

日期：108年6月21日
便簽 單位：研究發展處

速別：普通件

密等及解密條件或保密期限：

一、文陳閱後，公告於電子公佈欄、本組、本處及本校最新消息，並e-mail副知全校教師知照。

(一)欲申請之計畫主持人，請於8月12日前完成線上申請程序，俾利本組辦理申請。

(二)文存。

會辦單位：

| 第二層 決行 | | |
|------------------------|------|------------------------------------|
| 承辦單位 | 會辦單位 | 決行 |
| 行政組 張明芬 0621 1204 | | |
| 教授兼組長 李思禹 0621 1417 | | 代為決行 教授兼研究發展處長 周濟眾 0621 1417 |

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檔 號：

保存年限：

科技部 函

機關地址：台北市和平東路二段106號
聯絡人：林煒智
電話：(02)2737-7845
傳真：(02)2737-7924
電子信箱：wjlin@most.gov.tw

受文者：國立中興大學

發文日期：中華民國108年6月18日

發文字號：科部綜字第1080038111號

速別：普通件

密等及解密條件或保密期限：

附件：如說明二(附件1 108C0P009929_108D2014442-01.pdf、附件2 108C0P009929_108D2014443-01.odt、附件3 108C0P009929_108D2014444-01.odt、附件4 108C0P009929_108D2014445-01.odt、附件5 108C0P009929_108D2014446-01.odt、附件6 108C0P009929_108D2014447-01.odt、附件7 108C0P009929_108D2014448-01.odt、附件8 108C0P009929_108D2014449-01.odt、附件9 108C0P009929_108D2014450-01.odt、附件10 108C0P009929_108D2014451-01.odt、附件11 108C0P009929_108D2014452-01.odt、附件12 108C0P009929_108D2014453-01.odt、附件13 108C0P009929_108D2014454-01.docx、附件14 108C0P009929_108D2014455-01.docx、附件15 108C0P009929_108D2014460-01.docx、附件16 108C0P009929_108D2014461-01.docx、附件17 108C0P009929_108D2014456-01.doc、附件18 108C0P009929_108D2014457-01.doc、附件19 108C0P009929_108D2014458-01.doc、附件20 108C0P009929_108D2014459-01.doc、附件21 108C0P009929_108D2014462-01.doc、附件22 108C0P009929_108D2014463-01.doc)

主旨：108年度傑出研究獎申請案，自即日起至108年8月19日(星期一)止受理申請，請檢附相關申請文件並函送本部，逾期或資料不齊全者不予受理，請查照轉知。

說明：

- 一、旨揭申請案採線上申辦方式，申請人應至本部傑出研究獎線上作業系統，依本部傑出研究獎遴選作業要點及申請表單進行申請，申請機構請將符合資格之申請案彙整送出，並造具申請名冊(按歸屬領域及類別)函送本部。
- 二、檢附「科技部傑出研究獎遴選作業要點」、「科技部傑出研究獎申請表」、「科技部傑出研究獎WWW線上申請作業使用注意事項」及「108年度科技部傑出研究獎申請名冊」各1份。

正本：專題研究計畫受補助單位(共305單位)

國立中興大學

第1頁，共129頁
線上簽核文件列印 - 第2頁/共130頁



1080011495 108/06/19

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副本：本部自然司、工程司、生科司、人文司、綜合規劃司(均含附件)

108/06/19
10:35:16

部長陳良基

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科技部傑出研究獎遴選作業要點

107年10月26日科部綜字第1070075501號函修正

一、科技部(以下簡稱本部)為獎勵研究成果傑出之科學技術人才，長期從事基礎或應用研究，以提升我國學術研究水準及國際學術地位，創造社會發展與產業應用效益，展現科研成果之多元價值，增強國家科技實力，特訂定本要點。

二、申請機構如下：

(一)公私立大專院校及公立研究機構。

(二)經本部認可之行政法人學術研究機構、財團法人學術研究機構及醫療社團法人學術研究機構。



三、申請人除應符合本部補助專題研究計畫主持人資格(不含已退休、累獲本部傑出研究獎二次以上人員)外，並應分別符合下列規定：

(一)基礎研究類：

研究成果以突破科學問題為主，並具備下列條件之一者：

1. 研究成果具學術原創性或具重要學術價值。
2. 研究成果具學理創新性，對學術發展有重大影響及貢獻。

(二)應用研究類：研究成果以解決實務問題為主，對經濟、社會、民生福祉、環境永續、產業效益等具前瞻科技創新，改善人類生活之知識與技術，具有重大貢獻及有具體事實者。

四、申請方式如下：

(一)申請人應至本部網站線上製作下列文件後，將申請案線上傳送至申請機構，由申請機構彙整送出並造具申請名冊一式二份函送本部申請；文件不全或不符合規定者，不予受理：

1. 傑出研究獎申請表。
2. 個人資料表。
3. 依本部各學術司規定，應填之相關表件。
4. 申請截止日前五年內(此段期間曾生產或請育嬰假者，得延長至七年內，但應檢附相關證明文件)績效文件。

(二)本部各學術司得依個人研究表現或專題研究計畫申請案審查結果遴薦人選，由其依前款規定提出申請。

五、申請期限：

申請機構應依本部規定之期限提出申請，逾期不予受理。

六、審查方式分為初審、複審及決審三階段辦理，作業方式如下：

(一)初審階段：

1. 書面審查：由書面審查委員就每件申請案進行審查，每案之委員以不少於二人為原則。
2. 會議審查：由各該學術司司長(或指定代理人)邀集會議審查委員召開會議，決定進入複審階段之申請案。

(二)複審階段：

1. 領域(分組)會議：由各該學術司司長邀集委員召開會議，就初審階段審查結果討論推薦。



2. 各學術司聯席會議：由各該學術司司長邀集委員召開會議，決定各學術司推薦名單。
- (三) 決審階段由本部次長主持之決審會議決定獲獎人名單，簽陳部長核定。決審會議召開方式如下：
1. 至少須有二分之一以上決審委員出席，始得召開。
 2. 如須以投票方式進行表決，申請案須獲具表決權之決審委員三分之二以上同意票，始得通過。

審查作業期間以自申請案截止收件之次日起五個月內完成為原則，必要時得予延長。

七、審查委員之遴選原則及組成如下：

(一) 委員遴選原則：



1. 依各年度遴選作業辦理各階段審查委員選任，其任期至該年度遴選作業結束。
2. 由本部考量學術成就與聲望、研究專長領域、客觀與公正性等因素，就曾獲傑出研究獎、其他相當獎項之學術榮譽，或為熟悉該領域之專家予以遴選。
3. 審查委員須為當年度未申請本獎項者。

(二) 委員推薦方式：

1. 初審階段：書面審查委員由各該學術司司長邀集會議審查委員召開會議，參考本部研究人才資料庫名單，或視需要敘明理由自上述資料庫以外名單決定適當人選，經各學術司司長核定；會議審查委員由各該學術司自學門中推薦，並視需要置委員數人，經部長核定。
2. 複審階段：領域(分組)及司聯席會議審查委員之組成方式、人數、名單，得依領域屬性，由各該學術司推薦，經部長核定。
3. 決審階段：置決審委員十三至十七人，包括本部次長、各學術司司長及由各學術司推薦之部外專家學者，經部長核定。

審查委員應遵守本部訂頒之利益迴避及保密相關規定。

八、獎勵人數及方式如下：

(一) 獲獎人數：基礎研究類及應用研究類每年合計八十名為限。

(二) 獲獎人由本部頒發獎勵金新臺幣九十萬元及獎狀一紙。

九、獲獎人名單，由本部核定後函知申請機構，依本部規定格式造具印領清冊函送本部辦理撥款。

十、申請人之申請文件，涉有違反學術倫理情事者，依本部學術倫理案件處理及審議要點規定處理。

十一、其他相關事項如下：

(一) 傑出研究獎同年度以申請一件為限。

(二) 申請人近五年曾獲傑出研究獎者，以獲獎年度以後之研究成果及主要貢獻度為審查評分項目。

(三) 獲獎人以獲頒二次為限。

(四) 累獲傑出研究獎二次者，得依本部補助特約研究人員從事三年期特約研究計畫作業要點規定，申請特約研究計畫。



(五)傑出研究獎獲獎人自申請當年之八月一日起三年內不得再申請本獎項。
十二、本要點未盡事宜，依其他相關法令規定辦理。



科技部傑出研究獎申請表
Ministry of Science and Technology
Application Form for Outstanding Research Award (ORA)


Update 18 June 2019

一、基本資料


申請條碼：

(General Information)

(Application Number)

| | | | | | |
|---|--|----------|--|-------------|--|
| 申請機構/系所 (單位) | | | | | |
| Institution/Department | | | | | |
|  申請人中文姓名 | | 職 稱 | | 身分證號碼 | |
| Name | | Position | | (ID Number) | |
| 類別 (Category) | <input type="checkbox"/> 基礎研究類(Fundamental Research) <input type="checkbox"/> 應用研究類(Applied Research) | | | | |
| 歸屬領域 | <input type="checkbox"/> 自然科學(Natural Sciences and Sustainable Development) | | | | |



| | | |
|---|---|--|
| <p>(Research Field)</p> | <p><input type="checkbox"/> 工程(Engineering and Technologies)</p> <p><input type="checkbox"/> 生命科學(Life Sciences)</p> <p><input type="checkbox"/> 人文社會(Humanities and Social Sciences)</p> <p><input type="checkbox"/> 科學教育(Science Education)</p> | |
| <p>近五年研究成果比重自評</p> <p>(Self-evaluation of research impact on each category in the past five years.)</p> <p> (A+B=100%)</p> | <p>(A)基礎研究(Fundamental Research) : %</p> | <p>(B)應用研究(Applied Research) :</p> <p> %</p> |
| <p>歸屬學門</p> <p>(Academic Discipline)</p> <p>(See the list as attached)</p> | <p>代碼</p> <p>(Discipline Code)</p> | <p>名稱</p> <p>(Name)</p> |
| <p>是否曾獲傑出研究獎</p> | <p><input type="checkbox"/> 是(Yes) , 獲獎年度(Year)_____ <input type="checkbox"/> 否(No)</p> | |

| | |
|---------------|--|
| (ORA Awardee) | |
|---------------|--|

表 C701(Form C701)

申請人簽章：_____

日期：_____

(Signature of Applicant)

(Date)



科技部傑出研究獎WWW 線上申請作業使用注意事項

1. 本作業適用於Internet Explorer (IE) 11、Firefox 43、Safari 9或Chrome 47 版本以上之瀏覽器，本部網址：<http://www.most.gov.tw>。
2. 本系統提供傑出研究獎申請書之線上製作作業，包括表C701的資料輸入、及所有表格的空白Word檔案下載及上傳作業。
3. 申請人需有本部核發之ID及Password，方能使用線上申請系統。ID及Password的取得方式為先連線至本部網站首頁，自左上方「線上申辦登入」處，點選「新人註冊」，輸入申請人基本資料後按「確認」鈕：
 - (1)若本部研究人員系統已有該申請人資料，則系統會告知原ID並取得新的Password。
 - (2)若系統內無申請人資料，則需輸入個人詳細基本資料後，再將顯示的「研究人員基本資料表」列印簽名並經單位主管簽名確認後，傳真至本部資訊處(Fax：(02)2737-7691)，科技部在收到傳真後四個工作小時內會完成身分確認且自動寄送確認信函，以便取得您的ID與Password。
4. 若申請人遺忘ID及Password時，請自本部網站首頁「線上申辦登入」處，點選「忘記密碼」，輸入申請人基本資料後，點選「查詢密碼提示」，系統將提示原設定密碼之首尾碼，或點選「直接將新密碼E-Mail給我」，系統將自動寄送更改密碼確認信函，以取得登入帳號及新密碼；若先前已開通本部簡訊服務，亦可點選「直接將新密碼發送簡訊給我」，系統將登入帳號及新密碼以簡訊發送至原登錄之行動電話門號中。
5. 自本部網站首頁「線上申辦登入」處，身份選擇「研究人員(含學生)」，輸入申請人之登入帳號及密碼後進入「學術研發服務網」，在「申辦項目」「獎勵補助類」項下，點選「傑出研究獎」，進入個人基本資料畫面，確認後點選「下一步」，即進入本系統之「主畫面」，從主畫面視窗上點選「新增」，即可新增一筆申請案。傑出研究獎同一年度以申請一件為限。
6. 申請書製作完畢後，按「繳交送出」後會列出所有已完成登錄及上傳的表格及相關附件，經申請人確認無誤後，製作申請書合併檔，再按「繳交送出」。該筆申請案一旦按「繳交送出」後，所有資料會自動傳送至申請機構，此時申請人即無法再作任何修改，除非請申請機構之承辦人員在電腦上按「退件」鈕，申請人方得再進入本系統修改該筆申請案。修改完畢後必須再按「繳交送出」至申請機構。
7. 申請人將所有申請資料完成登錄及上傳並經審查無誤後，申請機構承辦人員即可透過「傑出研究獎申請案線上彙整作業」將申請人之傑出研究獎申請案線上製作所產生之相關資料傳送至本部，方完成傑出研究獎線上申請作業。
8. 對本作業系統如有任何疑問，請與本部資訊處聯絡(電話：0800-212-058、02-2737-7590~92)。
9. 為避免網路交通擁塞，請申請人於本部或申請機構規定之期限前提早上線使用。





Ministry of Science and Technology

Application Form for Outstanding Research Award (ORA)

(Research Field: Natural Sciences and Sustainable Development)

6 June 2018



II. Major achievements and contributions (limited to a size of less than 5 pages)

- i. All the application material submitted is limited to the recent 5 years (from August 2014 to July 2019).
- ii. List no more than 5 most important publications. State their impacts to academic/ applied research development. (For each of the listed publications with 2 or more corresponding authors, a copy of signed Table 1 of Form C702-M is required.)
- iii. List awards or honors received, plenary or invited speeches given in the international conferences, roles/positions or services (e.g. supervisors, council members, journal editors, review panelists, etc.) engaged in internationally eminent academia/ applied-research organizations or associations.
- iv. **Fundamental research:**



Other than the listed publications mentioned above, itemize and describe academic works or research achievements that have strong impacts on academics, society, or economy.

v. Applied research:

Itemize and describe innovations, domestic/ international patents, technology transfers, or research achievements, mainly contributed by the applicant. Describe their significance on solving any problems in industry, business, society or economy.

II. Curriculum vitae and publication list

Fundamental research/Applied research: Please list all journal papers and technical reports in the descending chronological order, mark the corresponding author(authors) with an asterisk (*).

III. Patent and technology transfer list

| Usage 1. Patent 2. Technology transfer 3. Industry-university cooperation 4. Industry alliance 5. Startups | Title of the Technology | Inventor(發明人) /Assignee(專利權人) | Date of Patent (Month/Year) | Manufacturer/ Country | Supporting information* |
|---|-------------------------|----------------------------------|--------------------------------|--------------------------|-------------------------|
| | | | | | |

* Please upload the PDF files of patent certificates and technology transfer agreements.

Notes:

- i) **All the application material submitted is limited to the recent 5 years (from August 2014 to July 2019).**



With proper written proof(s), applicants who took maternity leave or medical leave due to pregnancy in the recent 5 years may include works and papers published from **August 2014 to July 2019.**

- ii) For those who had formerly received Outstanding Research Award to apply for the Award this year, only the application material beyond the last award-receiving year should be considered.

- iv) Application material should be written in English and use 12pt Times New Roman, single-spaced type, and A4-size page.



Form C702-M

Table 1

Corresponding Authorship Certificate of Major Publication

for the Outstanding Research Award (ORA)

Ministry of Science and Technology

| | | | |
|---|--|---|---|
| Publication Title | | Published Date | |
| Corresponding Author(s)'s Name(s) | Description of Contribution or Parts Completed by the ORA Applicant | Proportion of Contribution by the ORA Applicant | Corresponding Author(s)'s Signature(s) |
| | | | |
| | | | |





| | | | |
|--|--|--|--|
| | | | |
| | | | |
| | | | |
| | | | |
| Applicant Signature: _____ Date: _____ | | | |



Notes:

1. This form should be filled in English.
2. A separate form is required for each publication.
3. At least three corresponding authors' signatures are required for each publication with more than three corresponding authors.

Form C702-M



科技部工程司傑出研究獎申請人近五年成果績效表

| | |
|-------|-----|
| 姓名： | 職稱： |
| 服務單位： | |

本人已確認所附申請表及相關資料均符合以下說明：（請勾選以下相符項目）

近5年未獲獎，申請資料期間為近五年成果（2014/08~2019/07）

104年曾獲獎，申請資料期間為近四年成果（2015/08~2019/07）

105年曾獲獎，申請資料期間為近三年成果（2016/08~2019/07）

簽名：_____

★以下五項內容請勿超過五頁，且符合以上申請資料期間之成果為限。

一、**研究成果的創新及突破**。簡述最具代表性之學術著作在學理創新或應用技術的突破與貢獻；明顯且持續性提升我國在該領域之國際學術地位、能見度與影響力；列出近五年內已發表之重要期刊論文、書籍、重要國際會議論文情形至多5篇，請填寫附表一。



二、**研究成果對工程領域之重要貢獻**。1. 基礎研究方面：含(1)已發表之重要期刊論文、書籍、重要國際會議論文之質與量及其成果被引用情形(外引率)，陳述並佐證在學門、領域內領先的程度；(2)研究成果成為一新的學理，引領研究方向。2. 應用研究方面：含(1)對我國產業價值或競爭力具貢獻或影響，如解決之實務問題及具體事實；(2)智慧財產應用績效及轉化為產業使用情形，如技術移轉授權、產學合作及專利，請填寫附表二；(3)對經濟、社會、民生等重大貢獻。



三、**國內外之獎項、成就及榮譽**。獲得國內外重要獎項及榮譽、國際研討會邀請專題演講或規劃委員、國際領導期刊編輯、國際重要委員會之委員或理監事等(請註明名稱及日期)；獲得國內外重要應用研究獎項或榮銜(請註明名稱及日期)、開發之系統或技術被廣泛應用(須有具體事証及績效佐證)。

四、**在研究團隊建立、人才培育及服務方面的重要貢獻及成就**。前瞻研究或技術團隊養成、人才培育貢獻、指導學生曾獲之獎項、特出表現或就業狀況及各類服務、教學貢獻實績等。

五、**其他可納入遴選考量之具體成就**。若有不含在上述四項且與本獎項相關之特殊事蹟，可加以說明；若無則不需填寫。

附表一

申請資料期間已發表之重要期刊論文、書籍、重要國際會議論文情形至多 5 篇，各篇重要著作如有共同作者，請各篇分別填寫合著證明表格：

| | 論文資料：請依發表時間之先後順序填寫，內容依序包括作者姓名(依原出版順序，主要作者請加註*)、題目、期刊名稱、卷數、起訖頁數及出版年，並註明是否為 SCI 或 SSCI 期刊(如為 SCI/SSCI 論文請加註該期刊所屬研究領域 ¹)。 | SCI/SSCI Rank N / M |
|---|--|------------------------|
| 1 | | / |
| 2 | | / |
| 3 | | / |
| 4 | | / |
| 5 | | / |

註：1.SCI/SSCI 論文所屬研究領域，請參照 ISI Essential Science Indicator 之劃分。

2.SCI/SSCI Rank：N 為期刊在所屬研究領域之 Impact Factor 排序名 (Impact Factor 以 2018 年 ISI 資料庫之資料為準)；M 為該期刊所屬研究領域之總期刊數。

3.Cited Number (SCI、SSCI 論文被引用次數) 統計期間截至 **2019/07/31**。該資料可透過 Web of Science 會員，利用網路資料庫查詢。Web of Science 會員名單請詳參下列網頁：<http://www.stpi.narl.org.tw/>，或至相關單位檢索光碟資料。

科技部工程司傑出研究獎申請人已發表近五年重要著作

合著證明

| | | | | | |
|---|--------|---|---|------|--|
| 著作名稱 | | | | 出版時間 | |
| 傑出獎申請人完成部分或貢獻說明 | 貢獻度所佔比 | % | | | |
| | 例： | | | | |
| 共同作者 | | | | | |
| 親自簽名 (不含申請人) | 1 | 2 | 3 | | |
| 申請人親自簽名： _____ 中華民國 _____ 年 _____ 月 _____ 日 | | | | | |



1. 各篇重要著作如有共同作者，請各篇分別填寫本合著證明。
2. 除申請人須親自簽名外，共同作者(不含申請人)也須親自簽名，共同作者如超過三

人，應至少有三位共同作者代表簽名。若共同作者若為外籍人士，本表得以外文撰寫。



The important published works of the past five years by the applicant to the
 Outstanding Research Award of Department of Engineering and Technologies,
 Ministry of Science Technology

Co-author Certificate

| | | | | | | |
|--|------------------------------|--|------|--|---|--|
| Publication | | | Date | | | |
| Contribution explanation or parts completed by Outstanding Award applicant | Contribution Proportion : | | % | | | |
| | | | | | | |
| Co-author signature (Excluding applicant) | 1 | | 2 | | 3 | |



Applicant signature:

Date:



附表二

(一)技術移轉授權(含專利及著作授權)

| 項次 | 合約編號 | 合約名稱 | 授權對象 | 合約起訖日 | 申請資料期間入帳金額 (新台幣仟元) |
|----|------|------|------|-------|--------------------|
| | | | | | |
| | | | | | |
| 總計 | | | | | |

(二)產學合作

| 項次 | 合約編號 | 產學計畫名稱 | 企業名稱 | 合約起訖日 | 合約金額(新台幣仟元) | 申請資料期間入帳金額 (新台幣仟元) |
|----|------|--------|------|-------|-------------|--------------------|
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| 總計 | | | | | | |

*填表(一)及(二)注意事項：



1. 技術移轉授權、產學合作之金額，請分別確實填列。
2. 合約生效日期可在申請資料期間之前，但須以申請機構申請資料期間已入帳金額為限，即入帳時間須在上述期間內。
3. 入帳金額以開立收(領)據為認列依據，請提供申請機構之收(領)據以資佐證，須與填列表格內容相符，並依填寫表格之項次依序標明列於附件。



(三)專利

| 項次 | 專利名稱 | 專利國別 | 專利證號 | 專利起訖日 |
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*填表(三)注意事項：

以「發明專利」為限。

研發成果管理運用單位：_____ (請簽章) 申請人：_____ (請親自簽名)



Ministry of Science and Technology

Application Form for Outstanding Research Award (ORA ; **Applied Research**) (Research Field : Life Sciences)

Update 1 June, 2019

II. Major achievements and contributions (No more than 5 pages)

- i. **Fundamental Research:** Summarize academic works or research achievements mainly contributed by the applicant and describe their significance. As for interdisciplinary research, please list major publications and state their significance and impacts on their related fields.
- ii. **Applied Research:** Summarize valid patents, technology transfers, or research achievements mainly contributed by the applicant. Describe their impacts on society or economy.

II. Other supporting materials

Summarizes the received awards or honors, plenary or invited speeches given in international conferences, the positions or services performed in international, eminent academic organizations or associations, such as, the supervisor, council member or journal editor.

III. Curriculum Vitae and publication list

Please list all works in descending chronological order, mark any corresponding author with an asterisk (*).

Notes:



- i) **All of the submitted application materials are limited to the recent 5 years (from August 2014 to July 2019).**
- ii) With the proper written proof(s), the applicants who took maternity leave or medical leave due to pregnancy in the recent 5 years may include works and papers published from **August 2011 to July 2019.**
- iii) The applicants have the received Outstanding Research Award to apply for the Award this year. The application material beyond the last award-receiving year will be considered.
- iv) The format of application materials should use 12pt Times New Roman, single-spaced type, and A4 size page.



II. The most important achievements in Taiwan for the past five years (from Aug 1, 2014 ~ July 31, 2019)

Table I. The list of technology transfer authorizations and patents

| No. | Contract No. | Contract Title | Authorized Party | Date of contract | The amount of the contract for the past five years (2014/08/01~2019/07/31) |
|-------|--------------|----------------|------------------|------------------|--|
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| Total | | | | | |

Table II. The list of patents

| No. | Patent Title | Patent No | Patent Country | Issue Date |
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Note: Limit to the invention patent.

Table III. The list of the Industry-university collaboration Programs

| No. | Contract No. | Name of Enterprise Project | Company name | Date of contract | The amount of the contract for the past five years (2014/08/01~2019/07/31) |
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Note:



1. The amount of technology transfer authorization






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Table IV. The list of publications

| No. | Publication Information Please fill in the information of publications in descending chronological order. The information needed for every publication are: Author(s) (same order as the published article), Title, Journal Name, Volume, Pages, and Date of Publication. | Order/Field | Total number of citations | |
|-----|--|-------------|---------------------------|-----------------|
| | | | Others' citation | * Self-citation |
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Note:



1. Please choose five most important publications conducted - and -





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* Self-cited number: applicant's name appearing on the authors of the publication




II. Please attach the following documents in PDF files.(The size of uploaded documents shall not exceed 10MB in total)

1. Five major publications in full text which are done in Taiwan for the past five years
(from Aug 1, 2014~ July 31, 2019)
2. The original search information of the number of citations of the above publications (Please compress and simplify the contents of the files in case of >10MB)
3. Please provide patent certificates and technology transfer agreements



Annex 1(附表一)

| Certificate of Co-Authorship of Publication 【 Five most important publications conducted in Taiwan for the past five years (From Aug 1, 2014 to July 31, 2019) 】【 | | | | | |
|---|---|---------------------|------------------|-------------------------|---|
| Title of Publication | | Date of Publication | | Contribution Percentage | % |
| Explanation of the contribution of the applicant  | | | | | |
| Coauthors' Signatures | 1 | | 2 | | 3 |
| | 4 | | 5 | | 6 |
| Signature of the Applicant : | | | Date (DD/MM/YY): | | |

1. If any of the papers has the coauthors, please separately fill in the Certificate of Co-Authorship of Publication.
2. **All coauthors should sign this Certificate of Co-Authorship of Publication. If the coauthor is a foreigner, he/she can be waived to sign this form.**



生科司傑出獎專屬表格填寫注意事項

(修訂：108年6月1日)

1. 專屬表格分**基礎研究及應用研究**兩種版本，請依申請類別選擇表格版本，資料皆以**英文填寫**，以利國際審查。
2. 歸屬學門一欄，請填寫申請人近三年執行專題計畫所屬學門(詳見附件)。若僅執行國家型科技計畫或專案者，則依所執行計畫之研究屬性選填。
3. 申請人近五年曾獲傑出研究獎者，以獲獎年度後之研究成果及主要貢獻度為審查評分項目。已獲獎肯定之論文成果不宜再重複提出傑出獎申請(例如：獲**105**年度傑出獎者若申請**108**年度傑出獎時，僅能提供**105/8/1**以後之論文成果，作為審查資料)。
4. 所附五篇最具代表性研究成果論文，各篇成果論文如有共同作者，請分別填寫合著證明(專屬表格中之附表一)。
5. 傑出研究獎申請書及補充資料表經提送至本部，內容無法再修正或進行抽換，敬請見諒！
6. 論文引用資訊查詢請以**2018**年之**JCR**網路版或其他相關資料庫為準。

附件

生科司學門歸屬表

| 學門 | Academic Discipline |
|---------------------|--|
| B30A001-植物保護、土壤及環保 | B30A001- Plant Protection, Environmental Protection, and Soil Science |
| B30A002-森林水保及生工生機 | B30A002- Forestry, Water Conservation, Bioenvironmental and Bio-industrial Engineering |
| B30A003-生物多樣性 | B30A003- Biodiversity |
| B30B001-農藝、園藝及農化 | B30B001- Agronomy, Horticulture and Agricultural Chemistry |
| B30B003-漁業、水產 | B30B003- Fishery, Aquaculture |
| B30B004-畜牧、獸醫及實驗動物 | B30B004-Animal Science, Veterinary Medicine, and Laboratory Animals |
| | |
| B20A001-基礎生物 | B20A001- Biology |
| B20A002-生物化學及分子生物 | B20A002- Biological Biochemistry and Molecular Biology |
| | |
| B10A001-生理 | B10A001- Physiology |
| B10A002-細胞生物及解剖 | B10A002- Cell Biology and Anatomy |
| B10A003-病理及法醫 | B10A003- Pathology and Forensic Medicine |
| B10B001-藥理及毒理 | B10B001- Pharmacology and Toxicology |
| B10B002-醫學生化及分子生物 | B10B002- Medical Biochemistry and Molecular Biology |
| B10C001-微生物免疫 | B10C001- Microbiology and Immunology |
| B10C002-寄生蟲及醫技與實驗診斷 | B10C002- Parasitology, Medical Technology, and Clinical Pathology |
| B10D001-藥學 | B10D001- Pharmacy |
| B10D002-中醫藥學 | B10D002- Chinese Medicine |
| B10E001-食品科學 | B10E001- Food Science |
| B10E002-營養保健 | B10E002- Nutritional Medicine |
| B10F001-公衛及環境醫學 | B10F001- Public Health and Environmental Medicine |

| 學門 | Academic Discipline |
|------------------------|--|
| B10F002-精神醫學、老人醫學及家庭醫學 | B10F002- Psychiatry, Gerontology/Geriatrics, and Family Medicine |
| B10F003-護理 | B10F003-Nursing |
| B10G001-醫工、骨科、幹細胞 | B10G001- Medical Engineering, Orthopedics, Stem Cell |
| B10G002-牙醫 | B10G002- Dentistry |
| B10G003-放射核醫 | B10G003- Radiology and Nuclear Medicine |
| B10G004-復健 | B10G004- Physical therapy and Rehabilitation |
| B10H001-肝膽、胃腸 | B10H001-Hepatology, Gastrointestinal Medicine |
| B10H002-消化外科 | B10H002- Gastroenterological Surgery |
| B10K001-心臟血管內科 | B10K001- Cardiology |
| B10K002-心臟血管外科 | B10K002- Cardiovascular Surgery |
| B10M001-胸腔內科 | B10M001- Chest |
| B10M002-胸腔外科 | B10M002- Chest Surgery |
| B10N001-神經內科 | B10N001- Neurology |
| B10N002-神經外科 | B10N002- Neurosurgery |
| B10N003-麻醉 | B10N003- Anesthesiology |
| B10P001-婦產 | B10P001- Obstetrics & Gynecology |
| B10P002-小兒科 | B10P002- Pediatric medicine |
| B10Q001-血液 | B10Q001- Hematology |
| B10Q002-腫瘤 | B10Q002- Hematological Oncology |
| B10Q003-風濕免疫 | B10Q003- Rheumatology |
| B10Q004-感染 | B10Q004- Infectious Disease |
| B10R001-腎臟 | B10R001- Renal Physiology & Nephrology |
| B10R002-泌尿 | B10R002- Urology |
| B10R003-新陳代謝及內分泌 | B10R003- Metabolism and Endocrinology |
| B10S001-眼 | B10S001- Ophthalmology |
| B10S002-耳鼻喉 | B10S002- Otolaryngology(ENT) |
| B10S003-皮膚 | B10S003- Dermatology |
| B10S004-整形外科/乳房外科 | B10S004- Plastic Surgery/ Breast Surgery |



Ministry of Science and Technology

Application Form for Outstanding Research Award (ORA ; **Fundamental Research**) (Research Field : Life Sciences)

Update 1 June, 2019

II. Major achievements and contributions (No more than 5 pages)

- i. **Fundamental Research:** Summarize academic works or research achievements mainly contributed by the applicant and describe their significance. As for interdisciplinary research, please list major publications and state their significance and impacts on their related fields.
- ii. **Applied Research:** Summarize valid patents, technology transfers, or research achievements mainly contributed by the applicant. Describe their impacts on society or economy.

II. Other supporting materials

Summarizes the received awards or honors, plenary or invited speeches given in international conferences, the positions or services performed in international, eminent academic organizations or associations, such as, the supervisor, council member or journal editor.

III. Curriculum Vitae and publication list

Please list all works in descending chronological order, mark any corresponding author with an asterisk (*).

Notes:

- i) **All of the submitted application materials are limited to the recent 5 years (from August 2014 to July 2019).**
- ii) With the proper written proof(s), the applicants who took maternity leave or medical leave due to pregnancy in the recent 5 years may include works and papers published from **August 2012 to July 2019.**
- iii) The applicants have the received Outstanding Research Award to apply for the Award this year. The application material beyond the last award-receiving year will be considered.
- v) The format of application materials should use 12pt Times New Roman, single-spaced type, and A4 size page.



II. The most important achievements in Taiwan for the past five years (from Aug 1, 2014 ~ July 31, 2019)

Table I. The list of publications

| No. | Publication Information Please fill in the information of publications in descending chronological order. The information needed for every publication are: Author(s) (same order as the published article), Title, Journal Name, Volume, Pages, and Date of Publication. | Order/Field | Total number of citations | |
|-----|--|-------------|---------------------------|-----------------|
| | | | Others' citation | * Self-citation |
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Note:

1. Please choose five most important





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ification of Co-Authorship of Publication as Appendix



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* Self-cited number: applicant's name appearing on the authors of the publication

Table II. The list of technology transfer authorizations and patents

| No. | Contract No. | Contract Title | Authorized Party | Date of contract | The amount of the contract for the past five years (2014/08/01~2019/07/31) |
|-------|--------------|----------------|------------------|------------------|---|
| | | | | | |
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| Total | | | | | |

Table III. The list of patents

| No. | Patent Title | Patent No | Patent Country | Issue Date |
|-----|--------------|-----------|----------------|------------|
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Note: Limit to the invention patent.

Table IV. The list of the Industry-university collaboration Programs

| No. | Contract No. | Name of Enterprise Project | Company name | Date of contract | The amount of the contract for the past five years (2014/08/01~2019/07/31) |
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1. The amount of technology transfer authorization





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II. Please attach the following documents in PDF files.(The size of uploaded documents shall not exceed 10MB in total)

1. Five major publications in full text which are done in Taiwan for the past five years
(from Aug 1, 2014~ July 31, 2019)
2. The original search information of the number of citations of the above publications (Please compress and simplify the contents of the files in case of >10MB)
3. Please provide patent certificates and technology transfer agreements



Annex 1(附表一)

| Certificate of Co-Authorship of Publication 【 Five most important publications conducted in Taiwan for the past five years (From Aug 1, 2014 to July 31, 2019) 】【 | | | | | |
|---|---|---------------------|------------------|-------------------------|---|
| Title of Publication | | Date of Publication | | Contribution Percentage | % |
| Explanation of the contribution of the applicant  | | | | | |
| Coauthors' Signatures | 1 | | 2 | | 3 |
| | 4 | | 5 | | 6 |
| Signature of the Applicant : | | | Date (DD/MM/YY): | | |

1. If any of the papers has the coauthors, please separately fill in the Certificate of Co-Authorship of Publication.
2. **All coauthors should sign this Certificate of Co-Authorship of Publication. If the coauthor is a foreigner, he/she can be waived to sign this form.**



科技部人文司(科學教育領域)傑出研究獎申請須知

- 1、 須填寫英文申請書以利國際審查，否則不予送審。
- 2、 研究成果請提供近五年內之資料。於本次申請截止日前五年內曾生產或請育嬰假者，得加填 2012 年與 2013 年著作資料，並請於本部線上申請系統指定處上傳證明文件。
- 3、 如曾為傑出獎得主，請提供最近一次傑出獎後之資料。
- 4、 獎勵類別分為基礎研究與應用研究類，申請任一類獎勵均須提供下列所有資料：
 - (一)近五年內最具代表性著作之貢獻。基礎研究類請著重在學理創新、在國際學術上之重要性等；應用研究類著重問題解決或技術創新運用等
 - (二)近五年研究成果對科學教育相關領域實務應用之貢獻。請說明研究成果對社會、經濟、民生之貢獻與影響；例如
 1. 對科學教育政策的影響、撰寫政策建議書等
 2. 研發工具或教材之數量
 3. 開發之課程或所舉辦之活動/競賽
 4. 專利/技轉/授權件數與金額
 5. 成品/商品銷售總金額及繳交科技部之收益
 6. 計畫成果推廣（例如舉辦研討會、工作坊、電子報、網站、影視產品）之次數與參與（閱聽）人數
 7. 研究成果影響人數與類別（例如校長、主任、教師、學生、家長、一般大眾等）
 8. 社會各界對研究成果肯定與關注程度（例如獲得獎項、媒體報導等）
 - (三)近五年在人才培育、學術社群服務方面的重要貢獻。
 1. 人才培育之具體貢獻：例如



- (1) 培育深具潛力的科學人才（例如奧林匹亞競賽或國際科展得獎者）
- (2) 培育表現優異之科教人才（例如師鐸獎、吳大猷獎、年輕學者獎、科技部優秀年輕學者計畫得主等）
- (3) 培育表現優異之科學普及人才，例如各種文化創作獎項、課程開發獎項、教材製作獎項、創業競賽獎項等。
- (4) 培育各級學生（碩博士生）、教師、研究人員之人數

2. 科學教育相關學術社群貢獻：例如

- (1) 近五年內擔任國際學會辦理之學術研討會 plenary speech、keynote speech 等。
- (2) 近五年內領導執行之大型、整合型研究計畫或產學合作計畫。
- (3) 近五年內在國內外學術社群的服務，如：擔任國內外重要學術學會理監事、國內外知名學術期刊編輯或審查委員等。
- (4) 執行國際合作計畫、承辦大型國際學術會議、延攬國際學者等。

以上資料以 5 頁為限。

(四)五年內最具代表性著作資料(最多五項)



Ministry of Science and Technology

Application Form for Outstanding Research Award (ORA)

(Research Field : Science Education)

II. Summarize the academic contribution of the applicant's most representative written works during the most recent 5 years. Please describe each representative work's relevant theoretical advances or practical application in the field of science education, including breakthroughs and contributions.



III. Describe the contributions of the applicant's research to practical applications in the field of science education during the most recent 5 years. Describe the contributions and impact of each of the applicant's research results on society, the economy, and people's livelihoods.



IV. Describe important contributions to talent cultivation and service to the academic community during most recent 5 years.



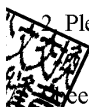
Items II-IV are limited to a total of 5 pages.

V. List the applicant's most representative written works during the most recent 5 years (maximum of 5 works)

| No. | Information concerning written works Please fill in the following information for each work, with the most recent works first: Author(s) (please note each author's name and title—such as Prof., Ph.D., M.S., etc.—after each work), year of publication, name of work, journal, volume, and page number; please mark the corresponding author with an asterisk*) | Journal IF | Total number of citations | |
|-----|---|------------|---------------------------|----------------|
| | | | Others' citations | Self-citations |
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1. Total number of citations: It is recommended that Scopus, Web of Science (SSCI), or Google Scholar be used; please note the name of the database if some other database has been used.

 2. Please fill out the attached English certificate of co-authorship if any of the uploaded representative works has been co-authored. A separate form is required for each co-authored work.

3. Academic books refer to books of an academic nature on science education that have been formally published by a publisher following a review process. Academic books—either the whole book or a certain chapter—must be reviewed before they may be confirmed. Please submit electronic files of academic books' copyright pages (page containing information concerning publisher) and table of contents.

4. In the case of works that have been accepted for publication but not formally published, please attach an electronic file of the publisher's letter of acceptance.

Notes:

i. All the submitted application materials are limited to the most recent 5 years. If the applicant has given birth or requested parental leave within the 5 years prior to the application cut-off date, information concerning works from 2012 and 2013 may be included, in which case verifying documents must be uploaded to the located indicated by MOST's online application system.

ii. In the case of individuals who have received the Outstanding Researcher Award, please



provide only application information following the most recent award.



| Certificate of co-authorship | | | | | | |
|---|----------|--|----------|--|----------|--|
| Title of work | | | | | | |
| Date of publication | | | | | | |
| Order of authorship | | | | | | |
| Percentage of contribution | % | | | | | |
| Please elaborate upon your contribution to works submitted for application for the Distinguished Research Award | | | | | | |
| Signature of each co-author | 1 | | 2 | | 3 | |
| | 4 | | 5 | | 6 | |



This article was not used for other award applications by any of the co-author(s).

Signature of applicant :

Date :

1. Please fill out this form if any of your uploaded representative works of the past five years is co-authored. A separate form is required for each co-author.
2. Each co-author must sign in person. If the work is a result of more than four authors, at least four signatures, including that of the first author and the corresponding author(s), are required for this form. In cases where there are foreign authors, this form may be completed in English.
3. If the required signatures cannot be obtained, please explain.



科技部人文司傑出研究獎申請須知(中文版)

一、注意事項

- (一)傑出研究獎申請截止日前5年內之代表性研究成果(可含實作成果)得上傳1~5篇(本、件、項)，另請就所列近5年著作目錄(表C302)，作系統性精要描述其研究成果之學術價值與重要貢獻，以作為評量參考依據。
- (二)人文司傑出研究獎申請人研究成果說明，得就中、英文版擇一填寫(如附表)。

二、各類別內涵

- (一) 基礎研究類：研究成果以突破科學問題為主，並具備下列條件之一者：
 1. 研究成果具學術原創性或具重要學術價值。
 2. 研究成果具學理創新性，對學術發展有重大影響及貢獻。
- (二) 應用研究類：研究成果以解決實務問題為主，對經濟、社會、民生福祉、環境永續、產業效益等具前瞻科技創新，改善人類生活之知識與技術，具有重大貢獻及有具體事實者。

三、審查重點：

基礎研究類及應用研究類之共同審查重點：

1. 研究成果之品質、重要性、創新性及在學術或應用上的貢獻。
2. 所參與國內外重要學術事務或所獲獎項等之學術成就對於個人及整體學術發展之重要性或具體貢獻。

應用研究類另考量之審查重點：

1. 研究成果能善盡學術之社會責任，對重要實務問題之改進有重大貢獻，並有具體事實者。
2. 研究及著述以針對人類社會之實際問題為主，其成果能突顯人文社會科學之價值意義與應有之影響力。

附表

人文司傑出研究獎申請人研究成果說明

* 本表為評量主持人研究成果之依據，敬請詳實填寫；主持人亦應同時更新本部學術研發服務網之個人資料表。

* 本表內容以5頁為限（字型大小12，標準字元間距，單行間距）。

一、請就所列近5年著作目錄(表C302)及代表性研究成果（可含實作成果）作系統性精要描述其學術研究價值與重要貢獻。

二、個人近5年對人才培育、研究團隊與學術社群之建立與服務，以及對社會之重要貢獻。



三、其他資料(請列出以下各項之名稱及日期：申請截止日前5年內獲獎情形、國內外邀請演講、擔任國際重要學術學會理監事或國際知名學術期刊編輯委員等)

Ministry of Science and Technology

Application Form for Outstanding Research Award (ORA)

(Research Fields : Humanities and Social Sciences)

I 、 Notes :

- A. Upload 1-5 representative research achievements (practical works included) achieved in recent 5 years before the deadline of the application. Fill in the form of research achievements in recent 5 years (C302) and summarize systematically the academic value and contributions of research achievements, which will be the references for the evaluation of this award.
- B. The applicant can choose to fill in either the Chinese or English version of the Research Performance Appraisal (please refer to the appendices).

II 、 Categories :

A. Fundamental Research

The research achievements should be focused on the breakthrough of scientific problems and meet at least one of the following requirements:

- being academically original or of great academic value.
- being innovative and influential in academic studies, as well of great contributions to academic development.

A. Applied Research

The research achievements should be practical in solving problems of economy, society, well-being, environmental sustainability, and industrial efficiency in Taiwan. It should also have great contributions to the improvement of knowledge and technology for human life.

III 、 Review Criteria

Shared criteria for fundamental research and applied research

1. The quality, significance, and innovation of research achievements and the contributions in academic and practical aspects.
2. The importance of the academic achievements derived from participating the domestic and international academic affairs or receiving academic awards that make great contribution to personal and the overall academic development.

Specific criteria for applied research

1. The research achievements that fulfil social responsibility, and make significant contributions to the improvements for practical problems. Please provide the concrete facts.
2. The research achievements focus on solving the practical problems of human society, with the results highlighting the merits and impact of humanities and social sciences.



Appendix

Research Achievements Appraisal of Applicant for Outstanding Research Award (Research Fields : Humanities and Social Sciences)

- * The applicant's research performance will be evaluated by the research achievements. Please fill in the form completely and accurately. The principal investigator should update personal data sheet on the academic research service portal of Ministry of Science and Technology
- * The application form is limited to 5 pages. (font size: 12pt; single line spacing)

1. Summarize systematically the academic value and contributions of your representative research achievements based on the form of your research achievements in recent 5 years (C302) (practical works included).
2. Describe the contributions to the cultivation of young scholars, establishment and service for the research team and academic community, as well as the major contributions to our society in recent 5 years.
3. Other supporting materials
(Awards or honors received, plenary or invited talks given at international conferences, positions or services performed in international, eminent academic organizations or associations, e.g. supervisor, council member, journal editor or review panelist.)



科技部傑出研究獎申請表

Ministry of Science and Technology

Application Form for Outstanding Research Award (ORA)

Update 18 June 2019

一、基本資料

申請條碼：

(General Information)

(Application Number)

| | | | | | |
|--|---|----------|-------------------------------|-------------|--|
| 申請機構/系所(單位) | | | | | |
| Institution/Department | | | | | |
| 申請人中文姓名 | | 職稱 | | 身分證號碼 | |
| Name | | Position | | (ID Number) | |
| 類別 (Category) | <input type="checkbox"/> 基礎研究類(Fundamental Research) <input type="checkbox"/> 應用研究類(Applied Research) | | | | |
| 歸屬領域 (Research Field) | <input type="checkbox"/> 自然科學(Natural Sciences and Sustainable Development) <input type="checkbox"/> 工程(Engineering and Technologies) <input type="checkbox"/> 生命科學(Life Sciences) <input type="checkbox"/> 人文社會(Humanities and Social Sciences) <input type="checkbox"/> 科學教育(Science Education) | | | | |
| 近五年研究成果比重自評 (Self-evaluation of research impact on each category in the past five years.) (A+B=100%) | (A)基礎研究(Fundamental Research) : % | | (B)應用研究(Applied Research) : % | | |
| 歸屬學門 (Academic Discipline) (See the list as attached) | 代碼 (Discipline Code) | | 名稱 (Name) | | |
| | | | | | |
| 是否曾獲傑出研究獎 (ORA Awardee) | <input type="checkbox"/> 是(Yes), 獲獎年度(Year)_____ <input type="checkbox"/> 否(No) | | | | |

表 C701(Form C701)

申請人簽章：_____

日期：_____

(Signature of Applicant)

(Date)

Ministry of Science and Technology

Application Form for Outstanding Research Award (ORA)

(Research Field: Natural Sciences and Sustainable Development)

6 June 2018

II. Major achievements and contributions (limited to a size of less than 5 pages)

- i. All the application material submitted is limited to the recent 5 years (from August 2014 to July 2019).
- ii. List no more than 5 most important publications. State their impacts to academic/ applied research development. (For each of the listed publications with 2 or more corresponding authors, a copy of signed Table 1 of Form C702-M is required.)
- iii. List awards or honors received, plenary or invited speeches given in the international conferences, roles/positions or services (e.g. supervisors, council members, journal editors, review panelists, etc.) engaged in internationally eminent academia/ applied-research organizations or associations.
- iv. **Fundamental research:**
Other than the listed publications mentioned above, itemize and describe academic works or research achievements that have strong impacts on academics, society, or economy.
- v. **Applied research:**
Itemize and describe innovations, domestic/ international patents, technology transfers, or research achievements, mainly contributed by the applicant. Describe their significance on solving any problems in industry, business, society or economy.

III. Curriculum vitae and publication list

Fundamental research/Applied research: Please list all journal papers and technical reports in the descending chronological order, mark the corresponding author(authors) with an asterisk (*).

IV. Patent and technology transfer list

| Usage | Title of the Technology | Inventor(發明人)/Assignee(專利權人) | Date of Patent (Month/Year) | Manufacturer/ Country | Supporting information* |
|------------------------------------|-------------------------|------------------------------|-----------------------------|-----------------------|-------------------------|
| 1. Patent | | / | | / | |
| 2. Technology transfer | | / | | / | |
| 3. Industry-university cooperation | | / | | / | |
| 4. Industry alliance | | / | | / | |
| 5. Startups | | / | | / | |

| | | | | | |
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| | | | | | |

* Please upload the PDF files of patent certificates and technology transfer agreements.

Notes:

- i) **All the application material submitted is limited to the recent 5 years (from August 2014 to July 2019).**
- ii) With proper written proof(s), applicants who took maternity leave or medical leave due to pregnancy in the recent 5 years may include works and papers published from **August 2014 to July 2019**.
- iii) For those who had formerly received Outstanding Research Award to apply for the Award this year, only the application material beyond the last award-receiving year should be considered.
- iv) Application material should be written in English and use 12pt Times New Roman, single-spaced type, and A4-size page.



Table 1

| <p align="center">Corresponding Authorship Certificate of Major Publication for the Outstanding Research Award (ORA) Ministry of Science and Technology</p> | | | |
|--|---|---|--|
| Publication Title | | Published Date | |
| Corresponding Author(s)'s Name(s) | Description of Contribution or Parts Completed by the ORA Applicant | Proportion of Contribution by the ORA Applicant | Corresponding Author(s)'s Signature(s) |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Applicant Signature: | | Date: | |

Notes:

1. This form should be filled in English.
2. A separate form is required for each publication.
3. At least three corresponding authors' signatures are required for each publication with more than three corresponding authors.

科技部人文司傑出研究獎申請須知(中文版)

一、注意事項

- (一)傑出研究獎申請截止日前5年內之代表性研究成果(可含實作成果)得上傳1~5篇(本、件、項),另請就所列近5年著作目錄(表C302),作系統性精要描述其研究成果之學術價值與重要貢獻,以作為評量參考依據。
- (二)人文司傑出研究獎申請人研究成果說明,得就中、英文版擇一填寫(如附表)。

二、各類別內涵

- (一)基礎研究類:研究成果以突破科學問題為主,並具備下列條件之一者:
 - 1.研究成果具學術原創性或具重要學術價值。
 - 2.研究成果具學理創新性,對學術發展有重大影響及貢獻。
- (二)應用研究類:研究成果以解決實務問題為主,對經濟、社會、民生福祉、環境永續、產業效益等具前瞻科技創新,改善人類生活之知識與技術,具有重大貢獻及有具體事實者。

三、審查重點:

基礎研究類及應用研究類之共同審查重點:

- 1.研究成果之品質、重要性、創新性及在學術或應用上的貢獻。
- 2.所參與國內外重要學術事務或所獲獎項等之學術成就對於個人及整體學術發展之重要性或具體貢獻。

應用研究類另考量之審查重點:

- 1.研究成果能善盡學術之社會責任,對重要實務問題之改進有重大貢獻,並有具體事實者。
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* 本表內容以 5 頁為限（字型大小 12，標準字元間距，單行間距）。

一、請就所列近 5 年著作目錄(表 C302)及代表性研究成果（可含實作成果）作系統性精要描述其學術研究價值與重要貢獻。



二、個人近 5 年對人才培育、研究團隊與學術社群之建立與服務，以及對社會之重要貢獻。

三、其他資料(請列出以下各項之名稱及日期：申請截止日前 5 年內獲獎情形、國內外邀請演講、擔任國際重要學術學會理監事或國際知名學術期刊編輯委員等)



Ministry of Science and Technology
Application Form for Outstanding Research Award (ORA)
(Research Fields : Humanities and Social Sciences)

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 2. Describe the contributions to the cultivation of young scholars, establishment and service for the research team and academic community, as well as the major contributions to our society in recent 5 years.
 3. Other supporting materials
(Awards or honors received, plenary or invited talks given at international conferences, positions or services performed in international, eminent academic organizations or associations, e.g. supervisor, council member, journal editor or review panelist.)



科技部工程司傑出研究獎申請人近五年成果績效表

姓名： 職稱：

服務單位：

本人已確認所附申請表及相關資料均符合以下說明：(請勾選以下相符項目)

近5年未獲獎，申請資料期間為近五年成果 (2014/08~2019/07)

104年曾獲獎，申請資料期間為近四年成果 (2015/08~2019/07)

105年曾獲獎，申請資料期間為近三年成果 (2016/08~2019/07)

簽名： _____

★以下五項內容請勿超過五頁，且符合以上申請資料期間之成果為限。

一、**研究成果的創新及突破**。簡述最具代表性之學術著作在學理創新或應用技術的突破與貢獻；明顯且持續性提升我國在該領域之國際學術地位、能見度與影響力；列出近五年內已發表之重要期刊論文、書籍、重要國際會議論文情形至多5篇，請填寫附表一。

二、**研究成果對工程領域之重要貢獻**。1. 基礎研究方面：含(1)已發表之重要期刊論文、書籍、重要國際會議論文之質與量及其成果被引用情形(外引率)，陳述並佐證在學門、領域內領先的程度；(2)研究成果成為一新的學理，引領研究方向。2. 應用研究方面：含(1)對我國產業價值或競爭力具貢獻或影響，如解決之實務問題及具體事實；(2)智慧財產應用績效及轉化為產業使用情形，如技術移轉授權、產學合作及專利，請填寫附表二；(3)對經濟、社會、民生等重大貢獻。

三、**國內外之獎項、成就及榮譽**。獲得國內外重要獎項及榮譽、國際研討會邀請專題演講或規劃委員、國際領導期刊編輯、國際重要委員會之委員或理監事等(請註明名稱及日期)；獲得國內外重要應用研究獎項或榮銜(請註明名稱及日期)、開發之系統或技術被廣泛應用(須有具體事証及績效佐證)。

四、**在研究團隊建立、人才培育及服務方面的重要貢獻及成就**。前瞻研究或技術團隊養成、人才培育貢獻、指導學生曾獲之獎項、特出表現或就業狀況及各類服務、教學貢獻實績等。

五、**其他可納入遴選考量之具體成就**。若有不含在上述四項且與本獎項相關之特殊事蹟，可加以說明；若無則不需填寫。

附表一

申請資料期間已發表之重要期刊論文、書籍、重要國際會議論文情形至多 5 篇，各篇重要著作如有共同作者，請各篇分別填寫合著證明表格：

| | 論文資料：請依發表時間之先後順序填寫，內容依序包括作者姓名 (依原出版順序，主要作者請加註*)、題目、期刊名稱、卷數、起訖頁數及出版年，並註明是否為 SCI 或 SSCI 期刊(如為 SCI/SSCI 論文請加註該期刊所屬研究領域 ¹⁾)。 | SCI/SSCI Rank N / M |
|---|--|------------------------|
| 1 | | / |
| 2 | | / |
| 3 | | / |
| 4 | | / |
| 5 | | / |



註：1.SCI/SSCI 論文所屬研究領域，請參照 ISI Essential Science Indicator 之劃分。

2.SCI/SSCI Rank：N 為期刊在所屬研究領域之 Impact Factor 排序名 (Impact Factor 以 2018 年 ISI 資料庫之資料為準)；M 為該期刊所屬研究領域之總期刊數。

3.Cited Number (SCI、SSCI 論文被引用次數) 統計期間截至 **2019/07/31**。該資料可透過 Web of Science 會員，利用網路資料庫查詢。Web of Science 會員名單請詳參下列網頁：<http://www.stpi.narl.org.tw/>，或至相關單位檢索光碟資料。



科技部工程司傑出研究獎申請人已發表近五年重要著作
合著證明

| | | | | | | | |
|------------------------------------|----------|---------------------|---|--|------|--|--|
| 著作名稱 | | | | | 出版時間 | | |
| 傑出獎申請人完成部分或貢獻說明 | 貢獻度所佔比例： | % | | | | | |
| | | | | | | | |
| 共同作者親自簽名 <small>(不含申請人)</small> | 1 | | 2 | | 3 | | |
| 申請人親自簽名： | | 中華民國 年 月 日 | | | | | |

1. 各篇重要著作如有共同作者，請各篇分別填寫本合著證明。
2. 除申請人須親自簽名外，共同作者(不含申請人)也須親自簽名，共同作者如超過三人，應至少有一位共同作者代表簽名。若共同作者若為外籍人士，本表得以外文撰寫。



The important published works of the past five years by the applicant to the
 Outstanding Research Award of Department of Engineering and Technologies,
 Ministry of Science Technology
Co-author Certificate

| | | | | |
|--|------------------------------|-------|---|--|
| Publication | | Date | | |
| Contribution Explanation or parts completed by Outstanding Award Applicant | Contribution Proportion : | % | | |
| | | | | |
| Co-author signature (Excluding applicant) | 1 | | 2 | |
| Applicant signature: | | Date: | | |



附表二

(一)技術移轉授權(含專利及著作授權)

| 項次 | 合約編號 | 合約名稱 | 授權對象 | 合約起訖日 | 申請資料期間入帳金額 (新台幣仟元) |
|----|------|------|------|-------|--------------------|
| | | | | | |
| | | | | | |
| 總計 | | | | | |

(二)產學合作

| 項次 | 合約編號 | 產學計畫名稱 | 企業名稱 | 合約起訖日 | 合約金額(新台幣仟元) | 申請資料期間入帳金額 (新台幣仟元) |
|----|------|--------|------|-------|-------------|--------------------|
| | | | | | | |
| | | | | | | |
| | | | | | | |

*填表(一)及(二)注意事項：

1. 技術移轉授權、產學合作之金額，請分別確實填列。
2. 合約生效日期可在申請資料期間之前，但須以申請機構申請資料期間已入帳金額為限，即入帳時間須在上述期間內。
3. 入帳金額以開立收(領)據為認列依據，請提供申請機構之收(領)據以資佐證，須與填列表格內容相符，並依填寫表格之項次依序標明列於附件。

(三)專利

| 項次 | 專利名稱 | 專利國別 | 專利證號 | 專利起訖日 |
|----|------|------|------|-------|
| | | | | |
| | | | | |



*填表(三)注意事項：

以「發明專利」為限。

研發成果管理運用單位：_____ (請簽章) 申請人：_____ (請親自簽名)

生科司傑出獎專屬表格填寫注意事項

(修訂：108年6月1日)

1. 專屬表格分**基礎研究及應用研究兩種版本**，請依申請類別選擇表格版本，資料皆以**英文填寫**，以利國際審查。
2. 歸屬學門一欄，請填寫申請人近三年執行專題計畫所屬學門(詳見附件)。若僅執行國家型科技計畫或專案者，則依所執行計畫之研究屬性選填。
3. 申請人近五年曾獲傑出研究獎者，以獲獎年度後之研究成果及主要貢獻度為審查評分項目。已獲獎肯定之論文成果不宜再重複提出傑出獎申請(例如：獲**105**年度傑出獎者若申請**108**年度傑出獎時，僅能提供**105/8/1**以後之論文成果，作為審查資料)。
4. 所附五篇最具代表性研究成果論文，各篇成果論文如有共同作者，請分別填寫合著證明(專屬表格中之附表一)。
5. 傑出研究獎申請書及補充資料表經提送至本部，內容無法再修正或進行抽換，敬請見諒！
6. 論文引用資訊查詢請以**2018**年之JCR網路版或其他相關資料庫為準。

附件

生科司學門歸屬表

| 學門 | Academic Discipline |
|---------------------|--|
| B30A001-植物保護、土壤及環保 | B30A001- Plant Protection, Environmental Protection, and Soil Science |
| B30A002-森林水保及生工生機 | B30A002- Forestry, Water Conservation, Bioenvironmental and Bio-industrial Engineering |
| B30A003-生物多樣性 | B30A003- Biodiversity |
| B30B001-農藝、園藝及農化 | B30B001- Agronomy, Horticulture and Agricultural Chemistry |
| B30B003-漁業、水產 | B30B003- Fishery, Aquaculture |
| B30B004-畜牧、獸醫及實驗動物 | B30B004-Animal Science, Veterinary Medicine, and Laboratory Animals |
| | |
| B20A001-基礎生物 | B20A001- Biology |
| B20A002-生物化學及分子生物 | B20A002- Biological Biochemistry and Molecular Biology |
| | |
| B10A001-生理 | B10A001- Physiology |
| B10A002-細胞生物及解剖 | B10A002- Cell Biology and Anatomy |
| B10A003-病理及法醫 | B10A003- Pathology and Forensic Medicine |
| B10B001-藥理及毒理 | B10B001- Pharmacology and Toxicology |
| B10B002-醫學生化及分子生物 | B10B002- Medical Biochemistry and Molecular Biology |
| B10C001-微生物免疫 | B10C001- Microbiology and Immunology |
| B10C002-寄生蟲及醫技與實驗診斷 | B10C002- Parasitology, Medical Technology, and Clinical Pathology |
| B10D001-藥學 | B10D001- Pharmacy |
| B10D002-中醫藥學 | B10D002- Chinese Medicine |
| B10E001-食品科學 | B10E001- Food Science |
| B10E002-營養保健 | B10E002- Nutritional Medicine |
| B10F001-公衛及環境醫學 | B10F001- Public Health and Environmental Medicine |
| | |
| 學門 | Academic Discipline |

| | |
|------------------------|--|
| B10F002-精神醫學、老人醫學及家庭醫學 | B10F002- Psychiatry, Gerontology/Geriatrics, and Family Medicine |
| B10F003-護理 | B10F003-Nursing |
| B10G001-醫工、骨科、幹細胞 | B10G001- Medical Engineering, Orthopedics, Stem Cell |
| B10G002-牙醫 | B10G002- Dentistry |
| B10G003-放射核醫 | B10G003- Radiology and Nuclear Medicine |
| B10G004-復健 | B10G004- Physical therapy and Rehabilitation |
| B10H001-肝膽、胃腸 | B10H001-Hepatology, Gastrointestinal Medicine |
| B10H002-消化外科 | B10H002- Gastroenterological Surgery |
| B10K001-心臟血管內科 | B10K001- Cardiology |
| B10K002-心臟血管外科 | B10K002- Cardiovascular Surgery |
| B10M001-胸腔內科 | B10M001- Chest |
| B10M002-胸腔外科 | B10M002- Chest Surgery |
| B10N001-神經內科 | B10N001- Neurology |
| B10N002-神經外科 | B10N002- Neurosurgery |
| B10N003-麻醉 | B10N003- Anesthesiology |
| B10P001-婦產 | B10P001- Obstetrics & Gynecology |
| B10P002-小兒科 | B10P002- Pediatric medicine |
| B10Q001-血液 | B10Q001- Hematology |
| B10Q002-腫瘤 | B10Q002- Hematological Oncology |
| B10Q003-風濕免疫 | B10Q003- Rheumatology |
| B10Q004-感染 | B10Q004- Infectious Disease |
| B10R001-腎臟 | B10R001- Renal Physiology & Nephrology |
| B10R002-泌尿 | B10R002- Urology |
| B10R003-新陳代謝及內分泌 | B10R003- Metabolism and Endocrinology |
| B10S001-眼 | B10S001- Ophthalmology |
| B10S002-耳鼻咽喉 | B10S002- Otolaryngology(ENT) |
| B10S003-皮膚 | B10S003- Dermatology |
| B10S004-整形外科/ 乳房外科 | B10S004- Plastic Surgery/ Breast Surgery |



Ministry of Science and Technology

Application Form for Outstanding Research Award (ORA : **Applied Research**) (Research Field : Life Sciences)

Update 1 June, 2019

II. Major achievements and contributions (No more than 5 pages)

Fundamental Research: Summarize academic works or research achievements mainly contributed by applicant and describe their significance. As for interdisciplinary research, please list major publications and state their significance and impacts on their related fields.

Applied Research: Summarize valid patents, technology transfers, or research achievements mainly contributed by the applicant. Describe their impacts on society or economy.

III. Other supporting materials

Summarizes the received awards or honors, plenary or invited speeches given in international conferences, the positions or services performed in international, eminent academic organizations or associations, such as, the supervisor, council member or journal editor.

IV. Curriculum Vitae and publication list

Please list all works in descending chronological order, mark any corresponding author with an asterisk (*).

Notes:

- i) All of the submitted application materials are limited to the recent 5 years (**from August 2014 to July 2019**).
- ii) With the proper written proof(s), the applicants who took maternity leave or medical leave due to pregnancy in the recent 5 years may include works and papers published from **August 2011 to July 2019**.
- iii) The applicants have the received Outstanding Research Award to apply for the Award this year. The application material beyond the last award-receiving year will be considered.
- iv) The format of application materials should use 12pt Times New Roman, single-spaced type, and A4 size page.



V. The most important achievements in Taiwan for the past five years (from Aug 1, 2014 ~ July 31, 2019)

Table I. The list of technology transfer authorizations and patents

| No. | Contract No. | Contract Title | Authorized Party | Date of contract | The amount of the contract for the past five years (2014/08/01~2019/07/31) |
|-------|--------------|----------------|------------------|------------------|--|
| | | | | | |
| | | | | | |
| Total | | | | | |

Table II. The list of patents

| No. | Patent Title | Patent No | Patent Country | Issue Date |
|-----|--------------|-----------|----------------|------------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Note: Limit to the invention patent.

Table III. The list of the Industry-university collaboration Programs

| No. | Contract No. | Name of Enterprise Project | Company name | Date of contract | The amount of the contract for the past five years (2014/08/01~2019/07/31) |
|-----|--------------|----------------------------|--------------|------------------|--|
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1. The amount of technology transfer authorization and the grant of industry university collaboration should be accurately entered.
2. The effective date of the contract may be within five years and it must be limited to the amount that has been posted by the applicant agency for the past five years (from 2014/09/01~2019/08/31). Thus, the crediting time must be within the aforementioned period.
3. The entry amount should be proofed by the organization of the applicant. Please provide the receipts or certificates. The content must match the contents and be marked according to the order of the entry form. Release attach the documents.

Table IV. The list of publications

| No. | Publication Information Please fill in the information of publications in descending chronological order. The information needed for every publication are: Author(s) (same order as the published article), Title, Journal Name, Volume, Pages, and Date of Publication. | Order/Field | Total number of citations | |
|-----|--|-------------|---------------------------|-----------------|
| | | | Others' citation | * Self-citation |
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |

Note:

1. Please choose five most important publications **conducted and completed in Taiwan** within five years. The candidate should be either the first author or corresponding author of the five publications.
2. If there are co-authors in five publications, please separately fill in the Certificate of Co-Authorship of Publication as Appendix 1.
3. Order/Field : For example, the publication ranks 6th in a total of 60 magazines in its category, and should be

noted as “6/60” (Please refer to the information using 2017 JCR database or the other databases).

4. Enumerate the contributions to improve social, economic and livelihood made by the research results.

* Self-cited number: applicant’s name appearing on the authors of the publication



VI. Please attach the following documents in PDF files.(The size of uploaded documents shall not exceed 10MB in total)

1. Five major publications in full text which are done in Taiwan for the past five years
(from Aug 1, 2014~ July 31, 2019)
2. The original search information of the number of citations of the above publications (Please compress and simplify the contents of the files in case of >10MB)
3. Please provide patent certificates and technology transfer agreements



| <p align="center">Certificate of Co-Authorship of Publication</p> <p align="center">【Five most important publications conducted in Taiwan for the past five years (From Aug 1, 2014 to July 31, 2019)】</p> | | | | | | |
|---|---|--|---------------------|--|---|-------------------------|
| Title of Publication | | | Date of Publication | | | Contribution Percentage |
| Explanation of the contribution of the applicant | | | | | | |
| Coauthors' Signatures | 1 | | 2 | | 3 | |
| | 4 | | 5 | | 6 | |
| Signature of the Applicant : | | | Date (DD/MM/YY): | | | |



1. If any of the papers has the coauthors, please separately fill in the Certificate of Co-Authorship of Publication.
2. All coauthors should sign this Certificate of Co-Authorship of Publication. If the coauthor is a foreigner, he/she may be waived to sign this form.




Ministry of Science and Technology

Application Form for Outstanding Research Award (ORA : **Fundamental Research**) (Research Field : Life Sciences)

Update 1 June, 2019

II. Major achievements and contributions (No more than 5 pages)

i. **Fundamental Research:** Summarize academic works or research achievements mainly contributed by the applicant and describe their significance. As for interdisciplinary research, please list major publications and state their significance and impacts on their related fields.

 **Applied Research:** Summarize valid patents, technology transfers, or research achievements mainly contributed by the applicant. Describe their impacts on society or economy.

III. Other supporting materials

Summarizes the received awards or honors, plenary or invited speeches given in international conferences, the positions or services performed in international, eminent academic organizations or associations, such as, the supervisor, council member or journal editor.

IV. Curriculum Vitae and publication list

Please list all works in descending chronological order, mark any corresponding author with an asterisk (*).

Notes:

- i) **All of the submitted application materials are limited to the recent 5 years (from August 2014 to July 2019).**
- ii) With the proper written proof(s), the applicants who took maternity leave or medical leave due to pregnancy in the recent 5 years may include works and papers published from **August 2012 to July 2019.**
- iii) The applicants have the received Outstanding Research Award to apply for the Award this year. The application material beyond the last award-receiving year will be considered.
- iv) The format of application materials should use 12pt Times New Roman, single-spaced type, and A4 size page.



V. The most important achievements in Taiwan for the past five years (from Aug 1, 2014 ~ July 31, 2019)

Table I. The list of publications

| No. | Publication Information Please fill in the information of publications in descending chronological order. The information needed for every publication are: Author(s) (same order as the published article), Title, Journal Name, Volume, Pages, and Date of Publication. | Order/Field | Total number of citations | |
|-----|--|-------------|---------------------------|-----------------|
| | | | Others' citation | * Self-citation |
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |

Note:

1. Please choose five most important publications **conducted and completed in Taiwan** within five years. The candidate should be either the first author or corresponding author of the five publications.
2. If there are co-authors in five publications, please separately fill in the Certificate of Co-Authorship of Publication as Appendix 1.
3. Order/Field : For example, the publication ranks 6th in a total of 60 magazines in its category, and should be noted as "6/60" (Please refer to the information using 2019 JCR database or the other databases).
4. Enumerate the contributions to improve social, economic and livelihood made by the research results.
* Self-cited number: applicant's name appearing on the authors of the publication

Table II. The list of technology transfer authorizations and patents

| Contract No. | Contract Title | Authorized Party | Date of contract | The amount of the contract for the past five years (2014/08/01~2019/07/31) |
|--------------|----------------|------------------|------------------|--|
| | | | | |
| | | | | |
| Total | | | | |

Table III. The list of patents

| No. | Patent Title | Patent No | Patent Country | Issue Date |
|-----|--------------|-----------|----------------|------------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Note: Limit to the invention patent.

Table IV. The list of the Industry-university collaboration Programs

| No. | Contract No. | Name of Enterprise Project | Company name | Date of contract | The amount of the contract for the past five years (2014/08/01~2019/07/31) |
|-------|--------------|----------------------------|--------------|------------------|--|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Total | | | | | |

Note:

1. The amount of technology transfer authorization and the grant of industry university collaboration should be accurately entered.
2. The effective date of the contract may be within five years and it must be limited to the amount that has been posted by the applicant agency for the past five years (from 2014/09/01~2019/08/31). Thus, the crediting time must be within the aforementioned period.
3. The entry amount should be proofed by the organization of the applicant. Please provide the receipts or

certificates. The content must match the contents and be marked according to the order of the entry form.
Release attach the documents.



VI. Please attach the following documents in PDF files.(The size of uploaded documents shall not exceed 10MB in total)

1. Five major publications in full text which are done in Taiwan for the past five years
(from Aug 1, 2014~ July 31, 2019)
2. The original search information of the number of citations of the above publications (Please compress and simplify the contents of the files in case of >10MB)
3. Please provide patent certificates and technology transfer agreements



| Certificate of Co-Authorship of Publication 【Five most important publications conducted in Taiwan for the past five years (From Aug 1, 2014 to July 31, 2019)】 | | | | | | | | | |
|--|---|--|---|---------------------|------------------|--|-------------------------|--|--|
| Title of Publication | | | | Date of Publication | | | Contribution Percentage | | |
| Explanation of the contribution of the applicant | | | | | | | | | |
| Coauthors' Signatures | 1 | | 2 | | 3 | | | | |
| | 4 | | 5 | | 6 | | | | |
| Signature of the Applicant : | | | | | Date (DD/MM/YY): | | | | |

1. If any of the papers has the coauthors, please separately fill in the Certificate of Co-Authorship of Publication.
2. All coauthors should sign this Certificate of Co-Authorship of Publication. If the coauthor is a foreigner, he/she may be waived to sign this form.



科技部人文司(科學教育領域)傑出研究獎申請須知

- 一、須填寫英文申請書以利國際審查，否則不予送審。
- 二、研究成果請提供近五年內之資料。於本次申請截止日前五年內曾生產或請育嬰假者，得加填 2012 年與 2013 年著作資料，並請於本部線上申請系統指定處上傳證明文件。
- 三、如曾為傑出獎得主，請提供最近一次傑出獎後之資料。
- 四、獎勵類別分為基礎研究與應用研究類，申請任一類獎勵均須提供下列所有資料：

(一)近五年內最具代表性著作之貢獻。基礎研究類請著重在學理創

新、在國際學術上之重要性等；應用研究類著重問題解決或技術創新運用等

(二)近五年研究成果對科學教育相關領域實務應用之貢獻。請說明研究成果對社會、經濟、民生之貢獻與影響；例如

1. 對科學教育政策的影響、撰寫政策建議書等
2. 研發工具或教材之數量
3. 開發之課程或所舉辦之活動/競賽
4. 專利/技轉/授權件數與金額
5. 成品/商品銷售總金額及繳交科技部之收益
6. 計畫成果推廣（例如舉辦研討會、工作坊、電子報、網站、影視產品）之次數與參與（閱聽）人數
7. 研究成果影響人數與類別（例如校長、主任、教師、學生、家長、一般大眾等）
8. 社會各界對研究成果肯定與關注程度（例如獲得獎項、媒體報導等）

(三)近五年在人才培育、學術社群服務方面的重要貢獻。

1. 人才培育之具體貢獻：例如
 - (1)培育深具潛力的科學人才（例如奧林匹亞競賽或國際科展得獎者）
 - (2)培育表現優異之科教人才（例如師鐸獎、吳大猷獎、年輕學者獎、科技部優秀年輕學者計畫得主等）
 - (3)培育表現優異之科學普及人才，例如各種文化創作獎項、課程開發獎項、教材製作獎項、創業競賽獎項等。
 - (4)培育各級學生（碩博士生）、教師、研究人員之人數
2. 科學教育相關學術社群貢獻：例如
 - (1)近五年內擔任國際學會辦理之學術研討會 plenary speech、keynote speech 等。
 - (2)近五年內領導執行之大型、整合型研究計畫或產學合作計畫。

- (3)近五年內在國內外學術社群的服務，如：擔任國內外重要學術學會理事、國內外知名學術期刊編輯或審查委員等。
- (4)執行國際合作計畫、承辦大型國際學術會議、延攬國際學者等。

以上資料以 5 頁為限。

(四)五年內最具代表性著作資料(最多五項)



Ministry of Science and Technology

Application Form for Outstanding Research Award (ORA)

(Research Field : Science Education)

- II.** Summarize the academic contribution of the applicant's most representative written works during the most recent 5 years. Please describe each representative work's relevant theoretical advances or practical application in the field of science education, including breakthroughs and contributions.
- III.** Describe the contributions of the applicant's research to practical applications in the field of science education during the most recent 5 years. Describe the contributions and impact of each of the applicant's research results on society, the economy, and people's livelihoods.
- IV.** Describe important contributions to talent cultivation and service to the academic community during most recent 5 years.

Items II-IV are limited to a total of 5 pages.

- V.** List the applicant's most representative written works during the most recent 5 years (maximum of 5 works)

| No. | Information concerning written works Please fill in the following information for each work, with the most recent works first: Author(s) (please note each author's name and title—such as Prof., Ph.D., M.S., etc.—after each work), year of publication, name of work, journal, volume, and page number; please mark the corresponding author with an asterisk*) | Journal IF | Total number of citations | |
|-----|---|------------|---------------------------|----------------|
| | | | Others' citations | Self-citations |
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |

1. Total number of citations: It is recommended that Scopus, Web of Science (SSCI), or Google Scholar be used; please note the name of the database if some other database has been used.
2. Please fill out the attached English certificate of co-authorship if any of the uploaded representative works has been co-authored. A separate form is required for each co-authored work.
3. Academic books refer to books of an academic nature on science education that have been formally published by a publisher following a review process. Academic books—either the whole book or a certain chapter—must be reviewed before they may be confirmed. Please submit electronic files of academic books' copyright pages (page containing information concerning publisher) and table of contents.
4. In the case of works that have been accepted for publication but not formally published, please attach an electronic file of the publisher's letter of acceptance.

Notes:



- i. All the submitted application materials are limited to the most recent 5 years. If the applicant has given birth or requested parental leave within the 5 years prior to the application cut-off date, information concerning works from 2012 and 2013 may be included, in which case verifying documents must be uploaded to the located indicated by MOST's online application system.
- ii. In the case of individuals who have received the Outstanding Researcher Award, please provide only application information following the most recent award.



| Certificate of co-authorship | | | | | | |
|---|----------|--|----------|--|----------|--|
| Title of work | | | | | | |
| Date of publication | | | | | | |
| Order of authorship | | | | | | |
| Percentage of contribution | % | | | | | |
| Please elaborate upon your contribution to works submitted for application for the Distinguished Research Award | | | | | | |
| Signature of each co-author | 1 | | 2 | | 3 | |
| | 4 | | 5 | | 6 | |
| <p>This article was not used for other award applications by any of the co-author(s). Signature of applicant : Date :</p> | | | | | | |

1. Please fill out this form if any of your uploaded representative works of the past five years is co-authored. A separate form is required for each co-author.
2. Each co-author must sign in person. If the work is a result of more than four authors, at least four signatures, including that of the first author and the corresponding author(s), are required for this form. In cases where there are foreign authors, this form may be completed in English.
3. If the required signatures cannot be obtained, please explain.

