

Innovation and Technology Fund

Solicitation of Proposals of Innovation and Technology Support Programme

(a) Guangdong-Hong Kong Technology Cooperation Funding Scheme

(b) Tier 3 funding

The Innovation and Technology Commission (ITC) is inviting project proposals for the 2009 Guangdong-Hong Kong Technology Cooperation Funding Scheme (TCFS) and the Tier 3 under the Innovation and Technology Support Programme of the Innovation and Technology Fund. The application period is **19 May to 3 July 2009**.

2. The special features, relevant requirements and procedures for this round of solicitation exercise of the TCFS are set out in Appendix. For Tier 3 funding scheme, please see details in the *Guide to the Innovation and Technology Fund (ITF) Volume I - Innovation and Technology Support Programme* (“the Guide”) available at the ITF website (www.itf.gov.hk). Applicants should read carefully the Appendix and the Guide before submitting applications.

3. For enquiries, please contact ITC or the relevant organisations according to the contact information provided in the Appendix and the Guide as appropriate.

Innovation and Technology Commission
May 2009

**Solicitation of Proposals of
2009 Guangdong-Hong Kong Technology Cooperation Funding Scheme**

Introduction

In order to strengthen technology development between Hong Kong and Guangdong, the governments of the Hong Kong Special Administrative Region (HKSAR) and Guangdong Province jointly set up the Guangdong-Hong Kong Technology Cooperation Funding Scheme (TCFS) in 2004 as a key cooperation initiative to encourage collaboration among universities, research institutes and technology enterprises in the two places. The Shenzhen Municipal Government joined the TCFS in 2005. The TCFS aims to support applied R&D projects which will facilitate the economic development in the Greater Pearl River Delta (PRD) region.

2. Under the TCFS, the governments of HKSAR and Guangdong Province invite R&D project proposals under specific topics/themes in technology areas of common interest and provide funding support to approved projects. Since 2004, the two sides have supported more than 850 projects in various technology areas including information and communications technologies, logistics and supply chain management enabling technologies, automotive parts, textiles and clothing, biomedicine and Chinese medicine, medical device, nanotechnology, new materials, new energy, environmental protection and aircraft parts.

Three Categories of Projects

3. There are three categories of projects for application under the TCFS, namely -
- (a) **Category A** – projects to be solicited, vetted and funded solely by Hong Kong -
 - (i) **Category A(1)** – projects to be solicited, vetted and monitored by the R&D Centres¹; and
 - (ii) **Category A(2)** – projects to be solicited, vetted and monitored by the Innovation and Technology Commission (ITC)².
 - (b) **Category B** – projects to be solicited, vetted and funded solely by Guangdong and Shenzhen.

¹ Five R&D Centres have been set up under the ITF since mid-2006 to drive and coordinate applied research in various technology areas including: automotive parts and accessory systems; information and communications technologies; logistics and supply chain management enabling technologies; nanotechnology and advanced materials; and textiles and clothing.

² Projects with the R&D Centres as applicants would be processed, vetted and monitored by the respective R&D Centres in accordance with their own guidelines and procedures in the same manner as under Category A(1).

- (c) **Category C** – projects to be jointly solicited, vetted and funded by Guangdong and Hong Kong -
 - (i) **Category C(1)** – projects jointly funded by Guangdong and Hong Kong; and
 - (ii) **Category C(2)** – projects jointly funded by Shenzhen and Hong Kong.

Category A and Category B

4. The HKSAR and Guangdong/Shenzhen governments will fund projects under Category A and Category B separately through their respective funding schemes. Given the different needs of Guangdong/Shenzhen and Hong Kong, the proposals solicited by the two sides are with different foci. The Hong Kong side solicits proposals which will focus more on technology development and could be adopted by industries for product enhancement and upgrading their technology level. The Guangdong/Shenzhen side invites applications which focus more on product development, sometimes with detailed specifications, and may lead to niche products which could be ready for sale in the market.

5. Applications under Category A (i.e. Hong Kong-funded projects) should be made by organisations incorporated in Hong Kong to the Hong Kong side (i.e. Innovation and Technology Commission (ITC) or the R&D Centres), while applications under Category B (i.e. Guangdong or Shenzhen-funded projects) should be made by organisations established in Guangdong and Shenzhen to the relevant authorities. In both cases, the projects will have to demonstrate an element of Guangdong/Hong Kong or Shenzhen/Hong Kong cooperation (e.g. collaboration between research institutes and enterprises in Guangdong/Shenzhen and Hong Kong).

6. Applications under Category A should comply with the relevant regulations, procedures and requirements set out in paragraphs 10 to 23 below. Applications under Category B should comply with the relevant procedures and requirements set by the Department of Science and Technology of Guangdong Province (GDST) (please visit the website www.gdstc.gov.cn for details) and the Shenzhen Bureau of Science Technology & Information (SBSTI) (please visit the website www.szsti.gov.cn for details).

7. The Guangdong/Shenzhen governments encourage those Guangdong/Shenzhen institutions interested in the themes under Category A to partner with a Hong Kong party who should be responsible for submitting an application to the Hong Kong side. Similarly, the HKSAR Government encourages those Hong Kong institutions interested in the themes under Category B to partner up with a Guangdong/Shenzhen party for submitting an application to the Guangdong/Shenzhen side.

Category C – Joint Funding

8. To foster closer technology cooperation, the category of projects (Category C) has been set up under the TCFS since 2007. Projects under this category will be

jointly funded by the Guangdong and Hong Kong authorities (Category C(1)) or the Shenzhen and Hong Kong authorities (Category C(2)). Details of the objectives and targets of the R&D project proposals to be solicited under Category C will also be prepared jointly by the two authorities concerned.

9. An application of the same project under Category C should be submitted simultaneously by the participating organisations to the respective authority in Hong Kong and Guangdong (or Shenzhen). Applications submitted to Hong Kong should comply with the procedures and requirements set out in paragraphs 10 to 23 below. The processing and preliminary vetting will be conducted separately by the two sides. The results of the preliminary vetting of the two sides will then be submitted to a joint vetting committee comprising officials from both sides for a final decision on the projects for joint funding support. The approved projects will be monitored by authorities of the two sides respectively, and may also be subject to joint monitoring by the authorities of the two sides.

Specific Topics/Themes

10. Under Category A, applications for applied R&D projects with the following specific topics/themes are invited -

| Specific Topics/Themes |
|--|
| <u>Category A(1)</u> <i>(The R&D Centres responsible for processing and vetting the applications are listed in the brackets after the specific topics/themes)</i> |
| (a) Smart charging station for electric vehicles (Automotive Parts and Accessory Systems R&D Centre) |
| (b1) Innovative textile materials (i) Harmless & environment-friendly natural & man-made fibres with multi-functionalities (ii) Interactive intelligent textile material (iii) Textile composite material (b2) Energy-saving and environmental-friendly production system and material (i) Innovative textiles and clothing production system to save energy/fuel consumption (ii) Environmental-friendly textile dyestuff and chemical (iii) Quick testing technology for toxic and harmful textiles and clothing products (The Hong Kong Research Institute of Textiles and Apparel) |
| (c1) RFID enabling technologies for manufacturing and logistic industries (c2) Enabling technologies for container logistics and business internetworking (c3) Industry-specific item level tagging and service technology |

| Specific Topics/Themes |
|--|
| (Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies) |
| (d) Integrated circuits for LED lighting and remote control (Hong Kong R&D Centre for Information and Communications Technology) |
| (e1) Nanotechnology and advanced materials for sustainable energy (except materials technologies for photovoltaics covered under Category C(2) below) (e2) Nanotechnology and advanced materials for solid state lighting (e3) Nanotechnology and advanced materials for environmental applications (e4) Nanotechnology and advanced materials for lifestyle and healthcare products (Nano and Advanced Materials Institute) |
| <u>Category A(2)</u> (<i>Applications will be processed and vetted by ITC</i>) |
| (a) Advanced manufacturing technologies – mould making, processing, optics, machinery, automation, etc. |
| (b) Product innovation via the use, design and fabrication of Integrated Circuits, for application areas in medical and health-care, manufacturing automation and energy management |
| (c) Development of organic electronics |
| (d) Information technologies for business and service process evolution (data mining, business intelligence, e-commerce, networking, secure data transfer, wireless communications, etc.) |
| (e) Multimedia technologies for digital entertainment applications |
| (f) Application of biotechnology for industrial process improvement |
| (g) Exploitation of biotechnology to improve food production and safety |
| (h) Development of efficient and cost-effective anti-pollution technologies and energy saving technologies |

11. Under Category C, applications for R&D projects under the following specific topics/themes are invited -

| Specific Topics/Themes |
|---|
| <u>Category C(1)</u> (<i>Applications will be processed and vetted by ITC</i>) (Please refer to <u>Annex</u> for the requirements of the themes under this category) |
| (a) New energy vehicles |
| (b) Industrial design system |

| |
|--|
| (c) Platform technologies for Integrated Circuits |
| Category C(2) (<i>Applications will be processed and vetted by ITC</i>) |
| (a) Intelligent industry robots |
| (b) High precision manufacturing equipment |
| (c) Data-mining and decision-making technologies |
| (d) Medical biotechnology <ul style="list-style-type: none">(i) Research and development of innovative medicine(ii) Research and development of quality control technology for Chinese medicine |
| (e) Research and development of novel medical device |
| (f) Materials technologies for photovoltaics |
| (g) Core technology for multimedia signal processing and productization |
| (h) Thin panel technology for LCD TV |
| (i) Design and applications of high precision AD converter IC |

12. Applications which do not fall under the specific topics/themes above will not be considered. For specific topics/themes under Category B, please refer to the websites of GDST and SBSTI (www.gdstc.gov.cn and www.szsti.gov.cn).

Collaboration between Hong Kong and Guangdong

13. Under the TCFS, we encourage collaboration among research institutions and industry/trade support organisations in both Hong Kong and Guangdong to leverage their existing R&D facilities, resources and knowledge as much as possible. We also encourage proposals with the participation of industry in both Hong Kong and Guangdong via provision of funding, expertise and advice in the relevant technology areas. Merits will be given to those applications with greater collaboration efforts as stated above in the assessment.

Funding Schemes

14. Under Categories A(2) and C, Hong Kong institutions can submit applications to ITC for the following three schemes -

- (a) Platform Research Scheme – covering projects whose applicants are local non-profit-distributing organisations including local public research institutes (including universities, Hong Kong Productivity Council, etc.), industry support organisations, trade and industry associations and professional bodies.

- (b) Collaborating Research Scheme – covering proprietary projects whose applicants are local private sector companies with local public research institutes as partners.
- (c) Company Research Scheme – covering proprietary projects whose applicants are local private sector companies without local public research institutes as partners.

15. The funding guidelines and procedures for projects under TCFS which are processed/vetted/monitored by ITC are set out in the *Guide to the Innovation and Technology Fund (ITF) Volume I - Innovation and Technology Support Programme* ("the Guide") available at the ITF website (www.itf.gov.hk).

Intellectual Property

16. The arrangements for intellectual property (IP) of TCFS projects under Category A are set out in Chapter II of the Guide. For projects under Category C, regardless of whether they are under Platform Research Scheme, Collaborating Research Scheme or Company Research Scheme, the IP arrangements should be negotiated between the applicant and the other participating organisations on a case by case basis.

Project Duration

17. All approved projects shall start in the last quarter of 2009 for a duration of normally two years. Priority will be given to those applications with earlier delivery of project deliverables and shorter project duration.

Application Procedures

18. Applications under Category A(1) should be submitted to the relevant R&D Centres. The list of the R&D Centres can be found in paragraph 24 below. Please contact the R&D Centres direct for their application procedures and requirements.

19. Applications under Category A(2) and those under Category C should be submitted to ITC in accordance with the procedures set out in Chapter II of the Guide. Specifically, such applications should be submitted under "ITSP – Guangdong-Hong Kong Technology Cooperation Funding Scheme" to ITC through the Innovation and Technology Commission Funding Administrative System (ITCFAS) accessible via the ITF website at www.itf.gov.hk.

20. Besides, applications under Category C to be submitted to ITC should also attach the respective application submitted by its Guangdong/Shenzhen partner to the Guangdong/Shenzhen authorities and the appendices, if any. As applications under Category C will be submitted to the joint vetting committee, such applications should be prepared in Chinese.

Vetting and Monitoring Mechanism

21. The vetting and monitoring mechanism for TCFS projects are set out in Chapter III to Chapter VI of the Guide.

22. For applications under Category A(1), they will be vetted and monitored by the respective R&D Centres. Applications under Category C with R&D Centres as applicants will be vetted by ITC in accordance with the guidelines set out in this document and the Guide. For details of the relevant vetting and monitoring guidelines and procedures of the R&D Centres, please contact the R&D Centres direct with the contact information provided in paragraph 24 below.

Solicitation Period

23. The solicitation period is **19 May - 3 July 2009**.

Enquiries

24. For enquiries of applications under Category A(1), please contact the R&D Centres direct -

| R&D Centre | Contact Persons |
|--|---|
| Automotive Parts and Accessory Systems R&D Centre | (1) Mr C. H. Leung Tel: 2788 5311 Fax: 2788 5406 E-mail: chleung@apas.hk (2) Mr Haydn Yik Tel: 2788 5316 Fax: 2788 5406 E-mail: haydnyik@apas.hk Website: www.apas.hk |
| Hong Kong Research Institute of Textiles and Apparel | Dr Kai-chiu Ho Tel: 2627 8188 Fax: 2364 2727 E-mail: kcho@hkrita.com Website: www.hkrita.com |
| Hong Kong R&D Centre for Logistics and Supply Chain Management Enabling Technologies | (1) Mr Anthony Kwok Tel: 2299 0524 Fax: 2299 0552 E-mail: akwok@lscm.hk (2) Ms Elaine Yu Tel: 2299 0538 Fax: 2299 0552 E-mail: eyu@lscm.hk Website: www.lscm.hk |

| R&D Centre | Contact Persons |
|--|---|
| Hong Kong R&D Centre for Information and Communications Technologies | Dr KC Wang Tel: 3406 2517 Fax: 3406 2801 E-mail: kawang@astri.org Website: www.astri.org |
| Nano and Advanced Materials Institute | Dr Chris Chan Tel: 2358 8172 Fax: 2358 8113, 3521 0618 E-mail: nami-rd@nami.org.hk Website: www.nami.org.hk |

25. For enquiries of applications under Category A(2) and Category C (for applications submitted to ITC), please contact -

- Miss April Chung (Tel: 2737 2433, Fax: 2377 0730, E-mail: apschung@itc.gov.hk); or
- Mr Frederick Cheng (Tel: 2736 0055, Fax: 2957 8726, E-mail: fwycheng@itc.gov.hk)

26. For enquiries about applications to the Guangdong or Shenzhen authority under Category C, please contact the GDST (for Category C(1)) and SBSTI (for Category C(2)) according to information provided on their websites (www.gdstc.gov.cn and www.szsti.gov.cn) respectively.

Innovation and Technology Commission
May 2009

2009 年粵港科技合作資助計劃

新能源汽車應用示範

背景

目前，我國節能與新能源汽車正處於從研發向規模產業化過渡的重要關頭，還存在著成本高、應用不便等困難。因此，有必要組織規模化的示範運行，考核產品，培育市場，完善產業鏈，使我國自主創新的節能與新能源汽車逐步發展成為有競爭力的產品。

純電動、混合動力和燃料電池電動汽車代表了新能源汽車發展的三大主流方向，其中我國在純電動車研究方面更具產業化基礎，最有可能率先實現電動車大規模產業化應用。廣東應以國家啓動節能與新能源汽車大規模示範運行為契機，發揮政府的引導作用，調動骨幹生產企業的積極性；通過機制創新，探索多種資本介入推廣運行的新模式；加強示範運行管理，科學、合理進行示範推廣，為節能減排和汽車產業的升級換代作貢獻。

內容與目標

目標：掌握電動汽車整車集成技術以及太陽能等新能源充電技術，根據市場應用需求，研發各具特色的示範樣車，並利用亞運會等重大活動實現純電動汽車的初期市場導入。

內容：開發出公交、出租、旅游等示範樣車，發展太陽能/風能等新能源充電技術。包括整車控制系統，電機及控制系統，高能二次動力電池及管理系統，可再生能源大功率 DC-DC 充電機，重點做好電動汽車的推廣應用示範工程。

驗收指標

- (1) 項目的關鍵技術和產品的整體性能要有明顯的創新性和先進性，對提升行業技術水平和促進產業升級具有積極作用，主要技術性能指標應達到國內領先水平；
- (2) 示範樣車及充電站（粵方要求：示範樣車不少於 100 輛，充電站不少於 3 個；項目具體技術指標按合同書內容和指標考核。）

目的

本項目的技術成果集中在新能源汽車整車技術、電機及控制系統，電池及管理系統，可再生能源等，並瞄準香港及廣東省開展產品化和產業化的需要。

受惠行業及所得裨益

整體而言，香港汽車零部件公司及相關業界均可受益於此項目成果。同時，此項目亦會引起重大的社會影響，提升公共交通系統，推進新能源環保技術並改善環境質素。

額外評分

1. 組成粵港聯合開發團隊，該團隊應該具有整車控制、電機開發與控制、電池組及管理系統開發的基礎以及綜合開發能力。且該團隊有實質性合作基礎。我們鼓勵粵港兩地的大專院校和支持機構合作，務求充分利用現有的研發設施、資源及知識，從而獲取最大裨益。
2. 此外，我們鼓勵申請機構提交有粵港兩地產業合夥參與的項目。參與的形式有多方面，包括提供資金及相關的專業技術及知識。

項目進行期限

項目須於兩年內完成。如申請項目能提早取得項目成果及其進行時間較短，可獲優先考慮。

提交港方申請書及截止申請日期

港方申請人須透過創新科技署基金管理系統，選取「創新及科技支援計劃-粵港科技合作資助計劃」擬備及提交申請書至創新科技署。請透過以下網址進入創新科技署基金管理系統，以提交申請表：www.itf.gov.hk。截止申請日期為 2009 年 7 月 3 日。

聯絡方法

陳啓聰先生(電話：2737 2417，傳真：2377 0730，電郵：gkcchan@itc.gov.hk)
郭滿強博士(電話：2737 2223，傳真：2375 0715，電郵：mkkwok@itc.gov.hk)
何永鴻先生(電話：2736 0080，傳真：2375 0715，電郵：ivanho@itc.gov.hk)

二零零九年五月

2009 年粵港科技合作資助計劃

現代工業設計公共服務平台

背景

現代工業設計是製造業產品創新的關鍵環節,對提高企業產品創新能力作用巨大,是產業升級、技術進步的重要保障,已成為廣東省發展快、創新能力強和最具發展潛力的產業之一。廣東省製造業經過多年 CAD/CAM 技術推廣應用,產品設計能力雖然有較大的提升,但與國外相比,特別是中小製造企業,在產品外觀設計、工業造型、結構設計、性能分析和系統集成技術上仍存在較大差距,已成為制約廣東省製造業向高端發展的技術瓶頸。廣東省是製造業大省,香港在現代工業設計與公共服務方面有一定的優勢,加強粵港合作,有利於兩地優勢互補,共同走自主創新之路,在現代工業設計與公共服務方面上取得重大突破,為製造企業提高新產品開發服務,形成區域產業競爭力,促進產業升級和跨越式發展。

項目目標

通過項目實施,促進粵港兩地現代工業設計與公共服務產業快速發展,提升兩地製造業的產品外觀設計、工業造型、結構設計、性能分析和系統集成技術應用和服務能力,提高新產品的性能、精度等綜合技術水平,縮短新產品開發周期和降低開發成本,顯著提升兩地的競爭力。

研究內容

根據《珠江三角洲地區改革發展規劃綱要》精神要求,針對廣東省裝備製造、電子信息和輕工產業的需求及粵港兩地的實際情況,扶持一批現代工業設計與公共服務平台,通過應用反求工程、快速原型和有限元分析等技術,提供產品外觀設計、工業造型、結構設計、性能分析和系統集成技術服務,重點解決產品結構設計、性能分析和系統集成等關鍵技術應用問題。

驗收指標

- 1、建成具備產品外觀設計、工業造型、結構設計、性能分析和系統集成技術服務能力的現代工業設計與公共服務平台,對提升行業技術水平和促進產業化有積極作用;
2. 提交驗收的聯合開發新產品不少於 3 種,整體性能要有明顯的創新性和先進性,技術水平達到國內領先或國際先進水平;
3. (粵方要求:平台服務的企業不少於 30 家;項目應擁有自主知識產權,獲得 3 件及以上專利。)

額外評分

1. 組成粵港聯合開發團隊,該團隊應該具裝備製造、電子信息和輕工產業技術開發的基礎以及綜合開發能力。且該團隊有實質性合作基礎。我們鼓勵粵港

兩地的大專院校和支持機構合作，務求充分利用現有的研發設施、資源及知識，從而獲取最大裨益。

2. 此外，我們鼓勵申請機構提交有粵港兩地產業合夥參與的項目。參與的形式有多方面，包括提供資金及相關的專業技術及知識。

項目進行期限

項目須於兩年內完成。如申請項目能提早取得項目成果及其進行時間較短，可獲優先考慮。

提交港方申請書及截止申請日期

港方申請人須透過創新科技署基金管理系統，選取「創新及科技支援計劃-粵港科技合作資助計劃」擬備及提交申請書至創新科技署。請透過以下網址進入創新科技署基金管理系統，以提交申請表：www.itf.gov.hk。截止申請日期為 2009 年 7 月 3 日。

聯絡方法

陳啓聰先生(電話：2737 2417，傳真：2377 0730，電郵：gkcchan@itc.gov.hk)
郭滿強博士(電話：2737 2223，傳真：2375 0715，電郵：mkkwok@itc.gov.hk)
何永鴻先生(電話：2736 0080，傳真：2375 0715，電郵：ivanho@itc.gov.hk)

二零零九年五月

2009 年粵港科技合作資助計劃

集成電路平台技術

背景

集成電路（IC）是電子資訊產業的核心和靈魂，是實施自主創新戰略的關鍵領域，同時也是廣東省急需突破的產業薄弱環節。面向重點領域，夯實研發基礎，開發核心晶片，可有效完善產業結構，提升產業國際競爭力，香港在集成電路人才與實驗條件方面有一定的優勢，加強粵港合作，有利於兩地優勢互補，加速形成較強的區域競爭力，實現跨越式發展。

目標

面向消費電子、通信、家電產品等重點領域對核心晶片的需求，支援粵港雙方高校、科研機構及企業，聯合開展晶片設計、封裝、測試等平台技術方面的自主開發，並以此推動集成電路新產品設計、新技術推廣及人才教育培訓等工作，使珠三角地區在相關領域搶佔核心晶片方面的優勢地位。

研究內容

面向消費電子、通信、家電產品等重點領域，突破多媒體處理、平板顯示、通信等相關晶片技術，建立粵港資源開放共用的 IP 核庫，搭建公共資訊服務平台，提供 ASIC/SoC 設計、封裝和測試，人才培養，技術推廣等服務。

受惠行業及所得裨益

消費電子、通信、家電等產品生產商，產品、集成電路的設計、封裝和測試等專業服務供應商，均可受惠。

額外評分

申請項目在推行時如能善用廣東省的研發能力，可獲得額外評分。我們鼓勵粵港兩地的大專院校和支援機構合作，務求能充分利用現有的研發設施、資源及知識，從而獲取最大裨益。

此外，我們鼓勵申請機構提交粵港兩地產業合伙參與的項目。參與的形式有多方面，包括提供資金及相關的專業技術及知識。

項目進行期限

項目最遲須於二零零九年第四季展開，為期最多兩年。

提交港方申請書及截止申請日期

港方申請人須透過創新科技署基金管理系統，選取「創新及科技支援計劃-粵港科技合作資助計劃」擬備及提交申請書至創新科技署。請透過以下網址

進入創新科技署基金管理系統，以提交申請表：www.itf.gov.hk。截止申請日期為 2009 年 7 月 3 日。

聯絡方法

侯經權先生(電話：2737 2566，傳真：2377 0730，電郵：kkhau@itc.gov.hk)
李穎儀女士(電話：2737 2228，傳真：2377 0730，電郵：leemaria@itc.gov.hk)

二零零九年五月