Part B   **Project Summary**

Project Title: Explore and Research the Atmospheric Environment (EXPLORE)	**Project Number 2008/0340** (Revised)

Name of Organization: Department of Chemical and Biomolecular Engineering, HKUST

(1) Goals:

    1. To promote a hands-on approach to studying air quality in Hong Kong's secondary schools through the proposed project **EXPLORE**

    2. To facilitate collaborative learning among schools through a bilingual (Chinese and English) **EXPLORE** website

    Objectives:

    (i) To establish physical experimental platforms for measuring NO_2, O_3, particulates and visibility in schools

    (ii) To train the trainers in deploying the platform in (i)

    (iii) To deploy the platform in (i) for students' studies or project learning

    (iv) To build a web platform for EXPLORE to facilitate data and information exchange among participating schools, and disseminate information to the public

(2) Targets: Six to Ten seed schools

    Expected number of beneficiaries:

    On the hardware EXPLORE platform: 30 – 50 teachers and 18 – 30 technicians to be trained, 900 to 2000 students from six to ten participating seed schools

    On the web EXPLORE platform: publicly accessible to all students from all schools

(3) Implementation Plan:

    (i) Duration: January 2010 – December 2011 (24 months)

    (ii) Process / Schedule: Preparation and school recruitment (0 – 6 months), One year of data collection (7 – 18 months), Data Analysis and Reporting (19 – 24 months)

    (iii) Collaboration with other parties / partners:

(4) Products

    (i) Deliverables / Outcomes: Experimental and Web platform of EXPLORE

    (ii) Dissemination of Deliverables/Outcomes: EXPLORE web, school symposium, publications

    (iii) Commercialization potential of Deliverables and Outcomes: High as the experimental platform can be standardized as study tools for every school.

(5) Budget (group in six categories)

    Staff: $738,800, Equipment: $180,000, Workshops: $8,000, General expenses: $145,200, Contingency: $9,996 Total amount granted: $1,082,000

(6) Evaluation - Performance indicators and outcome measurements

    (1) Adherence to the schedule and budget by the project team, (2)Adherence to the schedule by the users, for instance, can they complete their assigned tasks on time, (3) Questionnaire survey will be made in workshops, selected school visits, etc., (4) Workmanship and quality (accuracy, e.g.) of the instruments built by the schools, (5) The number of interactions between schools and the HKUST team in technical support or consultation, (6) Quality of the data collected by the schools benchmarked against the nearest EPD station, (7) Access frequency of the website by participating schools, (8) Activity frequency of the Exchange Post (number of questions and answers posted; hit rate), (9) Information access frequency (downloading of information and material), (10) Students' response on the project in helping them develop their own enquiry studies.