

**MEMORANDUM OF AGREEMENT**  
**CONSULTANCY PROJECT**

IN CONNECTION WITH **(TITLE AND NUMBER OF PROJECT)**

**ENTERED INTO BY AND BETWEEN**

**THE WATER RESEARCH COMMISSION**

A statutory entity with legal personality established in terms of Section 2 of the Water Research Act No. 34 of 1971 (as amended)

herein represented by **(NAME OF DIRECTOR AND KSA)**, who is duly authorised thereto  
(hereinafter referred to as the “**WRC**”)

**AND**

herein represented by .....

in his/her capacity as.....and duly authorised thereto

(hereinafter referred to as the “**Contractor**”)

**WHEREAS**

the **WRC**, in the execution of its statutory charge, promotes research and investment in water-centred innovation as well as the generation and dissemination of knowledge for the advancement of the **Fundamental Mission of the WRC**;

AND

the **Contractor** has submitted a proposal and desires to undertake appropriate research,

**IT IS HEREBY AGREED**

## 1. INTERPRETATION AND PRELIMINARY

- 1.1 The headings of the clauses in this agreement are for the purpose of convenience and reference only and shall not be used to interpret, modify or amplify the terms and conditions of this agreement.
- 1.2 Unless a contrary indication clearly appears, words importing
- 1.2.1 any one gender includes the other gender;
  - 1.2.2 the singular includes the plural and *vice versa*; and
  - 1.2.3 natural persons include created entities (corporate or unincorporated) and the state and *vice versa*.
- 1.3 The following terms shall have the meanings assigned to them hereunder and cognate expressions shall have corresponding meanings, namely:
- 1.3.1 “**Background Intellectual Property**” means intellectual property rights belonging to the **Contractor**, a **Researcher** and/or a third party associated with **The Project**, that existed prior to the **Commencement Date**;
  - 1.3.2 “**Capital Assets**” mean all assets, whether movable or immovable, including pilot plants, computer equipment, computer software and related services acquired for **The Project** with **WRC** funding;
  - 1.3.4 “**Commencement Date**” means.....
  - 1.3.5 “**Commercialisation**” means the process by which any intellectual property emanating from public funded research and development is or may be adapted for use for any purpose that may provide any benefit to society or commercial use on reasonable terms and “**commercialise**” shall have a corresponding meaning.
  - 1.3.6 “**Contract Amount**” means ..... (VAT exclusive) which is the full amount made available by the **WRC** to the **Contractor** for **The Project**;
  - 1.3.7 “**Contract Period**” means the period of .....months, commencing on .....and terminating on .....
  - 1.3.8 “**Disclosure**” means the provision of full details of potential intellectual property;
  - 1.3.9 “**Final Report**” means the edited report, duly approved by the **WRC** for publication purposes, which addresses all the deliverables and products identified in Annexure A;
  - 1.3.10 “**Fundamental Mission of the WRC**” is to facilitate research and investment in water-centred innovation and the generation and dissemination of knowledge;
  - 1.3.11 “**Intellectual Property**” means any creation of the mind that is capable of being

protected by law from use by any other person, whether in terms of South African law or foreign intellectual property law, and includes any rights in such creation, developed by **Researchers** within the scope of **The Project** but excludes copyrighted works such as a thesis, dissertation, article, handbook, or any other publication which, in the ordinary course of business, is associated with conventional academic work;

- 1.3.12 "**Intellectual Property Creator**" means the person involved in the conception of intellectual property in terms of the Intellectual Property Rights from Publicly Financed Research and Development Act of 2008 ("IPR from PFR&D Act of 2008") and identifiable as such for the purposes of obtaining statutory protection and enforcement of intellectual property rights;
- 1.3.13 "**Intellectual Property Transaction**" means any agreement in respect of intellectual property emanating from WRC-funded research and development, and includes licensing, assignment and any arrangement in which the intellectual property rights are transferred to a third party;
- 1.3.14 "**NIPMO**" means the National Intellectual Property Management Office established by section 8 of the IPR from PFR&D Act of 2008;
- 1.3.15 "**The Project**" refers to the research and development in relation to project **K8/...** entitled ....., and includes, but is not limited to, the deliverables against work programmes and time schedules as outlined in Annexure A hereto;
- 1.3.16 "**Revenue**" means all income and benefits of a monetary and non-monetary nature emanating from intellectual property transactions, and includes all actual, non-refundable royalties, other grant of rights and other payments, excluding donations, made to the Contractor in respect of an intellectual property transaction;
- 1.3.17 "**Researcher**" means faculty, staff, and other persons employed or contracted by the **Contractor**, or the **Contractor** itself, whether full-time or part-time; and/or any other persons, including a student, a student employee, a graduate student, a post-doctoral fellow, and a non-employee (including visiting faculty, affiliate and adjunct faculty, industrial personnel, fellow, etc.) who participates in the creation or generation of applicable knowledge and/or **Intellectual Property** in the scope of **The Project**;
- 1.3.18 "**Termination Date**" means .....; and
- 1.3.19 "The **Parties**" and "the **Party**" shall mean the **WRC** and the **Contractor**.
- 1.4 Any reference to an enactment shall mean that enactment as at the **Commencement Date** hereof and as amended or re-enacted from time to time.

- 1.5 Any provision in clause 1.3 that is a substantive provision conferring rights or imposing obligations on any party, shall be given effect to as if it were a substantive provision in the body of this agreement, notwithstanding that it is only in the definition clause.
- 1.6 When any number of days is prescribed in this agreement, same shall be reckoned as working days exclusively of the first and inclusively of the last day unless that day falls on a Saturday, Sunday or public holiday, in which case the day shall be the next succeeding working day which is not a Saturday, Sunday or public holiday.
- 1.7 In the event of any conflict in this agreement between figures referred to in numerals and in words, the words shall prevail.
- 1.8 Expressions defined in this agreement shall bear the same meaning in a schedule or annexure to this agreement, provided that such schedule or annexure does not itself contain its own independent definitions of said expressions.
- 1.9 Where any term is defined within the context of any particular clause in this agreement, the term so defined shall bear the meaning ascribed to it for all purposes in terms of this agreement, unless it is clear from the clause in question that the term so defined has limited application to the relevant clause, notwithstanding that the term has not been defined in this interpretation clause.
- 1.10 The expiration or termination of this agreement shall not affect the provisions of this agreement that expressly provide that they will operate after any such expiration or termination or which necessarily must continue to have effect after such expiration or termination, notwithstanding the fact that the provisions themselves do not expressly provide for this.
- 1.11 In any dispute between the interpretation of the annexures or schedules to this agreement and the provisions of this agreement, the latter shall prevail.
- 1.12 Any reference to signature in this agreement shall mean a wet ink signature made by or on behalf of a person and shall not include an electronic signature or an advanced electronic signature as defined in the Electronic Communications and Transactions Act, Act No 25 of 2002 and "signed" shall bear the same meaning as used in this agreement.
- 1.13 Any reference to writing, written request, written notice or the like in this agreement shall refer to paper-based communication and shall include writing by facsimile but shall not include writing in the form of data messages as defined in the Electronic Communications and Transactions Act, Act No 25 of 2002.

## **2. COMMENCEMENT AND DURATION OF AGREEMENT**

- 2.1 This agreement shall commence and come into force on the **Commencement Date** and shall, subject to the provisions set out below, endure for the **Contract Period** and shall terminate on the **Termination Date**.

- 2.2 This agreement shall, from the **Commencement Date**, supersede any previous agreements which may have been in force between the parties relating to the subject matter hereof.
- 2.3 The **Contract Period** for this agreement shall only be extended in writing, at the **WRC's** sole discretion and only under exceptional circumstances.

### 3. **GRANT OF CONTRACT**

The **WRC** hereby grants to the **Contractor** the right to undertake **The Project**, subject to the terms and conditions of this agreement.

### 4. **RESPONSIBILITY OF THE WRC**

The **WRC** shall, without prejudice to its rights as specified in Section 3(2) of the Water Research Act, No. 34 of 1971, in the discharge of its obligations:

- 4.1 Make the **Contract Amount** available to the **Contractor**, in terms of clause 6.
- 4.2 Appoint a Reference Group if deemed necessary.
- 4.3 Take appropriate steps to publish reports or summary descriptions of research reports and scholarly disclosures and place these in the public domain.
- 4.4 Provide any member of the general public with copies of such scholarly disclosures and research reports, subject to the provisions of clause 10.
- 4.5 Use its best endeavours to ensure that **Final Reports** are published within six (6) months of receipt of said report from the **Contractor**.

### 5. **RESPONSIBILITY OF THE CONTRACTOR**

The **Contractor** shall, in the discharge of its obligations:

- 5.1 Assume full responsibility for the management and execution of **The Project** and submission of specified deliverables;
- 5.2 Submit to the **WRC** deliverables according to the standards, schedules and time frames as set out in **Annexure A**;
- 5.3 Ensure that, where **The Project** has been duly amended, the standards, schedules and time frames as set out in **Annexure A** are also be duly amended in writing and this amendment signed by both parties;

- 5.4 Prepare progress reports and, as stipulated in Annexure A, and a **Final Report** for consideration by the **WRC**;
- 5.5 Prepare, on request by the **WRC**, a brief report on the progress of **The Project** for publicity purposes;
- 5.6 Record where applicable minutes of Reference Group meetings, or significant project meetings accurately and comprehensively in the format prescribed by the **WRC**. Such minutes shall be made available to the **WRC** within two (2) weeks of the date of the Reference Group or project meeting;
- 5.7 Ensure that deliverables are submitted in terms of the schedule set out in **Annexure B** hereto;
- 5.8 Take on the role of lead organisation where other parties are subcontracted to carry out **The Project**;
- 5.9 Subcontract all other contributing parties in a manner consistent with this agreement and budget set out in **The Project**;
- 5.10 Provide the **WRC** with copies of signed contracts between the **Contractor** and all parties subcontracted to contribute to **The Project** as soon as possible after the conclusion of said contracts;
- 5.11 Oversee the work of subcontracted parties and incorporate contributions by subcontractors, where applicable, into the deliverables specified in **The Project**; and
- 5.12 Make payments to subcontracted parties in accordance with the contractual arrangements between the **Contractor** and subcontracted parties, as the **WRC** will make payments to the **Contractor** only, and only upon achievement and receipt of deliverables as specified in **The Project**, subject to the provisions of clause 6.
- 5.13 The **Contractor** shall comply with the requirements of the IPR from PFR&D Act of 2008 and shall adopt and implement a policy in terms of which **Researchers** are required to conform to research best practices and procedures, which include, but are not limited to, the responsibility to:
  - 5.13.1 Retain all records and documents that are necessary for the protection of the **WRC's** interests in the **Intellectual Property**; and
  - 5.13.2 Create, retain, and use **Intellectual Property** according to the applicable intellectual property legislation.
- 5.14 The **Contractor** shall ensure that all **Researchers** sign the **WRC's** Intellectual Property Policies Acknowledgement Form when they join the team of **Researchers**.

- 5.15 It is the responsibility of the **Contractor** to ensure that its rights and obligations, as well as those of the **Researchers**, which arise from this agreement, do not conflict with those arising from other contractual obligations it and/or the **Researchers** may have.

## **6. PAYMENT**

- 6.1 The **Contract Amount** and a description of the deliverables against which payments will be made to the **Contractor** as set out hereunder, are set out in the payment schedule attached as **Annexure B**.
- 6.2 The **WRC** shall pay the **Contractor** as follows:
- 6.2.1 The **WRC** shall pay the **Contractor** stipulated amounts on submission of an invoice issued upon achievement of each deliverable as set out in Annexure B, if payment of the invoice is duly authorised by the **WRC**, provided that up to twenty percent (20%) of the total budget for the first year may be paid upfront by the **WRC** if requested by the **Contractor** and approved by the **WRC** and provided further that each subsequent deliverable scheduled for the first year will be set off against this advance until depleted.
- 6.2.2 Ten percent (10 %) of the **Contract Amount** will be retained and paid as full and final settlement on acceptance by the **WRC** of the final deliverable or deliverables, as specified in **The Project** and as duly authorised by the **WRC**. The final deliverables shall only be deemed to be accepted on notification by the **WRC** that the project has been completed.
- 6.3 The **WRC** places on record that it is not a VAT vendor. The parties further place on record that all estimates, budgets and/or the **Contract Amount** referred to in this agreement shall be exclusive of VAT and all payments of VAT by the **WRC** shall only be made upon receipt of VAT invoices.
- 6.5 If a **Contractor** fails to claim an outstanding amount within six (6) months of the finalisation of **The Project**, the **Contractor** will be deemed to have forfeited any claim to such outstanding amount in favour of the **WRC**.
- 6.6 The budget year shall coincide with the **WRC's** financial year, i.e. 1 April to 31 March.

## **7. CAPITAL ASSETS**

- 7.1 The Contractor must record all acquisitions of Capital Assets for **The Project** on a Capital Asset Acquisition Form, which must be submitted to the WRC within one (1) month of such acquisition.
- 7.2 Capital Assets shall remain the property of the **WRC**;

7.2.1 Shall be insured, to the satisfaction of the **WRC**, by the **Contractor** against contingencies, at the **Contractor's** own expense; and

7.2.2 Shall be duly returned to the **WRC** on or before the **Termination Date**.

7.3 If the **Contractor** wishes to acquire any **Capital Asset** at the **Termination Date**, a formal written request for such **Capital Asset** must be submitted to the **WRC** for its consideration.

## **8. INTELLECTUAL PROPERTY RIGHTS**

8.1 The **Contractor** shall use its best endeavours to identify, record and disclose to the **WRC**, in writing, all **Background Intellectual Property** vesting in the **Contractor**, in **Researchers** or any other third party involved in **The Project**, as well as any pre-emptive or other existing rights vesting in any of the abovementioned parties, which relate to the undertaking of **The Project**, prior to the **Commencement Date** of this agreement or as soon as the **Contractor** becomes aware of the existence of any of the abovementioned rights.

8.2 The **WRC** shall treat the **Background Intellectual Property** disclosed in terms of clause 8.1 confidentially, if requested to do so by the **Contractor**.

8.3 The Contractor shall:

8.3.1 Inform the **WRC** upon conception of any intellectual property or improvements and continuously thereafter of all steps in the progress made in developing such intellectual property on a confidential basis; and

8.3.2 At no time disclose any such intellectual property or improvement or any information relating thereto, to any person without the prior written consent of the **WRC**.

8.4 The **Parties** shall deal with all **Intellectual Property** created within the scope of **The Project** in accordance with its obligations in terms of the IPR from PFR&D Act of 2008.

8.5 The **WRC** shall assist the **Contractor** in assessing whether the **Intellectual Property** merits statutory protection if such assistance is requested.

8.6 The **Parties** shall support each other in any legal action instituted to enforce and/or defend its respective **Intellectual Property** rights.

8.7 The **WRC** and all successors in title shall give **Researchers** due recognition as the **Intellectual Property Creators** of the **Intellectual Property** created within the scope of **The Project** as provided for in the IPR from PFR&D Act of 2008.



8.8 It is the responsibility of the **Contractor** to inform relevant third parties and all **Researchers** whose **Intellectual Property** rights may be limited by this agreement, of such limitations, in writing, and in advance of the **Commencement Date**.

## **9. COMMERCIALY EXPLOITABLE INTELLECTUAL PROPERTY**

9.1 The **Parties** shall notify each other promptly, in writing, of the potential for commercial exploitation or **Intellectual Property Transactions** in respect of **Intellectual Property**.

9.2 The **Parties** shall collaborate in the protection and commercialisation of the **Intellectual Property** and the conclusion of **Intellectual Property Transactions**. The parties shall enter into a separately negotiated written agreement defining the relationship, roles and responsibilities of the **WRC** and the **Contractor** in said collaboration, which shall, be in accordance with the **WRC's** Benefit Sharing Policy and applicable statutory provisions.

9.3 Should either of the **Parties** decide against participating in said collaboration, it shall inform **NIPMO** and the other party that it does not wish to participate in the protection, commercial exploitation or further development of the **Intellectual Property** within ninety (90) days of receipt of the notification referred to in clause 9.1.

9.4 The commercialisation of the **Intellectual Property** and the conclusion of **Intellectual Property Transactions** shall be subject to:

9.4.1 The **WRC's** obligation to disseminate scholarly disclosures and research reports in terms of clause 10;

9.4.2 Due consideration of the public interest and other legal obligations; and

9.4.3 The acquisition of **Intellectual Property** rights by the State in terms of the IPR from PFR&D Act of 2008

## **10 DISCLOSURE & PUBLICATION**

The right to publish research results or any other information resulting from **The Project**, in whatsoever form or medium, is reserved by the **WRC** subject to the provisions of the IPR from PFR&D Act of 2008.

## **11 AMENDMENT OF AGREEMENT**

Any agreed variation to this agreement shall not be of any force and effect, unless recorded in writing as an amendment to this agreement and signed by both parties.

## **12**     **INDEMNITY**

- 12.1     The **Contractor** hereby indemnifies the **WRC** and holds it harmless against all damages, losses and/or costs arising out of or in connection with illness, injuries, death and/or damage to and/or loss of property of any and all persons (including employees and/or agents of the **Contractor** and its sub-**Contractors**) in any way sustained in connection with the performance of **The Project** in terms of this agreement by the **Contractor**.
- 12.2     Notwithstanding the provisions of clause 12.1 any claim for damages, including, but not limited to, loss of income, consequential or incidental damages, against the **Contractor**, whether in delict or based on this agreement, shall be limited to an amount equal to the **Contract Amount** or the amount actually paid by the **WRC** to the **Contractor** in respect of the work performed in terms of the **Project**, whichever is the lesser.

## **13**     **WARRANTIES**

- 13.1     The **Contractor** does not warrant specific outcomes or research results to and in favour of the **WRC**.
- 13.2     The **Contractor** warrants to and in favour of the **WRC** that:
- 13.2.1   It has the infrastructure, research capacity and other resources necessary to perform **The Project** and to give proper effect to the terms of this agreement;
- 13.2.2   The **Researchers** are suitably qualified to participate in **The Project**;
- 13.2.3   The **Contractor** shall, in relation to research and work performed for **The Project**, not infringe any intellectual property rights, or other rights, of any third party;
- 13.2.4   The **Contractor** shall comply with the provisions of the IPR from PFR&D Bill of 2008; and
- 13.2.5   The **Contractor** is solvent.

13.3     **WRC** warrants to and in favour of the **Contractor** that it has the full right, power and authority to enter into this agreement and to grant to the **Contractor** the various rights granted to it hereunder.

13.4     The **Contractor** and **WRC**, subject to provisions and limitations as per clause 12, hereby indemnify each other against any loss, damage, expense which may be suffered by, or action which may be instituted against, the indemnified parties as a result of a breach of any of the foregoing warranties.

## 14 NO AGENCY

14.1 The **Contractor** acknowledges and agrees that it acts herein as is an independent contractor and is not an employee, agent or partner of **WRC**.

14.2 The **Contractor** shall not hold out or represent in any manner whatsoever that it represents the **WRC** or that it has any power or authority to commit or legally bind the **WRC**, except insofar as the **Contractor** may be expressly authorised thereto in writing.

## 15 NO ASSIGNMENT

The **Contractor** shall not be entitled to assign this agreement to any third party without the prior written consent of the **WRC**, which consent shall only be given if such assignment is deemed to be in the public interest.

## 16 FORCE MAJEURE

Neither party shall have any liability or be deemed to be in breach of this agreement for any delays or failures in performance of this agreement which result from circumstances beyond the reasonable control of that party, including without limitation labour disputes involving that party. The party affected by such circumstances shall promptly notify the other party in writing when such circumstances cause a delay or failure in performance and when they cease to do so. If a force majeure event prevents performance of this agreement for a continuous period of six (6) months, the parties shall meet to discuss the termination of this agreement.

## 17 BREACH

17.1 Should either **Party** ("the defaulting party") be in breach of any material term(s) or condition(s) of this agreement and fail to remedy such breach within a period of 14 (fourteen) days (or any other reasonable period mutually agreed in writing between the **Parties** with due consideration of the nature and extent of the breach) after having received written notification from the other **Party** ("the aggrieved party") to rectify such breach, the aggrieved party may declare a dispute in writing and an attempt shall be made by the **Parties** to resolve the said dispute in terms of the dispute resolution procedure stipulated in clause 18 of this agreement.

17.2 In the event of the **Contractor** being the defaulting party, it shall immediately refund to the **WRC**, pending the outcome of the dispute resolution procedure, any funds already transferred, but not yet utilised towards or committed under the **Project**, with interest calculated from date of breach at the prevailing prime interest rate calculated per annum.

## **18 DISPUTE RESOLUTION:**

18.1 In the event of any dispute arising from this agreement, the Parties shall make every effort to settle such dispute amicably.

- a. If the parties fail to settle the dispute amicably, such dispute shall be elevated to the Senior Management / Executive or their duly designated representatives for mediation purposes.

18.2 Should the dispute - despite such mediation - remain unresolved for a period of 30 (thirty) days after being so referred, either Party may declare a dispute.

18.3 Should the dispute remain unresolved, it will be adjudicated by a competent court with jurisdiction to hear the matter.

18.4 Any of the **Parties** shall, and notwithstanding the aforesaid provisions, and without prejudice to the legal rights and obligations of the other **Party** or **Parties**, be entitled to terminate this agreement by giving three (3) calendar months prior written notice of such termination to the other party or parties.

## **19 EFFECT OF TERMINATION**

Upon the **Termination Date** or termination of this agreement in terms of clause 19.5 the grant of the right to undertake **The Project** and other rights granted by the **WRC** to the **Contractor** shall cease.

## **20 DOMICILIUM CITANDI ET EXECUTANDI**

20.1 The parties choose as their *domicilia citandi et executandi* for all purposes under this agreement, whether in respect of court process, notices or other documents or communications of whatsoever nature (including the exercise of any option), the following addresses :

20.1.1 **The WRC:**

**Physical address:**

Marumati Building

491 18<sup>th</sup> Avenue, Rietfontein,

Pretoria

**Postal address:**

Private Bag X03,

Gezina, 0031

**Facsimile number:** 012 331 2565

**20.1.2 The Contractor:**

**Physical address:**

**Postal address:**

**Facsimile number:**

- a. Any notice or communication required or permitted to be given in terms of this agreement shall be valid and effective only if in writing but it shall be competent to give notice by facsimile, but not in the form of a data message.
- b. Either party may by notice to the other party change the physical address chosen as its *domicilium citandi et executandi* to another physical address where postal delivery occurs or its postal address or its facsimile number, provided that the change shall become effective on the 7th business day from the deemed receipt of the notice by the other party.

**21. WHOLE AGREEMENT, NO AMENDMENT**

- 21.1 This agreement constitutes the whole agreement between the parties relating to the subject matter hereof.
- 21.2 No amendment or consensual cancellation of this agreement or any provision or term hereof and no settlement of any disputes arising under this agreement and no extension of time, waiver or relaxation or suspension of or agreement not to enforce or to suspend or postpone the enforcement of any of the provisions or terms of this agreement shall be binding unless recorded in a written document signed by the parties. Any such extension, waiver or relaxation or suspension which is so given or made shall be strictly construed as relating strictly to the matter in respect whereof it was made or given.
- 21.3 If any clause of this agreement is found to be invalid, unenforceable or illegal, then the remaining provisions of this agreement shall be deemed to be severable therefrom and

shall continue to be in full force and effect unless such invalidity, unenforceability or illegality goes to the root of this agreement.

21.4 The validity and interpretation of this agreement will be governed by the laws of the Republic of South Africa.

SIGNED at **PRETORIA** on this the ..... day of .....2009 in the presence of the undersigned witnesses:

Witnesses:

1 \_\_\_\_\_

2 \_\_\_\_\_

*(Signatures of witnesses)*

\_\_\_\_\_

*(On behalf of **WRC**)*

KSA Director, or duly authorized delegated official

SIGNED at ..... on this the ..... day of.....2009 in the presence of the undersigned witnesses:

Witnesses:

1 \_\_\_\_\_

2 \_\_\_\_\_

*(Signatures of witnesses)*

\_\_\_\_\_

On Behalf of **The Contractor** who warrants his/her capacity and authority to execute this agreement



## WATER RESEARCH COMMISSION

Private Bag X03

TEL: (012) 330-0340

Gezina

FAX: (012) 331-2565

SOUTH AFRICA

0031

Enquiries: L Baloyi

### INTELLECTUAL PROPERTY POLICY ACKNOWLEDGEMENT FORM

I hereby acknowledge that I have read and understood the Water Research Commission's Intellectual Property Policy and agree to abide by the terms and conditions thereof.

SIGNED at \_\_\_\_\_ on this the \_\_\_\_\_ day of \_\_\_\_\_ 2009

Signature .....

Full names of signatory\* \_\_\_\_\_

Capacity\* \_\_\_\_\_

\* to be signed by individual duly authorized thereto by the contractor and/or organization submitting research prop