Number of Work/Study Related Injuries

A total of 30 work/study related injury cases were recorded in 2007. Among the cases:

- 18 cases involved staff members
- 8 cases involved students
- 4 cases involved contractors

A comparison of accident numbers over the past 10 years is shown in Table 1 below. The number of staff injuries in 2007 was the second lowest in record.

Table 1. Comparison of Accident Numbers

<table>
<thead>
<tr>
<th>Year</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Accident Number</td>
<td>54</td>
<td>39</td>
<td>28</td>
<td>28</td>
<td>25</td>
<td>23</td>
<td>30</td>
<td>35</td>
<td>25</td>
<td>18</td>
</tr>
<tr>
<td>Student Accident Number</td>
<td>4</td>
<td>8</td>
<td>8</td>
<td>10</td>
<td>7</td>
<td>7</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

Lost Workdays

A total of 86 lost workdays of all staff injury cases were recorded by the end of 2007. This was an 80% reduction as compared with the lost workdays for 2006.

The comparison of lost workdays over the past 10 years is shown in Table 2 below.

Table 2. Comparison of Lost Workdays
The severity of individual cases is analyzed and indicated by the number of lost workdays as shown in Table 3. Among all the 18 staff injury cases, 5 cases did not incur any lost workdays, 2 cases incurred 3 or less lost workdays and 11 cases incurred more than 3 lost workdays. The largest number of lost workdays in one single case was 17 days. The case involved a hall attendant who tripped over the ground when clearing garbage at a student hall.

Table 3. HKUST Staff Work Accidents in 2007 by Department

<table>
<thead>
<tr>
<th>Year</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number of Lost Workday</td>
<td>630</td>
<td>237.5</td>
<td>453</td>
<td>71.5</td>
<td>190</td>
<td>382.5</td>
<td>123.5</td>
<td>278</td>
<td>430</td>
<td>86</td>
</tr>
<tr>
<td>Average Lost Workday Per Accident</td>
<td>11.6</td>
<td>6.1</td>
<td>16.2</td>
<td>2.5</td>
<td>7.5</td>
<td>16.6</td>
<td>4.1</td>
<td>7.9</td>
<td>17.2</td>
<td>4.8</td>
</tr>
</tbody>
</table>

Table 3. HKUST Staff Work Accidents in 2007 by Department

<table>
<thead>
<tr>
<th>Department</th>
<th>No. of Accidents</th>
<th>Total</th>
<th>LWD=0</th>
<th>0&lt;LWD≤3</th>
<th>LWD&gt;3</th>
</tr>
</thead>
<tbody>
<tr>
<td>BICH</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>CHEM</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>FMO</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PHYS</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>SAO</td>
<td>9</td>
<td>1</td>
<td>1</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
<td><strong>5</strong></td>
<td><strong>2</strong></td>
<td><strong>11</strong></td>
<td></td>
</tr>
</tbody>
</table>

LWD = Lost Workday(s)

**Causes of Work/Study Related Injuries**

Figure 1 summarizes the causes for all work/study related injuries in 2007.

“Sharp Objects” and “Slips and Trips” were the top 2 causes for all work/study related injuries in 2007, accounting for 6 and 5 cases respectively. “Slips and trips” was the top cause for staff injuries while “sharp object” was the top cause for student injuries.

Among the 6 cases caused by “sharp objects”, 5 of them involved students working with glassware (pipettes, flasks, glass tubes, etc.). The only case involving a staff member was also caused by a broken glass pipette.

The 5 “Slips and Trips” cases all belonged to the Student Affairs Office (SAO), involving cleaner, lifeguard and attendants.
There was only one case caused by "manual handling" as compared with 7 cases in 2006.

**Figure 1. HKUST Cause of Work and Study Related Accidents in 2007**

Locations of Accidents

Of the 26 staff and students injury cases:
- 10 occurred in laboratories.
- 9 occurred in staff/student quarters.
- 4 occurred in common areas.
- 3 occurred in workshops/plant rooms/warehouses.

**Common Root Causes of Accidents**

Besides classifying causes of injuries in terms of physical sources and energies involved, investigation of the injury cases also revealed some common underlying root causes. These root causes are summarized in Figure 2 below.
Non-injury Incidents

A total of 6 non-injury incidents were recorded in 2007. Among them, 4 occurred in laboratories, 1 occurred in the student quarters and 1 in outdoor common area. The incidents included:

- 2 small fire incidents, both of which occurred in the laboratory in the course of experiments.
- 2 chemical spill incidents, 1 of which was due to accidental breakage of chemical container and the other was due to improper disposal of chemical containers.
- 1 town gas leakage incident at student quarters.
• 1 odour complaint in the laboratory.

Summary of Significant Findings

☐ The number of staff injury cases in 2007 (18 cases) was significantly less than that of 2006 (25 cases). In fact, the number was the second lowest in record. The number of student injury cases was the same as 2006 (8 cases). The number of lost workdays (86 days) in 2007 was also much less than that of 2006 (430 days).

☐ “Sharp Objects” and “Slips and Trips” were the top two causes of work/study related injuries in 2007. “Slips and trips” was the top cause for staff injuries while “sharp object” was the top cause for student injuries.

☐ All 5 cases caused by “Slips and Trips” belonged to SAO. All 6 “sharp objects” cases were associated with glassware handling.

☐ “Manual Handling” had been one of the top causes for injuries for many years. There was only one such case in 2007 as compared with 7 cases in 2006.

☐ There were only 6 departments/units in which injury cases (including staff and students) had occurred in 2007. This number was also the lowest in record.
Maintaining Ventilation Performance Target in a Five-Day Work Schedule

It has been more than a year since a number of upgraded ventilation systems have taken over the duty of supplying fresh air to the offices in Zones D and E of the office block as a part of the University’s commitment to achieve the indoor air performance target of maintaining an average radon level of 150 Bq/m³ or below from 8:00 am to 10:00 pm, Monday to Saturday, in the office blocks (For details on this arrangement, please refer to (1) Radon Q and A, September 2006 issue of Safetywise http://www.ab.ust.hk/sepo/sftywise/200609/Page5.htm (2) http://www.iaq.ust.hk). During the year, the Health, Safety and Environment Office (HSEO) has actively monitored the radon levels in offices to ensure the performance target continues to be met. The results obtained had been very positive. Offices monitored had overall averages lower than 100 Bq/m³ from Monday to Saturday, and the daytime radon averages recorded from 8:00 am to 10:00 pm were even much lower than 100 Bq/m³. None of the offices monitored had radon levels exceeded the established target.

As the five-day work schedule took effect about 6 months ago, concern has been raised about the new ventilation schedule and its impact on the radon levels in offices. Survey results had revealed that the ventilation systems in Zones D and E have been operating with the same six-day work schedule, as there are classes arranged in classrooms in the zones on Saturdays, and the radon levels recorded in offices at these zones were similar to the results obtained from previous surveys. For other areas, the ventilation schedule has been modified to meet the needs. Especially on Saturdays when many of the offices are closed, the ventilation systems in these areas have been rescheduled to operate on Saturday mornings and intermittently in the afternoons. After these adjustments, survey results recorded in these areas indicated that the overall radon average satisfies the performance target established. In general, the overall average from 8:00 am to 10:00 pm on Saturdays was slightly higher than the average recorded for the same period from Monday to Friday but yet, the average was still lower than the 150 Bq/m³ performance target. HSEO will work with Facilities Management Office (FMO) to ensure the performance of the ventilation systems will continue to adhere to the established ventilation schedule, including managing radon levels in offices at an acceptable level on Saturdays as well.
Your efforts in saving the earth!

Waste Reduction Practices at HKUST

The HKUST has been implementing the Wastewise Scheme which is supported by the Environmental Protection Department of the Hong Kong SAR Government. In 2007, the University continued to fulfill the waste reduction targets and was once again awarded the “Gold Wastewise” recognition. HKUST has been awarded this recognition since 2003.

The following are current green practices launched via the Wastewise Scheme to date:

- Many staff and students continue to use electronic means instead of paper and plastic banners for communication/promotion.

- The “Octopus” system has been installed on school buses for replacing the use of printed paper tickets.

- Used items for the Garage Sales included:
  - household items and sundries,
  - clothes, shoes, bags and accessories,
  - books,
  - toys,
  - CDs and
  - domestic electrical appliances.

- Outdated safety helmets were collected for recycling.

- Color-coded bins have been provided for collection of different kinds of wastes (paper, plastic bottles, aluminum cans and rechargeable batteries).

- The food waste collection and composting scheme at LG1 catering outlet has been launched.

- Organic farming has also been developed.

To further enhance environmental awareness and green practices in the campus, you are very welcome to contribute your suggestions to HSEO (e-mail: safety@ust.hk)!
In June 2008, which is only a few months from now, HKUST will hold a week-long event that promises to become a milestone of how this University will address emerging global environmental concerns, such as greenhouse gas release and global warming. A group of faculty and staff members have formed a working party, and have been laboring for months to prepare for this event and a campus sustainability strategy, which includes a first ever carbon footprint evaluation for HKUST. The June event hopefully will initiate a sustained effort by the University community to become environmentally sustainable in our education, research and operation.

The first half of the week will see environmental sustainability exhibitions by HKUST as well as other organizations invited to take part. Energy saving, both existing practices and innovative ideas, will obviously be an important theme. Sustainable design for our new campus development and organic farming on campus are among other interesting topics.

The second half of the week will focus on talks and panel discussions by international and local speakers who are leaders in promoting environmental sustainability. We expect a highly enlightening and informative series of talks and discussions. The working group will also see to it that there will be practical experience sharing sessions so that HKUST, as well as other local tertiary institutions that will be invited to participate, can “walk the talk” and realize the idea that local universities should lead the way in environmental sustainability. Stay tuned for more details about this exciting June event and the environmental sustainability campaign!
Health, Safety and Environment Office (HSEO) Laboratory has recently entered into a collaboration agreement with the Chemistry (CHEM) Undergraduate Teaching Laboratory. The collaboration has the following objectives:

- to better support CHEM undergraduate laboratory teaching,
- to avoid redundant purchase of expensive analytical equipment,
- to optimize use of analytical equipment and other laboratory facilities,
- to better support research and service of university departments and units and
- to explore further opportunities of collaboration.

The initial phase of collaboration between HSEO Lab and CHEM UG Teaching Lab is realized through joint purchase of two pieces of analytical instruments, namely an Agilent GCMS and a Perkin-Elmer ICPMS, with HSEO contributing 59% and CHEM 41% of the cost. This idea originated about six months ago when HSEO and CHEM colleagues came to know that both units were going to acquire a new GCMS. After exploring the usage pattern and other equipment needs of the two units, both parties agreed that it would be mutually beneficial to pursue a joint effort and combine the two sums of equipment funding to acquire one GCMS and one ICPMS.
This collaboration will allow the two pieces of equipment to be put to optimal use. When they are not being used in CHEM undergraduate teaching, they will be used for environmental and occupational analyses by HSEO staff. Because of the two laboratory accreditation schemes that HSEO Lab subscribes to, there are stringent requirements on equipment maintenance as part of the overall quality management. This ensures students will have access to equipment in optimal conditions, it also allows students to appreciate the importance of quality assurance. In fact this is an area that the two units may further collaborate on, for example, in the form of an elective course on quality assurance in analytical chemistry and laboratory accreditation. Since HSEO Lab is the only laboratory on campus with accreditations for various environmental and occupational analytical methods, it may also serve as a possible internship opportunity for CHEM graduates, where they can learn the operations of a service laboratory with quality management. Moreover, this collaboration will enhance the analytical support to academic departments and campus units by combining the analytical expertise of the two units.

For more information about the HSEO Lab, please visit our web page at www.ab.ust.hk/hseo/hseolab.
With the opening of the HKUST Fok Ying Tung Graduate School (FYTGS) in the Nansha IT Park’s Software Building in early 2007, a number of research centers and facilities have become operational. The number of requests on health, safety and environmental (HSE) issues from these centers and facilities is increasing in the past few months. The Health, Safety and Environment Office (HSEO) has appointed Mr M T To Percy to provide HSE services to HKUST off-campus offices, including HKUST FYTGS. Since the end of last year, he has already started to work with the School in establishing its HSE management system, addressing emerging safety issues and have completed a number of safety training on office safety, chemical safety and fire safety in Nansha campus. The goal is to ensure all the necessary HSE programs being implemented in Hong Kong campus will also be in place in Nansha campus and at the same time are in compliance with the mainland China’s related legislative requirements.

The Graduate School’s new campus is expected to be completed in 2009. In this respect, HSEO has also provided technical input to the design of its new campus. This will be a new challenge to HSEO staff members to achieve our goal of providing a safe and healthy work and study environment for our staff and students who are outside of our Hong Kong campus.

You are welcome to contact Mr Percy To if your off-campus office needs any health and safety advice or assistance. Percy’s phone number is 2358 6507 (e-mail: percytmt@ust.hk).
On Campus Medical Clinic Users Survey 2007

The purpose of the survey was to collect feedback from users (including students, staff and family members) for evaluation of the quality of our on campus medical service and for making appropriate enhancements.

The survey was conducted during the period from 21st to 30th November 2007. Apart from hard copy survey questionnaires, students and staff could also submit their responses online. A total of 1055 responses were received, the majority of which were submitted online. There had been substantial increases in the responses as compared with the surveys conducted in 2004 and 2006. Such increases were believed to be attributed to the convenience of the online arrangement. Among the responses, about 66% were students. This was quite different from the previous surveys in which responses made by students were usually lower than those by staff.

The survey results indicate that both students and staff members are satisfied with the service in general.

Over 170 specific comments and suggestions were received in areas including staff attitude, effectiveness of medicines, waiting time, opening hours, scope of services, etc. Meetings had been conducted with the medical service provider and other concerned offices to address the concerns identified from the comments and suggestions. The service provider was requested to review their operations and consider making necessary adjustments accordingly. Some of the concerns expressed had also reflected a lack of understanding of the users on certain health issues or services. As such, a FAQs web page has also been established for providing easy reference about the medical services and knowledge on personal health care matters.

The URL address of the FAQs page is: http://www.ab.ust.hk/sepo/Clinic/faq.htm