

二〇二一年度國家科學技術獎（香港特區）

2021 State Science and Technology Awards (HKSAR)

A 引言 Introduction

國務院設立國家科學技術獎，以：

The State Science and Technology Awards, administered by the State Council, aim to:

- 獎勵對科學技術發展作出傑出貢獻的個人及組織；
recognise outstanding contributions to scientific and technological progress by individuals and organisations;
- 表彰科學技術工作者的積極性和創造性；
commend the enthusiasm and creativity of scientists and technologists;
- 加速科學技術事業的發展；及
accelerate the development of scientific and technological undertakings; and
- 提高綜合國力。
enhance overall national strength.

B 國家科學技術獎 The Awards

國家科學技術獎共分五個獎項：

There are five categories under the State Science and Technology Awards:

1. 國家最高科學技術獎；
State Pre-eminent Science and Technology Award;
2. 國家自然科學獎；
State Natural Science Award;
3. 國家技術發明獎；
State Technological Invention Award;
4. 國家科學技術進步獎；及
State Scientific and Technological Progress Award; and
5. 中華人民共和國國際科學技術合作獎。
International Scientific and Technological Cooperation Award of the People's Republic of China.

香港特別行政區（「香港特區」）獲國家科學技術獎勵工作辦公室（獎勵辦）委託，推薦國家技術發明獎、國家科學技術進步獎和國家自然科學獎三個獎項的香港特區候選人。香港特區政府創新科技署負責統籌國家技術發明獎和國家科學技術進步獎兩個獎項的香港特區推薦工作，而香港特區政府教育局則負責統籌國家自然科學獎的香港特區推薦工作。如有需要，創新科技署會

成立一個評審委員會，以便推薦合適項目予獎勵辦，參加國家技術發明獎和國家科學技術進步獎的競逐。

The Hong Kong Special Administrative Region (HKSAR) has been entrusted by the National Office for Science and Technology Awards (NOSTA) to coordinate and submit nominations from the HKSAR for the State Technological Invention Award (STIA), the State Scientific and Technological Progress Award (SSTPA) and the State Natural Science Award (SNSA). The Innovation and Technology Commission (ITC) of the HKSAR Government is responsible for the nomination of the STIA and SSTPA in the HKSAR, whereas the Education Bureau of the HKSAR Government is responsible for the nomination of the SNSA in the HKSAR. If necessary, ITC will set up a Judging Panel to select entries for nomination for the STIA and SSTPA to NOSTA.

C 獎項 Awards to Winners

經國家科學技術獎勵委員會審定的國家技術發明獎及國家科學技術進步獎的得獎項目，可獲國家頒發證書及獎金。國家科學技術獎勵工作辦公室將於稍後公布各等級獎項獎金金額。

Winning entries of the STIA and SSTPA as assessed by the Judging Panel formed by NOSTA will be presented with certificates and cash awards by the Mainland authority. NOSTA will announce the amount of cash awards for respective award categories in due course.

D 參選資格 Eligibility

符合香港特區政府推薦的國家技術發明獎及國家科學技術進步獎候選人必須是在技術發明和促進科學技術進步等方面做出創造性突出貢獻，並符合國家科學技術獎勵條例及其實施細則所規定條件的香港特區居民，或在香港特區從事科學研究、技術開發的其他人士。參選者的主要科學研究、技術開發成果必須在香港特區進行和完成。倘若參選者的項目是與香港特區以外的人士合作完成，該參選者必須為項目的主要完成人。外籍人士如長期在華從事科研工作（即在中國國內（包括香港）連續工作不少於五年，每年在華工作時間不少於六個月），並為中國科學技術發展做出突出貢獻，亦符合提名資格。參選者必須對提交材料的真實性和準確性負責。

A candidate for nomination by the HKSAR Government for the STIA and SSTPA must be either resident of the HKSAR who has made outstanding innovative contributions in the areas of technological development and promoting the progress of science and technology; or a person who has engaged in scientific research and technology development in the HKSAR. The candidate's major research and development work should be conducted and completed in the HKSAR. In case the candidate cooperates with researchers outside the HKSAR, the candidate should be the principal person who completed the project. Foreign nationals who engage in technological research in China on a long-term basis (i.e. working in China (including Hong Kong) for not less than five consecutive years with at least six months of working in China each year) and make outstanding contributions to the scientific and technological development of the country are also eligible for nomination. Candidates should take full responsibility for the authenticity and accuracy of the materials submitted.

獲推薦的候選人可以是獨立一人或者是共同參與一項科技工作的數名人士。然而，國家技術發明獎及國家科學技術進步獎下各等級獎項均制定其單項授獎人數限額。同一項目的技術內容不得在同一年度重覆參加國家自然科學獎、國家技術發明獎及國家科學技術進步獎。

An individual or several individuals working together is/are eligible for nomination. However, the number of award winners is limited by the quota set for the respective classes under STIA and SSTPA. A project can only be nominated for either SNSA, STIA or SSTPA in the same year.

列入國家或省部級計劃、基金支持的項目，須在項目整體驗收通過後始符合參選資格。同一人在同一年度只能作為一個項目的完成人。另外，經推薦予獎勵辦評審，但未獲授獎的項目，如再次以相關技術內容參加，須相隔一年才可提交申請。至於所有曾獲國家自然科學獎、技術發明獎和科學技術進步獎的完成人，則須相隔兩年才可提交申請。

Projects under State Programmes, Programmes of Ministries or Commissions, Programmes of Provinces, Municipalities or Autonomous Regions or Foundation are eligible for nomination only after the projects have successfully undergone inspection and verification. A candidate can only be nominated for one award in the same year. A project which has been nominated for NOSTA's consideration but with no awards conferred cannot be submitted again in the subsequent year. All award winners of SNSA, STIA and SSTPA cannot submit any application in the subsequent two years after receiving the Award.

在科學研究、技術開發項目中僅從事組織管理和輔助服務的工作人員，不得作為國家科學技術獎的候選人。

A person who merely manages or facilitates a research project on science and technology is not eligible for nomination.

(一) 國家技術發明獎 State Technological Invention Award (STIA)

國家技術發明獎授予運用科學技術知識做出產品、工藝、材料及其系統等重大技術發明的科學技術工作者。

The STIA will be conferred on persons who work in the fields of science and technology and have made significant technological inventions on products, industrial techniques, materials and their related systems.

以上所稱的產品包括各種儀器、設備、器械、工具、零部件以及生物新品種等；工藝包括工業、農業、醫療衛生等領域的各種技術方法；材料包括採用各種技術方法獲得的新物質等；系統是指產品、工藝和材料的技術綜合。

The above-mentioned products include all kinds of instruments, equipment, apparatus, tools, parts, and biological new species; industrial techniques cover the fields of industry, agriculture, medical treatment and health; materials include new substances obtained by different kinds of technological methods; systems refer to the integration of technologies into products, industrial techniques and materials.

重大技術發明應當具備下列條件：

The significant technological invention should meet the following criteria:

1. 前人尚未發明或者尚未公開；
The invention must not have been invented by other people, or made public previously;
2. 具有先進性和創造性；及
The invention must be original and creative; and
3. 經實施，可創造顯著經濟效益或社會效益。
Upon implementation, the invention must be able to produce considerable economic returns or social benefits.

推薦參加國家技術發明獎評審的技術發明，應當具備有關知識產權證明，經過三年以上較大規模的實施應用，取得良好實用效果。產品材料應已批量生產和應用，對工藝要求應經過中試或相當於中試以上規模的生產實施。

The nominated invention under STIA should have relevant supports on intellectual property rights, demonstrated its extensive application for more than three years and have achieved significant results. The invented product or material should have been put into production and application. The invented industrial techniques should exhibit broad application and production.

國家技術發明獎的授獎範圍不包括僅依賴個人的經驗和技能、技巧不可重複實施的技術。

The STIA will not be awarded if the invention is a technology that merely relies on personal experience, technique and skills that cannot be implemented repeatedly.

國家技術發明獎的候選人必須是該項技術發明的部分或者全部創造性技術內容的獨立完成人。獲推薦的候選人可以是獨立一人或者是共同參與一項技術發明工作的數名人士。然而，單項授獎人數設有限額，一等獎及二等獎單項的授獎人數一般不超過六人。

A candidate for the STIA must be the person who individually completed part of, or the whole of the innovative technology content of the technological invention. An individual's name, or the names of several people who worked together on the invention, can be put forward for this award. The number of award winners for a single project is, however, limited, and in general will not exceed six persons for each first class or second class award winning project.

(二) 國家科學技術進步獎 State Scientific and Technological Progress Award (SSTPA)

國家科學技術進步獎授予作出突出貢獻的科學技術工作者，包括：

The SSTPA will be conferred on persons who work in the fields of science and technology and have made outstanding contributions, including:

在**實施技術開發項目**中 – 完成重大科學技術創新、科學技術成果轉化，創造顯著經濟效益的人士；

In the implementation of technological development projects – persons who have accomplished significant science and technology innovation, transferred their science and technology achievements, and generated substantial economic returns.

技術開發項目是指在科學研究和技術開發活動中，完成具有重大市場實用價值的產品、技術、工藝、材料、設計和生物品種及其推廣應用。

Technological development projects refer to the completion, application and promotion of products, technology, industrial techniques, materials, design and biological species which have significant market and practical value during scientific research and development of technology.

在**實施社會公益項目**中 – 長期從事科學技術基礎性工作和社會公益性科學技術事業，經過實施檢驗，創造顯著社會效益的人士。

In the implementation of public welfare projects – persons who have generated substantial social benefits through prolonged science and technological undertaking in foundation work and public welfare.

社會公益項目是指在標準、計量、科技信息、科技檔案、科學技術普及等科學技術基礎性工作和環境保護、醫療衛生、自然資源調查和合理利用、自然災害監測預報和防治等社會公益性科學技術事業中取得的重大成果及其應用推廣。

Public welfare projects refer to projects that accomplish significant achievements in the application and promotion of foundation work in science and technology such as standards, calculation, technology information and records, and the popularisation of science and technology; as well as environmental protection, medical treatment and health, investigation of natural resources and their reasonable utilisation, and the forecasting, monitoring, alleviation and prevention of natural disasters.

國家科學技術進步獎候選人應當具備下列條件之一：

Nominees for the SSTPA should meet one of the following criteria:

1. 在設計項目的總體技術方案中作出重要貢獻；
Made significant contributions to the design of the overall technology proposal of the project;
2. 在關鍵的技術和疑難問題的解決中作出重大技術創新；
Made significant technological innovations in solving key technology problems;
3. 在成果轉化和推廣應用過程中作出創造性貢獻；
Made creative contributions to the commercialisation and promotion of application process;
4. 在高技術產業化方面作出重要貢獻。
Made important contributions to the industrialisation of advance technology.

推薦參加國家科學技術進步獎項目，應當具備突出技術創新性、並經過三年以上較大規模的實施應用，產生了顯著的經濟效益或者社會效益；及對推動行業科技進步有明顯作用。

The nominated project under SSTPA should have demonstrated outstanding technology innovation; extensive application for more than three years that generated substantial economic returns and social benefits, and have obvious contribution to the science and technology advancement of the industry.

單項授獎人數設有限額。一等獎的人數一般不超過 15 人，二等獎的人數一般不超過 10 人。

The number of award winners for a single project is limited, and in general will not exceed 15 persons for the first class award and 10 persons for the second class award.

E 資格審核 Eligibility Assessment

創新科技署會根據獎勵辦制訂的要求，對香港特區的參賽項目進行初步形式審查及內容評審。

ITC will conduct preliminary formality check and assessment on the applications in the HKSAR according to the requirements laid down by NOSTA.

F 評核申請 Assessment of Applications

兩個獎項的申請人須在申請書簡述他們參賽的發明、設計、產品、活動等，並說明為何他們的參賽項目足以競逐有關獎項，以便當局評核申請人是否符合授獎資格。這些資料將用作評核申請人項目的水平。根據獎勵辦要求，申請人及／或其所屬機構／大學或需承擔答辯和異議答覆等責任，並自費出席相關活動。

Applicants should describe in the application forms their invention, design, product, activity etc. and justify why their projects qualify for the awards. Such information will be used to assess the application's qualities. As required by NOSTA, applicants and/or their institutions/universities might be required to respond to queries and disagreement, and attend related activities at their own cost.

香港特區政府或成立一個由相關科學與技術範疇專家組成的評審委員會進行評審工作，以推薦合適項目予獎勵辦。

The HKSAR Government might set up a Judging Panel comprising experts from the relevant fields of science and technology to assess the applications before making nominations to NOSTA for further consideration.

創新科技署及評審委員會的一切決定，將是最終決定，對香港特區參與國家技術發明獎及國家科學技術進步獎有關的一切事宜均具約束力。所有參選資格、規則、評審準則及獎項均以獎勵辦制訂的要求以及最後之公布為準。

All decisions made by ITC and the Judging Panel will be final and binding on all matters relating to the HKSAR's participation in the STIA and SSTPA. The eligibility criteria, regulations, assessment criteria and awards are subject to the requirements as prescribed by NOSTA and the final announcement of NOSTA.

G 參選方法 Application Procedure

有興趣參與二〇二一年度國家技術發明獎及國家科學技術進步獎香港特區甄選的人士，可於本署的網址 www.itc.gov.hk/ch/ssta 下載申請書。申請書及附件必須以中文及英文分別填寫。請把填妥的申請書及附件的電子版檔案（Word 檔案格式）連同一式兩份列印版本（活頁釘裝）於 2020 年 10 月 23 日或以前親身或以專人派遞方式交到：

香港添馬添美道 2 號
政府總部西翼 21 樓
創新科技署（國家科學技術獎（香港特區）秘書處）

Persons interested in participating in the HKSAR selection exercise of 2021 STIA and SSTPA should download the application form from the ITC's webpage at www.itc.gov.hk/en/ssta. Application form and appendices should be **completed in both Chinese and English in separate copies**. Please send the softcopy (in word format) and **two** hardcopies (in loose binding) of the completed application form and appendices in person or by courier **on or before 23 October 2020** to:

Innovation and Technology Commission
(State Science and Technology Awards (HKSAR) Secretariat)
21/F, West Wing, Central Government Offices
2 Tim Mei Avenue, Tamar
Hong Kong

H 注意事項 Matters for Attention

二〇二一年度「國家科學技術獎」的具體要求和安排載列於本署網頁 <http://www.itc.gov.hk/ch/ssta/>，並以獎勵辦最新公佈資料為準。有需要時，本署或會相應地向申請人索取補充資料。

The 2021 SSTA requirements and arrangements can be found in the ITC webpage at <http://www.itc.gov.hk/en/ssta/>. Please note that the Awards' requirements and arrangements set out therein are subject to the latest announcement made by NOSTA. ITC might request further information from the applicants accordingly if necessary.

聯絡方法 Enquiries

如有查詢，請與我們聯絡：

Enquiries can be addressed to:

電話：3655 4750；傳真：2375 0715

網址：www.itc.gov.hk/ch/ssta；電郵：ssta@itc.gov.hk

Tel: 3655 4750 ; Fax: 2375 0715

Website: www.itc.gov.hk/en/ssta ; Email: ssta@itc.gov.hk