The Hong Kong University of Science and Technology
Health, Safety and Environment Office

**Registration of Hazard Warnings (20__)**

<table>
<thead>
<tr>
<th>Room No.</th>
<th>Designation&lt;sup&gt;①&lt;/sup&gt;</th>
<th>Department</th>
<th>No. of Signs Required&lt;sup&gt;②&lt;/sup&gt;</th>
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**Hazard Warnings** (List the abbreviations for each applicable warning. See the list attached)

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- 
- 

**Protections Required**

- 
- 
- 

**Person in Charge**

<table>
<thead>
<tr>
<th>Name/Post</th>
<th>Office/ Lab Phone (s)</th>
<th>Home Phone(s)&lt;sup&gt;③&lt;/sup&gt;</th>
<th>Pager, other means of contact&lt;sup&gt;④&lt;/sup&gt;</th>
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</table>

**Emergency Contact 1**

<table>
<thead>
<tr>
<th>Name/Post</th>
<th>Office/ Lab Phone (s)</th>
<th>Home Phone(s)&lt;sup&gt;③&lt;/sup&gt;</th>
<th>Pager, other means of contact&lt;sup&gt;④&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

**Emergency Contact 2**

<table>
<thead>
<tr>
<th>Name/Post</th>
<th>Office /Lab Phone (s)</th>
<th>Home Phone(s)&lt;sup&gt;③&lt;/sup&gt;</th>
<th>Pager, other means of contact&lt;sup&gt;④&lt;/sup&gt;</th>
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</table>

① Name of the room, e.g. research lab, hot lab, teaching lab. and etc.
② There should be one sign at each entrance.
③ For Security Office only, will not be posted or otherwise disclosed.

**Departmental Safety Officer**

Name __________________________ Signature __________________________ Date ___________
Explanatory Notes for the Completion of the Hazard Warning Registration Forms:

General guidelines:

1. The Hazard Warning Placards are to be posted on all laboratory doors including ones without any hazardous materials or operations.

2. For the areas without hazards the placard should state “NO SPECIAL HAZARDS” (e.g. the computer labs).

3. The placards also need to be posted on doors to any plant rooms, or store areas which hold hazardous materials or operations (such as swimming pool plant room).

Guidance notes for completing the form

1. “Number of Signs Required” refers to the number of placard to be posted. That means you will require two if your room has two different doors.

2. Please refer the attached sheets to fill in the abbreviations for the “Hazard Warnings” and “Protection Required”. Enter “NO SPECIAL HAZARD” for the rooms without hazards. The placards should not indicate any hazard which is not present in the room. Any changes in the hazard status of a room should be reported to HSEO promptly so that the placards can be changed to reflect the current state of affairs within the room.

3. Telephone numbers listed on the placards should be for emergency contacts. The “Emergency Contact Persons 1 and 2” are persons who are able to provide current information on operations within the rooms.

4. Only the office telephone number will be posted on the placard. “Home Phones” and “Other means of contact” will not be posted or otherwise disclosed. These will be kept in the Security Control Center for emergency contact purpose only.
Hazard Warnings

RM  
Potential hazard in the form of unsealed radioisotopes and/or possibly contaminated equipment/objects in this area.

XH  
Irradiating apparatus capable of producing x-rays is present in this area.

LH  
Class III or Class IV Laser present in this area.

MF  
Machines capable of producing an exposure to magnetic field, radiofrequencies and microwave radiation exceeding $\frac{1}{2}$ the Threshold Limit Value TLV.

RF  
See Table Below

MR  
See Table Below

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Radiofrequency/Microwave Threshold Limit Values (TLVs)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Power Density (mW/cm$^2$)</th>
<th>Electric Field Strength Squared (V$^2$/m$^2$)</th>
<th>Magnetic Field Strength Squared (A$^2$/m$^2$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 kHz to 3 MHz</td>
<td>100</td>
<td>377,000</td>
<td>2.65</td>
</tr>
<tr>
<td>3 MHz to 30 MHz</td>
<td>$900/f^*$</td>
<td>$3770 \times 900/f^2$</td>
<td>$900(37.7f^2)$</td>
</tr>
<tr>
<td>30 MHz to 100 MHz</td>
<td>1</td>
<td>3770</td>
<td>0.027</td>
</tr>
<tr>
<td>100 MHz to 1 GHz</td>
<td>$f/100$</td>
<td>$3770 \times f/100$</td>
<td>$f/37.7 \times 100$</td>
</tr>
<tr>
<td>1 GHz to 300GHz</td>
<td>10</td>
<td>37,700</td>
<td>0.265</td>
</tr>
</tbody>
</table>

* $f =$ frequency in MHz

HVT  
$\geq 600$ V AC or 1.0 kV DC, or especially hazardous situation such as exposed conductors.

UV  
Presence of ultraviolet source in the spectral region between 180 and 400nm which is capable of emitting UV radiation of an Effective irradiance* exceeding 0.1 W/cm$^2$. ($\frac{1}{2}$ the permissible exposure for 8 hr.) This includes arc, vapor and gas discharge, incandescent and fluorescent lamps but excludes lasers.

* Effective irradiance = Total irradiance weighted against the peak of the spectral effectiveness curve (270nm).

HP  
Dangerous high-pressure system. E.g. pressure vessels, receiver, high-pressure gas line, especially when fragile apparatus is involved.

HVC  
Hazard of implosion due to fracture of high vacuum vessel.
BH

Biological organisms/agents which present a hazard to human health or the environment, but are unlikely to cause disease in healthy workers.

BH/BSL2

Biological organisms/agents (Risk group 2) which can cause human disease, but under normal circumstances, is unlikely to be a serious hazard to healthy workers.

CG

Suspect or confirmed human carcinogen stored/used in this area.

LA

Animal holding or animal experiment area.

TS

Large quantity of toxic substance stored/used in this area.

TG

Toxic gases stored, used or being generated in this area.

OM

Strong oxidizing material stored or used in this area.

EM

Explosive or shock-sensitive material stored or used in this area.

FM

Flammable material stored or used in this area.

CM

Corrosives (materials that may cause severe damage on contact with living tissues) stored or used in this area.

HF

Hydrofluoric acid stored or used in this area.

CN

Cyanide compounds stored or used in this area.

Protections Required

NE

NO UNAUTHORIZED ENTRY

DR

DOZIMETER REQUIRED

FS

FACE SHIELD REQUIRED

EP

EAR PROTECTION REQUIRED

RS

RESPIRATOR REQUIRED

SG

WEAR SAFETY GLASSES