes all prior agreements and understandings between the parties.
- 8.2 This Deed can only be amended or replaced or novated by another document signed by the parties.
- 8.3 Any provision of this Deed which is unenforceable or partly unenforceable is, where possible, to be severed to the extent necessary to make this Deed enforceable, unless this would materially change the intended effect of this Deed.
- 8.4 A provision of or a right created under this Deed may not be:
  - (a) waived except in writing signed by the Party granting the waiver; or
  - (b) varied except in writing signed by the Parties.
- 8.5 The rights provided in this Deed are cumulative with and not exclusive of the rights provided by law independently of this Deed.
- 8.6 Each Party must pay its own costs in connection with the entry into this Deed and compliance with its terms.
- 8.7 This Deed may be signed in counterparts each of which are an original and together constitute the same Deed.

8.8 This Deed is governed by the law of the State of Victoria, Australia, and the parties submit to the jurisdiction of the courts of that State.

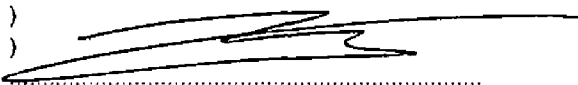
Executed as a Deed

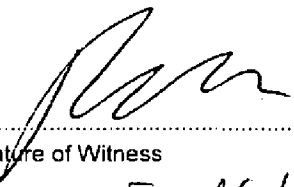
Signed sealed and delivered as a Deed by and on behalf of The University of Melbourne by its authorised officers pursuant to Statute 1.5.6 of The University of Melbourne Statutes:

)  
)  
)   
Signature of Authorised Officer  
Name: **Gioconda Di Lorenzo**  
**University Secretary**  
Date: 22/1/2016

  
Signature of Authorised Officer  
Name: 20/1/16  
Professor Glyn Davis  
Date: VICE-CHANCELLOR

Signed sealed and delivered as a Deed by Dr. Kwun Lun Cho

)  
)   
Signature of Authorised Officer  
Name: Kwun Lun Cho  
Date: 26.10.2015

  
Signature of Witness  
Name: Dr. Engel S. Redel  
Date: 26.10.2015

## **SCHEDULE 1**

### **Invention**

UoM Commercial Tech ID 2014-091 entitled Chlorine Resistant Polyelectrolyte multilayer membranes for desalination

A membrane for reverse osmosis, forward osmosis or nanofiltration comprising (a) a water permeable, charged substrate and (b) a plurality of polyelectrolyte bilayers deposited on at least one side of the substrate, each

polyelectrolyte bilayer comprising a layer of a cationic polyelectrolyte material and a layer of an anionic polyelectrolyte material wherein the anionic polyelectrolyte material is sulfonated polysulfone. In yet an even further aspect the present invention provides a method of forming a membrane, the method comprising the steps of:

(a) providing a charged substrate;

(b) depositing a plurality of polyelectrolyte bilayers on at least one side of the charged

substrate, each polyelectrolyte bilayer comprising a layer of a cationic polyelectrolyte material

and a layer of an anionic polyelectrolyte material wherein the anionic polyelectrolyte material

is a sulfonated polysulfone. In yet an even further aspect the present invention provides a method of treating water

to increase its purity using the membrane of the invention. In one aspect the method comprises providing a feed stream of water to be treated and contacting a membrane of the invention with the feed stream to produce a permeate stream and a retentate stream wherein the permeate stream has a higher level of purity than the feed stream.

### **Technology**

(a) any Intellectual Property Rights in the Invention;

(b) any Patents;

(c) Technical Information existing as at the effective date of this Deed that is not in the public domain; and

(d) the Materials.



## DEED OF ASSIGNMENT

THIS DEED is executed on the day of 14 / 11 / 2015

### BETWEEN

**THE UNIVERSITY OF MELBOURNE** (ABN 84 002 705 224) a body politic and corporate established in 1853 and constituted under the University of Melbourne Act 2009 (Vic) of Melbourne, Victoria, 3010

(University)

AND

**Prof. Frank Caruso**

Address: 31 Bowen Street Camberwell Victoria 3124 Australia

E-mail: fcaruso@unimelb.edu.au

(Assignor)

### RECITALS

- A. The Assignor has contributed to the development of the Technology as an employee of the University.
- B. The Assignor wishes to acknowledge that any Intellectual Property Rights subsisting in the Technology, to the extent that the Assignor contributed to the development of the Technology, vest in the University pursuant to the Assignor's contract of employment and the University Statute in force at the relevant time.
- C. To the extent that the Assignor retains or continues to hold any right, title or interest in the Intellectual Property Rights subsisting in the Technology, the Assignor wishes to assign such Intellectual Property Rights to the University.
- D. The University and the Assignor wish to record their understanding in accordance with this Deed.

## AGREED TERMS

### 1. DEFINITIONS AND INTERPRETATION

---

#### 1.1 In this Deed:

**Business Day** means, when used to determine when a Notice is received, an obligation must be or is fulfilled, or a right must be or is exercised, a day in the place in which that notice is received, obligation must be or is fulfilled or right must be or is exercised (as the case may be) other than a Saturday, Sunday, public holiday or (in the case of a notice received by, obligation fulfilled by or right exercised by the University) a University holiday as indicated on the University calendar (as amended from time to time) in that place.

**Claim** means any claim, demand, action or proceeding of any nature however it arises and whether it is present or future, fixed or unascertained, actual or contingent.

**Commercialise**, in relation to the Technology, means:

- (a) to use, manufacture, sell, hire, promote, import, or otherwise exploit a Product or to provide a service utilising any part of the Technology;
- (b) to use or disclose any Technical Information and other confidential information comprised in the Technology;
- (c) in respect of a copyright work or other subject matter in which copyright subsists, to exercise any of the rights of a copyright owner in relation to any work or other subject matter comprised in the Technology; or
- (d) to conduct clinical trials or any other research, development and testing required to establish commercial viability of a Product;

including licensing any person to do any of the above, or to assign to any person or otherwise dispose of the Technology, and Commercialisation has a corresponding meaning.

**Deed** means this Deed of Assignment.

**Encumbrance** means a mortgage, charge, pledge, lien or title retention arrangement, a right of set off or right to withhold payment of a deposit or other money, or any easement, restrictive covenant, caveat or similar restriction over property, or an agreement to create or to allow any of them to exist.

**Intellectual Property Rights** means all rights in the field of intellectual property and industrial property including:

- (a) copyright, rights in respect of inventions (including patents) registered and unregistered trademarks (including service marks), rights in designs plant varieties, circuit layouts and Know How and any right to have information kept confidential;
- (b) any application or right to apply for registration of the rights referred to in paragraph (a); and
- (c) all rights or forms of protection of a similar nature or having equivalent or similar effect to any of the rights in paragraph (a) or (b) which may subsist anywhere in the world.

**Invention** means the invention described in Schedule 1.

**Know How** means all information not in the public domain including inventions, drawings, design, circuit diagrams, computer programs, data, formulae, specifications, methodologies and techniques, design procedures and procedures for experiments and tests, results of experiments and tests, and information relating to the design, assembly, manufacture, supply or use of any Products and Materials.

**Materials**, in relation to the Technology, means any chemical or biological substances including any: organic or inorganic element or compound; nucleotide or nucleotide sequence including DNA and RNA sequences; gene; vector or construct including plasmids, phages, bacterial vectors, bacteriophages and viruses; host organism including bacteria, fungi, algae, protozoa and hybridomas; eukaryotic or prokaryotic cell line or expression system or any development strain or product of that cell line or expression systems; protein including any peptide or amino acid sequence, enzyme, antibody or protein conferring targeting properties and any fragment of a protein or a peptide enzyme or antibody; drug or pro-drug; assay or reagent; any other genetic or biological material or micro-organism or any transgenic animal; and any physical property rights relating to any of the foregoing.

**Moral Rights** has the meaning ascribed in the Copyright Act 1968 (Cth), as amended, and similar rights in jurisdictions outside Australia.

**Notice** has the meaning given to it in clause 7.

**Patents** mean the patents and patent applications claiming and/or relating to the Invention, including Australia 2015900431 filed on 11/02/2015 entitled Chlorine Resistant Polyelectrolyte multilayer membranes for desalination, and all applications and granted patents or other similar forms of protection anywhere in the world claiming priority with or from such patents including utility model and design patents and certificates of invention and all divisionals, continuations, continuations-in-part, reissues, renewals, extensions, additions, supplementary protection certificates or equivalent to any such patent applications and patents.

**Product** means any material, product, kit, method or use which:

- (a) uses or is manufactured using or otherwise incorporates any part of the Technology; and/or
- (b) the manufacture, sale, method or use of which, is the subject of or falls within any claim of any of the Patents.

**Technical Information** means Know How developed by the Assignor which is necessary for or useful to the Commercialisation of the Technology.

**Technology** has the meaning given to it in Schedule 1.

**University Statute** means The University of Melbourne Statutes.

1.2 In this Deed:

- (a) a reference to the Technology includes a reference to any part of the Technology;
- (b) the singular includes the plural and vice versa;

- (c) a reference to a clause, paragraph or schedule is to a clause, paragraph or schedule to this Deed;
- (d) a reference to a party is to a party to this Deed;
- (e) a reference to a person includes a natural person, partnership, body corporate, association, governmental or local authority or agency or other entity;
- (f) a reference to a statute or other law includes regulations and other instruments under it and consolidations, amendments, re-enactments or replacements of any of them;
- (g) the meaning of general words is not limited by specific examples introduced by including, for example or similar expressions;
- (h) nothing in this Deed is to be interpreted against a party solely on the ground that the party prepared or put forward the Deed or any part of it; and
- (i) headings are for reference only and do not affect interpretation.

## **2. COMMENCEMENT**

---

- 2.1 This Deed will take effect on and from the date on which the last party signs this Deed.

## **3. ACKNOWLEDGEMENT AND ASSIGNMENT OF INTELLECTUAL PROPERTY RIGHTS**

---

- 3.1 The Assignor acknowledges that any Intellectual Property Rights subsisting in the Technology, to the extent that the Assignor contributed to the development of the Technology, vest in the University pursuant to the Assignor's contract of employment and the University Statute in force at the relevant time (including Statute 14.1 of the University Statute).
- 3.2 To the extent that the Assignor retains or continues to hold any right, title or interest in the Intellectual Property Rights subsisting in the Technology notwithstanding the acknowledgement in clause 3.1, the Assignor assigns to the University such right, title and interest in those Intellectual Property Rights (including future Intellectual Property Rights) subsisting in the Technology, including:
- (a) the Patents;
  - (b) Technical Information;
  - (c) copyright in the Technology;
  - (d) the Materials;
  - (e) the absolute right to apply for registration as the proprietor of any Intellectual Property Rights subsisting in the Technology anywhere in the world; and
  - (f) the absolute right to do anything in relation to ownership, protection and use of any Intellectual Property Rights subsisting in the Technology anywhere in the world.



- 3.3 The Assignor must do all things and execute all documents necessary to give effect to this Deed and render all assistance reasonably required by the University for the purpose of confirming, recording or perfecting the assignment under clauses 3.2.
- 3.4 The Assignor acknowledges that the University owns all physical property rights in the Materials.

#### **4. CONSIDERATION**

---

- 4.1 The University agrees and acknowledges that:
- (a) upon the assignment of the Intellectual Property Rights subsisting in the Technology to the University; and
  - (b) to the extent that the Intellectual Property Rights subsisting in the Technology is licensed, or assigned by the University, to a third party in which the Assignor does not have a shareholding interest,

the University will pay to the Assignor a share of the net royalties received by the University derived from Commercialisation of the Intellectual Property Rights subsisting in the Technology or otherwise reward the Assignor for the Assignor's contribution to the development of the Technology (as the case may be) in accordance with Statute 14.1 of the University Statute and any applicable policies pursuant to the University Statute in force at the time this Deed is executed.

#### **5. ASSIGNOR'S WARRANTIES AND CONSENT**

---

- 5.1 The Assignor warrants to the University that:
- (a) the Assignor is entering into this Deed in the Assignor's personal capacity and not as an employee of the University; and
  - (b) the Assignor has received independent legal advice in relation to this Deed or has decided not to obtain independent legal advice.
- 5.2 To the best of the Assignor's knowledge, the Assignor warrants to the University that:
- (a) the Assignor contributed to the creation, implementation or development of the Technology in the performance of the Assignor's role and duties as an employee of the University;
  - (b) to the extent that the Assignor assigns any right, title or interest in or to Intellectual Property Rights in clause 3.2, the Assignor is a legal and beneficial owner of the Intellectual Property Rights subsisting in the Technology (including the Patents, Technical Information and any copyright in the Technology);
  - (c) the Intellectual Property Rights subsisting in the Technology (including the Patents, Technical Information and any copyright in the Technology) do not infringe the Intellectual Property Rights of any other person;
  - (d) the Assignor has not knowingly granted any licences or Encumbrances in relation to the Intellectual Property Rights subsisting in the Technology;

- (e) the Assignor has not received any notice of any Claim in respect of the Technology or the Intellectual Property Rights subsisting in the Technology;
  - (f) the Assignor has disclosed all agreements and arrangements, whether or not formal or informal with third parties, including but not limited to material transfer agreements, collaboration agreements, consultancies and all sources of funding contributions pertaining to the Technology and its development;
  - (g) the Assignor has notified the University of all public disclosures, either written or oral, including but not limited to publications, abstracts, articles, presentations, journal submissions, thesis (including the final PhD oration presentation) containing or describing the Technology of which the Assignor is aware;
  - (h) the Assignor has notified the University of any other person or party that contributed to the development of the Technology; and
  - (i) the Assignor has not done or failed to do anything whereby the whole or any part of the rights assigned under this Deed might be invalidated or registration of them refused.
- 5.3 The Assignor consent to acts or omissions that would otherwise infringe the Assignor's Moral Rights in any copyright subsisting in the Technology including as a result of any use of such copyright in the Patent.
- 5.4 To the extent that the Technology is not in the public domain as at the effective date of this Deed, the Assignor agrees to maintain the confidentiality of the Technology (including the Technical Information) until the Technology becomes part of the public domain other than as a result of a breach of confidence by the Assignor.
- 5.5 If, at any time on or after the date of this Deed, the Assignor becomes aware of any fact, matter or circumstance which may materially affect the University's Intellectual Property Rights subsisting in the Technology, the Assignor must promptly notify the University in writing of the relevant particulars.

## **6. ASSIGNOR'S INDEMNITY**

---

- 6.1 The Assignor indemnifies the University against any losses, costs, actions, claims, demands, expenses, judgements, court orders or other liabilities arising out of or in connection with any negligent or deliberate breach by the Assignor of the warranties or undertakings contained in clause 5.

## **7. NOTICE**

---

- 7.1 Any notice, demand, consent, approval or communication given pursuant to the provisions of this Deed (Notice) will be deemed to have been properly given if delivered, in writing, in person, or mailed by registered mail to the following addresses, or another address as may be designated in writing by the receiving Party from time to time during the term of this Deed:

Name: University of Melbourne

Address: University of Melbourne, Parkville, VIC 3010

Fax number: +61 (0) 3 9810 3268  
Attention: Chief Financial Officer

Name: **Prof. Frank Caruso**  
Address: 31 Bowen Street Camberwell Victoria 3124 Australia  
Email address: fcaruso@unimelb.edu.au

7.2 A Notice given in accordance with this clause takes effect when taken to be received (or at a later time specified in it), and is taken to be received:

- (a) if hand delivered, on delivery;
- (b) if sent by prepaid post, on the second Business Day after the date of posting (or on the seventh Business Day after the date of posting if posted to or from a place outside Australia);
- (c) if sent by facsimile, when the sender's facsimile system generates a message confirming successful transmission of the entire Notice unless, within eight Business Hours after the transmission, the recipient informs the sender that it has not received the entire Notice,

but if the delivery, receipt or transmission is not on a Business Day or is after 5.00pm on a Business Day, the Notice is taken to be received at 9.00am on the next Business Day.

## **8. GENERAL**

---

- 8.1 This Deed contains the entire agreement between the parties with respect to its subject matter and supersedes all prior agreements and understandings between the parties.
- 8.2 This Deed can only be amended or replaced or novated by another document signed by the parties.
- 8.3 Any provision of this Deed which is unenforceable or partly unenforceable is, where possible, to be severed to the extent necessary to make this Deed enforceable, unless this would materially change the intended effect of this Deed.
- 8.4 A provision of or a right created under this Deed may not be:
  - (a) waived except in writing signed by the Party granting the waiver; or
  - (b) varied except in writing signed by the Parties.
- 8.5 The rights provided in this Deed are cumulative with and not exclusive of the rights provided by law independently of this Deed.
- 8.6 Each Party must pay its own costs in connection with the entry into this Deed and compliance with its terms.
- 8.7 This Deed may be signed in counterparts each of which are an original and together constitute the same Deed.

8.8 This Deed is governed by the law of the State of Victoria, Australia, and the parties submit to the jurisdiction of the courts of that State.

**Executed as a Deed**

Signed sealed and delivered as a Deed by and on behalf of The University of Melbourne by its authorised officers pursuant to Statute 1.5.6 of The University of Melbourne Statutes:

)

)

)

Signature of Authorised Officer

Name: **Dr Gioconda Di Lorenzo**  
**University Secretary**

Date: 12 November 2015

Signature of Authorised Officer

Name: **Professor Glyn Davis**  
**VICE-CHANCELLOR**  
**THE UNIVERSITY OF MELBOURNE**

Date: 14/11/15

Signed sealed and delivered as a Deed by Prof. Frank Caruso

)

)

Signature of Authorised Officer

Name: **FRANK CARUSO**

Date: 28/10/15

Signature of Witness

Name: **MELANIE HUTCHINS**

Date: 28/10/15

## **SCHEDULE 1**

### **Invention**

UoM Commercial Tech ID 2014-091 entitled Chlorine Resistant Polyelectrolyte multilayer membranes for desalination

A membrane for reverse osmosis, forward osmosis or nanofiltration comprising (a) a water permeable charged substrate and (b) a plurality of polyelectrolyte bilayers deposited on at least one side of the substrate, each

polyelectrolyte bilayer comprising a layer of a cationic polyelectrolyte material and a layer of an anionic polyelectrolyte material wherein the anionic polyelectrolyte material is sulfonated polysulfone. In yet an even further aspect the present invention provides a method of forming a membrane, the method comprising the steps of:

(a) providing a charged substrate;

(b) depositing a plurality of polyelectrolyte bilayers on at least one side of the charged

substrate, each polyelectrolyte bilayer comprising a layer of a cationic polyelectrolyte material

and a layer of an anionic polyelectrolyte material wherein the anionic polyelectrolyte material

is a sulfonated polysulfone. In yet an even further aspect the present invention provides a method of treating water

to increase its purity using the membrane of the invention. In one aspect the method comprises providing a feed stream of water to be treated and contacting a membrane of the invention with the feed stream to produce a permeate stream and a retentate stream wherein the permeate stream has a higher level of purity than the feed stream.

### **Technology**

(a) any Intellectual Property Rights in the Invention;

(b) any Patents;

(c) Technical Information existing as at the effective date of this Deed that is not in the public domain; and

(d) the Materials.



## DEED OF ASSIGNMENT

THIS DEED is executed on the day of 12 / 11 / 2015

### BETWEEN

THE UNIVERSITY OF MELBOURNE (ABN 84 002 705 224) a body politic and corporate established in 1853 and constituted under the University of Melbourne Act 2009 (Vic) of Melbourne, Victoria, 3010

(University)

AND

Assoc. Prof. Sandra Elizabeth Kentish

Address: 3 Inverness Drive Kew East Victoria 3102

E-mail: sandraek@unimelb.edu.au

(Assignor)

### RECITALS

- A. The Assignor has contributed to the development of the Technology as an employee of the University.
- B. The Assignor wishes to acknowledge that any Intellectual Property Rights subsisting in the Technology, to the extent that the Assignor contributed to the development of the Technology, vest in the University pursuant to the Assignor's contract of employment and the University Statute in force at the relevant time.
- C. To the extent that the Assignor retains or continues to hold any right, title or interest in the Intellectual Property Rights subsisting in the Technology, the Assignor wishes to assign such Intellectual Property Rights to the University.
- D. The University and the Assignor wish to record their understanding in accordance with this Deed.

## AGREED TERMS

### 1. DEFINITIONS AND INTERPRETATION

---

#### 1.1 In this Deed:

**Business Day** means, when used to determine when a Notice is received, an obligation must be or is fulfilled, or a right must be or is exercised, a day in the place in which that notice is received, obligation must be or is fulfilled or right must be or is exercised (as the case may be) other than a Saturday, Sunday, public holiday or (in the case of a notice received by, obligation fulfilled by or right exercised by the University) a University holiday as indicated on the University calendar (as amended from time to time) in that place.

**Claim** means any claim, demand, action or proceeding of any nature however it arises and whether it is present or future, fixed or unascertained, actual or contingent.

**Commercialise**, in relation to the Technology, means:

- (a) to use, manufacture, sell, hire, promote, import, or otherwise exploit a Product or to provide a service utilising any part of the Technology;
- (b) to use or disclose any Technical Information and other confidential information comprised in the Technology;
- (c) in respect of a copyright work or other subject matter in which copyright subsists, to exercise any of the rights of a copyright owner in relation to any work or other subject matter comprised in the Technology; or
- (d) to conduct clinical trials or any other research, development and testing required to establish commercial viability of a Product;

including licensing any person to do any of the above, or to assign to any person or otherwise dispose of the Technology, and Commercialisation has a corresponding meaning.

**Deed** means this Deed of Assignment.

**Encumbrance** means a mortgage, charge, pledge, lien or title retention arrangement, a right of set off or right to withhold payment of a deposit or other money, or any easement, restrictive covenant, caveat or similar restriction over property, or an agreement to create or to allow any of them to exist.

**Intellectual Property Rights** means all rights in the field of intellectual property and industrial property including:

- (a) copyright, rights in respect of inventions (including patents) registered and unregistered trademarks (including service marks), rights in designs plant varieties, circuit layouts and Know How and any right to have information kept confidential;
- (b) any application or right to apply for registration of the rights referred to in paragraph (a); and
- (c) all rights or forms of protection of a similar nature or having equivalent or similar effect to any of the rights in paragraph (a) or (b) which may subsist anywhere in the world.



**Invention** means the invention described in Schedule 1.

**Know How** means all information not in the public domain including inventions, drawings, design, circuit diagrams, computer programs, data, formulae, specifications, methodologies and techniques, design procedures and procedures for experiments and tests, results of experiments and tests, and information relating to the design, assembly, manufacture, supply or use of any Products and Materials.

**Materials**, in relation to the Technology, means any chemical or biological substances including any: organic or inorganic element or compound; nucleotide or nucleotide sequence including DNA and RNA sequences; gene; vector or construct including plasmids, phages, bacterial vectors, bacteriophages and viruses; host organism including bacteria, fungi, algae, protozoa and hybridomas; eukaryotic or prokaryotic cell line or expression system or any development strain or product of that cell line or expression systems; protein including any peptide or amino acid sequence, enzyme, antibody or protein conferring targeting properties and any fragment of a protein or a peptide enzyme or antibody; drug or pro-drug; assay or reagent; any other genetic or biological material or micro-organism or any transgenic animal; and any physical property rights relating to any of the foregoing.

**Moral Rights** has the meaning ascribed in the Copyright Act 1968 (Cth), as amended, and similar rights in jurisdictions outside Australia.

**Notice** has the meaning given to it in clause 7.

**Patents** mean the patents and patent applications claiming and/or relating to the Invention, including Australia 2015900431 filed on 11/02/2015 entitled Chlorine Resistant Polyelectrolyte multilayer membranes for desalination, and all applications and granted patents or other similar forms of protection anywhere in the world claiming priority with or from such patents including utility model and design patents and certificates of invention and all divisionals, continuations, continuations-in-part, reissues, renewals, extensions, additions, supplementary protection certificates or equivalent to any such patent applications and patents.

**Product** means any material, product, kit, method or use which:

- (a) uses or is manufactured using or otherwise incorporates any part of the Technology; and/or
- (b) the manufacture, sale, method or use of which, is the subject of or falls within any claim of any of the Patents.

**Technical Information** means Know How developed by the Assignor which is necessary for or useful to the Commercialisation of the Technology.

**Technology** has the meaning given to it in Schedule 1.

**University Statute** means The University of Melbourne Statutes.

---

1.2 In this Deed:

- (a) a reference to the Technology includes a reference to any part of the Technology;
- (b) the singular includes the plural and vice versa;

- (c) a reference to a clause, paragraph or schedule is to a clause, paragraph or schedule to this Deed;
- (d) a reference to a party is to a party to this Deed;
- (e) a reference to a person includes a natural person, partnership, body corporate, association, governmental or local authority or agency or other entity;
- (f) a reference to a statute or other law includes regulations and other instruments under it and consolidations, amendments, re-enactments or replacements of any of them;
- (g) the meaning of general words is not limited by specific examples introduced by including, for example or similar expressions;
- (h) nothing in this Deed is to be interpreted against a party solely on the ground that the party prepared or put forward the Deed or any part of it; and
- (i) headings are for reference only and do not affect interpretation.

## **2. COMMENCEMENT**

---

- 2.1 This Deed will take effect on and from the date on which the last party signs this Deed.

## **3. ACKNOWLEDGEMENT AND ASSIGNMENT OF INTELLECTUAL PROPERTY RIGHTS**

---

- 3.1 The Assignor acknowledges that any Intellectual Property Rights subsisting in the Technology, to the extent that the Assignor contributed to the development of the Technology, vest in the University pursuant to the Assignor's contract of employment and the University Statute in force at the relevant time (including Statute 14.1 of the University Statute).
- 3.2 To the extent that the Assignor retains or continues to hold any right, title or interest in the Intellectual Property Rights subsisting in the Technology notwithstanding the acknowledgement in clause 3.1, the Assignor assigns to the University such right, title and interest in those Intellectual Property Rights (including future Intellectual Property Rights) subsisting in the Technology, including:
- (a) the Patents;
  - (b) Technical Information;
  - (c) copyright in the Technology;
  - (d) the Materials;
  - (e) the absolute right to apply for registration as the proprietor of any Intellectual Property Rights subsisting in the Technology anywhere in the world; and
  - (f) the absolute right to do anything in relation to ownership, protection and use of any Intellectual Property Rights subsisting in the Technology anywhere in the world.

- 3.3 The Assignor must do all things and execute all documents necessary to give effect to this Deed and render all assistance reasonably required by the University for the purpose of confirming, recording or perfecting the assignment under clauses 3.2.
- 3.4 The Assignor acknowledges that the University owns all physical property rights in the Materials.

#### **4. CONSIDERATION**

---

- 4.1 The University agrees and acknowledges that:
- (a) upon the assignment of the Intellectual Property Rights subsisting in the Technology to the University; and
  - (b) to the extent that the Intellectual Property Rights subsisting in the Technology is licensed, or assigned by the University, to a third party in which the Assignor does not have a shareholding interest,

the University will pay to the Assignor a share of the net royalties received by the University derived from Commercialisation of the Intellectual Property Rights subsisting in the Technology or otherwise reward the Assignor for the Assignor's contribution to the development of the Technology (as the case may be) in accordance with Statute 14.1 of the University Statute and any applicable policies pursuant to the University Statute in force at the time this Deed is executed.

#### **5. ASSIGNOR'S WARRANTIES AND CONSENT**

---

- 5.1 The Assignor warrants to the University that:
- (a) the Assignor is entering into this Deed in the Assignor's personal capacity and not as an employee of the University; and
  - (b) the Assignor has received independent legal advice in relation to this Deed or has decided not to obtain independent legal advice.
- 5.2 To the best of the Assignor's knowledge, the Assignor warrants to the University that:
- (a) the Assignor contributed to the creation, implementation or development of the Technology in the performance of the Assignor's role and duties as an employee of the University;
  - (b) to the extent that the Assignor assigns any right, title or interest in or to Intellectual Property Rights in clause 3.2, the Assignor is a legal and beneficial owner of the Intellectual Property Rights subsisting in the Technology (including the Patents, Technical Information and any copyright in the Technology);
  - (c) the Intellectual Property Rights subsisting in the Technology (including the Patents, Technical Information and any copyright in the Technology) do not infringe the Intellectual Property Rights of any other person;
  - (d) the Assignor has not knowingly granted any licences or Encumbrances in relation to the Intellectual Property Rights subsisting in the Technology;

- (e) the Assignor has not received any notice of any Claim in respect of the Technology or the Intellectual Property Rights subsisting in the Technology;
  - (f) the Assignor has disclosed all agreements and arrangements, whether or not formal or informal with third parties, including but not limited to material transfer agreements, collaboration agreements, consultancies and all sources of funding contributions pertaining to the Technology and its development;
  - (g) the Assignor has notified the University of all public disclosures, either written or oral, including but not limited to publications, abstracts, articles, presentations, journal submissions, thesis (including the final PhD oration presentation) containing or describing the Technology of which the Assignor is aware;
  - (h) the Assignor has notified the University of any other person or party that contributed to the development of the Technology; and
  - (i) the Assignor has not done or failed to do anything whereby the whole or any part of the rights assigned under this Deed might be invalidated or registration of them refused.
- 5.3 The Assignor consent to acts or omissions that would otherwise infringe the Assignor's Moral Rights in any copyright subsisting in the Technology including as a result of any use of such copyright in the Patent.
- 5.4 To the extent that the Technology is not in the public domain as at the effective date of this Deed, the Assignor agrees to maintain the confidentiality of the Technology (including the Technical Information) until the Technology becomes part of the public domain other than as a result of a breach of confidence by the Assignor.
- 5.5 If, at any time on or after the date of this Deed, the Assignor becomes aware of any fact, matter or circumstance which may materially affect the University's Intellectual Property Rights subsisting in the Technology, the Assignor must promptly notify the University in writing of the relevant particulars.

## **6. ASSIGNOR'S INDEMNITY**

---

- 6.1 The Assignor indemnifies the University against any losses, costs, actions, claims, demands, expenses, judgements, court orders or other liabilities arising out of or in connection with any negligent or deliberate breach by the Assignor of the warranties or undertakings contained in clause 5.

## **7. NOTICE**

---

- 7.1 Any notice, demand, consent, approval or communication given pursuant to the provisions of this Deed (Notice) will be deemed to have been properly given if delivered, in writing, in person, or mailed by registered mail to the following addresses, or another address as may be designated in writing by the receiving Party from time to time during the term of this Deed:

Name: University of Melbourne

Address: University of Melbourne, Parkville, VIC 3010

Fax number: +61 (0) 3 9810 3268

Attention: Chief Financial Officer

Name: **Assoc. Prof. Sandra Elizabeth Kentish**

Address: 3 Inverness Drive Kew East Victoria 3102

Email address: sandraek@unimelb.edu.au

7.2 A Notice given in accordance with this clause takes effect when taken to be received (or at a later time specified in it), and is taken to be received:

- (a) if hand delivered, on delivery;
- (b) if sent by prepaid post, on the second Business Day after the date of posting (or on the seventh Business Day after the date of posting if posted to or from a place outside Australia);
- (c) if sent by facsimile, when the sender's facsimile system generates a message confirming successful transmission of the entire Notice unless, within eight Business Hours after the transmission, the recipient informs the sender that it has not received the entire Notice,

but if the delivery, receipt or transmission is not on a Business Day or is after 5.00pm on a Business Day, the Notice is taken to be received at 9.00am on the next Business Day.

## **8. GENERAL**


---

- 8.1 This Deed contains the entire agreement between the parties with respect to its subject matter and supersedes all prior agreements and understandings between the parties.
- 8.2 This Deed can only be amended or replaced or novated by another document signed by the parties.
- 8.3 Any provision of this Deed which is unenforceable or partly unenforceable is, where possible, to be severed to the extent necessary to make this Deed enforceable, unless this would materially change the intended effect of this Deed.
- 8.4 A provision of or a right created under this Deed may not be:
  - (a) waived except in writing signed by the Party granting the waiver; or
  - (b) varied except in writing signed by the Parties.
- 8.5 The rights provided in this Deed are cumulative with and not exclusive of the rights provided by law independently of this Deed.
- 8.6 Each Party must pay its own costs in connection with the entry into this Deed and compliance with its terms.
- 8.7 This Deed may be signed in counterparts each of which are an original and together constitute the same Deed.

8.8 This Deed is governed by the law of the State of Victoria, Australia, and the parties submit to the jurisdiction of the courts of that State.

**Executed as a Deed**

Signed sealed and delivered as a Deed by and on behalf of **The University of Melbourne** by its authorised officers pursuant to Statute 1.5.6 of The University of Melbourne Statutes:

)  
)  
)   
.....  
Signature of Authorised Officer

Name: **Dr Gioconda Di Lorenzo**  
**University Secretary**  
Date: **12 November 2015**


  
.....  
Signature of Authorised Officer

Name: **Professor Glyn Davis**  
**VICE-CHANCELLOR**  
Date: **THE UNIVERSITY OF MELBOURNE**  
**12/11/15**

Signed sealed and delivered as a Deed by  
**Assoc. Prof. Sandra Elizabeth Kentish**

)  
)  
)   
.....  
Signature of Authorised Officer

Name: **S. KENTISH**  
Date: **27/10/15**

  
.....  
Signature of Witness

Name: **LOUISE BAKER**  
Date: **27/10/15**

## **SCHEDULE 1**

### **Invention**

UoM Commercial Tech ID 2014-091 entitled Chlorine Resistant Polyelectrolyte multilayer membranes for desalination

A membrane for reverse osmosis, forward osmosis or nanofiltration comprising (a) a water permeable charged substrate and (b) a plurality of polyelectrolyte bilayers deposited on at least one side of the substrate, each

polyelectrolyte bilayer comprising a layer of a cationic polyelectrolyte material and a layer of an anionic polyelectrolyte material wherein the anionic polyelectrolyte material is sulfonated polysulfone. In yet an even further aspect the present invention provides a method of forming a membrane, the method comprising the steps of:

(a) providing a charged substrate;

(b) depositing a plurality of polyelectrolyte bilayers on at least one side of the charged

substrate, each polyelectrolyte bilayer comprising a layer of a cationic polyelectrolyte material

and a layer of an anionic polyelectrolyte material wherein the anionic polyelectrolyte material

is a sulfonated polysulfone. In yet an even further aspect the present invention provides a method of treating water

to increase its purity using the membrane of the invention. In one aspect the method comprises providing a feed stream of water to be treated and contacting a membrane of the invention with the feed stream to produce a permeate stream and a retentate stream wherein the permeate stream has a higher level of purity than the feed stream.

### **Technology**

(a) any Intellectual Property Rights in the invention;

(b) any Patents;

(c) Technical Information existing as at the effective date of this Deed that is not in the public domain; and

(d) the Materials.