The Greater Bay Area Science Project Competition (GBASPC) 2023 大灣區學生科技大賽 2023

Guidelines and General Rules

All teachers and students should read the following information for the GBASPC 2023. Non-compliance may lead to disqualification.

參賽者(包括老師和學生)請詳閱以下有關大灣區學生科技大賽 2023 的條款及細則。如有違反任何所述規則,參賽者會被取消參賽資格。

I. Guideline and General Rules for School and Project Application I. 有關學校報名的指引及細則

- 1. Each school can nominate one team consisting of a maximum of 3 students and a teacher coordinator. The teacher-in-charge should supervise participating students at their school throughout the event. This is to ensure participating students are fully committed in all the events and assisted by their teachers when problems arise. The teacher-in-charge should notify participating students' parent or legal guardian and obtain their authorization to enter their child in the competition.
- 1. 每一所學校只可提名一隊,每隊最多三名學生,可委派一名老師負責協助統籌學生參賽。為確保參賽同學能投入全部比賽活動及在有需要時得到老師協助,隊伍負責老師須帶領其學生參與在比賽舉行期間的活動。負責老師亦需通知該隊伍每位參賽學生的家長或監護人以獲其同意讓學生參加此比賽。
- 2. The nominated students must be currently studying in S1 to S5 (grade 7 to grade 11) and from the same school.
- 2. 所有參賽學生須來自同一所學校,並現正就讀中一至中五年級。
- 3. Each team is only allowed to submit one project. The research work must be completed within 2 years prior to the submission date (i.e. from September 2021 to Aug 2023). The research work that has been submitted to other competitions will be accepted provided that it has not received any awards.
- 3. 每隊只能提交一個專題研究報告。該研究工作須於 2021 年 9 月至 2023 年 8 月期間完成。若該專題研究曾用於其他比賽但未獲任何獎項,亦可用於此比賽中。
- 4. If you are interested in participating this competition, enter the GBASPC website: http://www.gbaspc-gec-hk.com and proceed the application process by clicking the Registration button to fill in either Google form or Tencent survey.
- 4. 有興趣參加此比賽者,可到網頁 http://www.gbaspc-gec-hk.com 啟動登記程序或填寫谷歌問券/騰訊問券報名

- 5. Enter the information of students and a teacher participating in the competition clearly.
- 5. 登記時,請清楚地輸入參賽老師和學生的資料。
- 6. Enter the project title and select a category.

| Biological Science and Chemistry | Physics & Engineering | Computer Science |
|-------------------------------------|------------------------|-------------------------|
| Biomedical Science | Mechanical Engineering | Information Technology |
| Chemical and Biological Engineering | Electrical Engineering | Machine Learning |
| Material Science | | |
| Environmental Science | | |

6. 輸入專題研究主題,並選擇以下其中一個所屬類別

| 生物科學及化學 | 物理及工程 | 電腦科學 |
|---------|-------|------|
| 生物醫藥科學 | 電機工程 | 資訊科技 |
| 生物化學工程 | 機械工程 | 機器學習 |
| 材料科學 | | |
| 環境科學 | | |

- 7. Enter a maximum of 50 words project description and the competition organizer may recategorize the project if needed. The project can be either a research or an invention.
- 7. 用最多五十字描述該專題研究。如需要,大會主辦者有機會重新安排專題研究的分類。 專題研究可以是一項科學研究或發明。
- 8. A completed GBASPC ENTRY FORM with a school chop, students and teachers' signature must be uploaded in order to complete the registration process.
- 8. 上載填寫好的大灣區學生科技大賽報名表(附有校方蓋印、參賽老師及學生的簽名),才 能完成登記程序。
- 9. Upon successful registration, a confirmation email will be sent to the participating team within one week.
- 9. 登記成功後,參賽隊伍將於一週內收到一封確認電郵。
- 10. Each project will be assigned a project number for submission of works. The project number will be sent to registered team via email. No school name, logo, teachers and students' name should be put in the submitted works, otherwise the team will be disqualified.
- 10. 每一個專題研究將獲安排一個代號,以作往後提交文件之用。已登記的隊伍將於電郵收到代號。往後提交的所有文件均不能顯示參賽學校的名字及校徽,也不能顯示參賽老師及學生的名字。如有違反上述規則,參賽者會被取消參賽資格
- 11. By registering the competition, participants agree to abide by the official guidelines and rules and by decisions made by the GBASPC Organizing Committee, which are final.

- 11. 當登記參加此比賽時,參賽者已承諾會遵守大灣區學生科技大賽組織委員會的指引、細則和作出的最終決定。
- 12. No substitutions of participants could be made after registration deadline.
- 12. 過了登記限期後,參賽隊伍將不能替換成員。
- 13. Submissions which have not completed registration by the end of deadline due to incomplete or incorrect information will be disqualified.
- 13. 報名登記如有未完成的部分或錯誤資料將被視為登記失敗,並遭取消資格。
- 14. The financial budget of conducting research of all participating teams should be fully subsidized by the school.
- 14. 每隊隊伍用於專題研究的所有經費需由所屬學校全面資助。
- 15. The deadline for the registration is 11:59 pm on 7 July 2023.
- 15. 截止登記時間為: 2023 年 7 月 7 日晚上 11 時 59 分

II. Guideline and General Rules for Project Submission II.指引及提交報告規則

- 1. The project work must be the original work of the participants. The participants are solely responsible for any infringement on copyrighted materials. The GBASPC Organizing Committee reserves the right to request proof that the submitted work is the original work created solely by the participants. Non-compliance may lead to disqualification.
- 1.報告必須是參賽者的原創作品。如有任何侵犯版權的材料,參賽者須負上全部責任。 GBASPC 組委會保留要求參賽者提供證據證明所提交的作品是由其原創的權利。無法遵守 的隊伍可能會被取消參賽資格。
- 2. Participating students should maintain the highest standard of honesty and integrity. Scientific fraud and plagiarism will not be tolerated. Fraudulent projects will be disqualified.
- 2.參加活動的學生應秉持最高的學術誠信。任何科學學術上的欺瞞和抄襲將不被容忍。學 術造假的報告將被取消參賽資格。
- 3. Project Number and Project Title should be shown on the submitted paper. Participating schools and students should not be identified on the submitted works to avoid being recognized to the public and judges. No school name, logo, teachers and students' name should be put in the submitted work, otherwise the team will be disqualified.
- 3. 論文報告中應展示報告編號和報告題目。所提交的作品中不應標明參與的學校和學生名稱,以避免被公眾和評審員知悉。提交的作品中不得包含學校名稱、校徽、教師和學生的姓名,否則將被取消參賽資格。

- 4. The research paper shall be written in either Chinese or English.
- 4.研究論文應以中文或英文撰寫。

The requirements for ALL research papers are as follow:

所有研究論文的要求如下:

Required to be included 必須包括

Cover page (It should not include school name, student names and teachers name) 封面(不應該包括學校名稱,學生和老師姓名)

Project Number

Project Title

報告目編號

報告題目

Contents

ABSTRACT

Provide a brief summary of the research work or invention providing key information of introduction, the issue to be addressed, experimental design, key quantitative results, interpretation and conclusion.

內容

摘要

提供研究或發明的摘要,提供引言、針對的問題、實驗設計、關鍵數據結果、解釋和結論等資料。

INTRODUCTION

Explain the background of the study, state the purpose and/or hypothesis that you investigated, explain the rationale for your approach to address the problem.

引言

解釋研究背景,陳述研究目的和/或假設,解釋研究背後的基本原理。

METHODS

Describe the experimental procedure, how to collect the data and how the data were analyzed. 方法

描述實驗步驟,如何收集數據以及如何分析數據。

RESULTS

Present the key results in form of figures and tables.

結果

以圖表的形式展示關鍵結果。

DISCUSSION

Interpretation of the results. Fundamental questions to answer include:

- Do the results support the hypothesis of the experiment?

- Are the results agree with what others have shown? If not, do they suggest an alternative explanation or design flaws in the experiment or other reasons?
- Are some of the results anomalous? Any reasons?
- How the results can be used?
- What is the new understanding of the problem you investigated?
- How to improve the experiment?
- If the hypothesis working, what would be the next step in your study?

討論

解釋得出的結果。要回答的基本問題包括:

- -結果是否支持實驗的假設?
- -結果是否與其他人的一致?如果不是,他們有否建議其他解釋或實驗設計上存在的缺陷或其他原因?
- -有沒有一些異常的結果?爲什麼?
- -得出的結果有何用處?
- -你對所研究的問題有什麼新的認識嗎?
- -如何改善實驗?
- -如果假設是正確的,你的下一步研究將是什麼?

CONCLUSION

- A brief summary drawn from the results and discussion.

結論

-從結果和討論中得出的簡短摘要。

REFERENCES

- All the sources for the text and figures must be cited.
- Plagiarism is strictly forbidden.
- Use the APA referencing style for citing the sources.

參考

- -必須引用所有文本和數字的來源。
- -嚴禁抄襲。
- -使用 APA 樣式引用來源。

Should not be included in all submitted works 不應包含在所有提交的作品中

- Names of students
- Names of teachers/ mentors
- Names and logos of schools

學生姓名

- -老師/導師的姓名
- -學校的名稱和校徽

Format of the research paper 研究論文的格式

ABSTRACT

- Title: Calibri, bold and 14-point

- Abstract: Calibri, 12-point and 1.15 line spacing
- Written in Chinese with maximum 450 words or in English with maximum 300 words
- Keywords: Calibri, 12-point (no more than 6 words in English and 10 words in Chinese)

摘要

-標題:粗體和 14 點大小

-摘要:12點大小和1.15行距

-以中文寫成,最多450字,或以英文寫成,最多300字

-關鍵字: 12點(英語不超過6個單詞,中文不超過10個單詞)

CONTENTS

- Calibri, 12-point and 1.5 line spacing
- Written in Chinese with maximum 5,000 words or in English with maximum 3,500 words
- Maximum 25 pages including abstract, research contents, appendices and references

內容

- -12 點大小和 1.5 行間距
- -用中文寫成最多 5,000 個單詞或用英文寫成最多 3500 個單詞
- -最多25頁,包括摘要,研究內容,附錄和參考
- 5. Participating team must submit the written research paper on or before 11:59 PM 1 September 2023. Late entries will not be accepted.
- 5. 參賽團隊必須在 2023 年 9 月 1 日或之前提交書面研究論文。
- 6. Written research paper can be submitted in a pdf form via email at gbaspc@gtcollege.edu.hk or gbaspc@gtcollege.edu.hk or gbaspc@gtcollege.edu.hk or
- 6.書面研究論文可以 pdf 格式通過電子郵件發送至 gbaspc@gtcollege.edu.hk 或 gbaspc@qq.com
- 7. A completed GBASPC DECLARATION FORM with students' signature must be uploaded in order to complete the submission process.
- 7.必須上傳完整的帶有學生簽名的 GBASPC 聲明表,提交過程方以完成。
- 8. Incomplete research paper will not be sent to Judging Panel for review.
- 8.不完整的研究論文將不會發送到評審委員會進行審查。
- 9. Participating teams are welcome to supplement the written research paper with a video not longer than 3 minutes or PowerPoint presentation within 20 slides for invention project.
- 9.團隊只可使用不超過 3 分鐘的視頻或 20 張幻燈片中的 PowerPoint 演示文稿,補充發明項目的書面研究論文。

- 10. The Judging Panel would review all proposals and shortlist 10 teams to the Final Round based on the assessment criteria provided in competition details.
- 10.評審團將根據比賽詳情中提供的評估標準,審核所有提案並入圍 10 支隊伍。
- 11. Participating teams are not allowed to amend or replace the submitted proposal and combination of team members on any occasion. Otherwise, the team will be disqualified.
- 11.參加團隊不得在任何情况下修改或替換提交的提案和團隊成員的組合。 否則,該隊將被 取消比賽資格。
- 12. Submissions which have not completed by the end of deadline due to incomplete or incorrect information will be disqualified.
- 12.如果團隊的信息不完整或不正確,或在截止日期前未完成提交作品,將被取消參賽資格。

III. Other General Rules

III. 其他一般規則

- 1. All rules and regulations are subjected to amendment without prior notice.
- 1.所有規則和法規如有變更,恕不另行通知。
- 2. The GBASPC Organizing Committee reserves the right to reject or disqualify any entries. In case of any disputes, the decision of the GBASPC Organizing Committee should be final.

 2. GBASPC 組委會保留拒絕或取消參賽資格的權利。如有任何爭議,GBASPC 組委會保留
- 2. GBASPC 組委曾保留拒絕或取消營養貧格的權利。如有任何爭議,GBASPC 組委曾保留最終决定權。
- 3. In case of any discrepancies between the English version and the Chinese version of the information, the English version shall prevail.
- 3.如果信息的英文版與中文版之間有任何差异,則以英文版爲准。
- 4. The GBASPC Organizing Committee reserves the right to use any photograph/video taken at any event held by the organizer, without the expressed written permission of those included within the photograph/video for education or other non-commercial purpose. GBASPC Organizing Committee may use the photograph/video in publications or other media material produced, used including but not limited to newspapers, magazines, websites, brochures, television, etc.
- 4. GBASPC 組委會保留使用在參加團隊的任何活動中拍攝的任何照片/錄像的權利,可用于教育或其他非商業目的。 GBASPC 組委會可以在出版物或其他媒體材料中使用參加團隊的照片/錄像帶,包括(但不限于)報紙,雜誌,網站,小冊子,電視等。
- 5. All personal data provided will be confidential.
- 5.提供的所有個人數據將列為機密。

- 6. All award-winning projects will not be returned.
- 6.所有獲獎項目將不予退還。
- 7. All members of 10 finalist teams are required to attend their presentation session, STEM Forum and Award Presentation Ceremony on 18 November 2023. Otherwise, the team will be disqualified.
- 7. 十隊决賽入圍團隊的所有成員必須參加 2023 年 11 月 18 日舉行的演講, STEM 論壇和頒 獎典禮。否則,該團隊將被取消參賽資格。
- 8. Scoring sheet will not be distributed to participating teams. The decisions of the Judging Panel for the competition results shall be final.
- 8.計分表不會分發給參賽團隊。評審委員會對比賽結果的决定爲最終决定