
广以新实验室负责人安全责任要点须知

一、责任定位

- **第一责任人：**对实验室安全负全面管理监督责任
- **法律底线：**确保实验活动符合国家法律法规，重大事故及时上报学校职能部门后，上报至教育厅及应急管理局

二、核心职责清单

1. 实验室风险等级和实验室现状等级

- **实验室风险等级：**依据‘高等学校实验室安全分级分类管理办法’，根据各实验室风险源类型和信息，将所有高校实验室分为I级，II级，III级，IV级四个安全等级，对应不同的管理要求。
- **实验室现状等级：**EHS 根据安全检查情况，将实验室安全现状分为‘Red flag’、‘Minor issue’、‘Good’三个级别，对应不同的整改要求

教育部要求及相关文件：<https://sites.gtiit.edu.cn/ehs/lab-related-safety-regulations-rules-sharing/>

2. 人员准入与培训

- 填写‘实验室人员矩阵’，为对应岗位设置对应的安全培训内容
- 每个实验室均需配备一名专职或兼职的安全员（不可为本科生）
- 确保所有人员通过 MOODLE 准入测试并完成授权
- 定期完成实验室人员安全技能年度评估（每年度）

实验室人员矩阵：<https://sites.gtiit.edu.cn/ehs/safety-information-sharing/training-material/>

3. 风险评估与实验分析

- 实验室发生重大变更 (MoC) 应告知 EHS 办公室
- 所有实验前必须完成《实验危害分析 (EHA)》
- 中高风险实验、涉及重要危险源的实验内容需上报 EHS 备案
- 新实验、设备、条件变更前重新评估
- 每学年至少回顾一次 EHA
- 需确保 EHA 中对应的控制措施落实到位

*重要危险源：“高等学校实验室安全检查项目表”中明确的重要危险源内容。一般内容有：有毒有害（剧毒、易制爆、易制毒、爆炸品等）化学品、危险（易燃、易爆、有毒、窒息、高压等）气体、动物及病原微生物、辐射源及射线装置、同位素及核材料、危险性机械加工装置、强电强磁与激光设备、特种设备等。

*重大变更：实验室新增、停用、报废关键设备（特种设备、中高风险设备等）；涉及实验室关键人员变更，如：实验室首席研究员、实验室负责人、实验室经理等；

实验危害分析（模板）/重大变更登记表（模板）：

<https://sites.gtiit.edu.cn/ehs/safety-information-sharing/training-material/>

4. 化学品管理

- 常规化学品：及时回柜
- 管制类化学品：
 - 所有管制类均需通过中央仓库采购
 - 必须提交 EHA 至 EHS 办公室，方可领取
 - 易制毒：单实验室 $\leq 50\text{kg}$,
 - 易制爆：单实验室 $\leq 2\text{kg}$
 - 剧毒：单实验室 $\leq 1\text{kg}$ ，当日使用完毕
 - 必须双人双锁、“五双”管理，专库专存
 - 每 6 个月核销一次

管制类化学品清单及其他: <https://sites.gtiit.edu.cn/ehs/lab-related-safety-regulations-rules-sharing/>

5. 安全检查

- 根据安全等级, 定期开展安全自检, 监督通风橱、气路、消防设施等的定期检查
- 配合学院、校级安全检查并按实整改

实验室自检表 (校内模板): <https://sites.gtiit.edu.cn/ehs/safety-information-sharing/training-material/>

高等学校实验室安全检查表 (教育部): <https://sites.gtiit.edu.cn/ehs/lab-related-safety-regulations-rules-sharing/>

6. 个人防护品

- 正确辨别岗位职业健康因素
- 确保 PPE 配置符合实验内容: 防护眼镜、长袖工作服、工作鞋等

7. 应急响应

- 事故立即报告: 实验室负责人→应急小组→校管理层→属地公安 (管制化学品丢失)
- 剧毒化学品使用点必须安装高清监控并接入校监控系统

更多实验室相关信息, 请访问 <https://sites.gtiit.edu.cn/ehs/> 了解相关信息。

EHS 办公室联系信息:

e-mail: ehs@gtiit.edu.cn

Office: A202, NC / A301, SC

(GTIIT) New Lab PI Onboarding Safety Notice - Key Responsibilities

1. Responsibility Positioning

- **First Person Responsible:** Bear full management and supervision responsibility for laboratory safety
- **Legal Bottom Line:** Ensure experimental activities comply with national laws and regulations; report major accidents to school functional departments, then to Provincial Education Department and Emergency Management Bureau

2. Core Responsibility Checklist

2.1 Lab Risk Level & Current Status Level

- **Lab Risk Level:** Per the "University Laboratory Safety Classification and Grading Management Measures", all university labs are classified into four safety levels (I, II, III, IV) with corresponding management requirements
- **Current Status Level:** EHS classifies lab safety status into three levels based on inspection results: 'Red Flag', 'Minor Issue', and 'Good', with corresponding rectification requirements

Reference: Ministry of Education requirements and related documents
<https://sites.gtiit.edu.cn/ehs/lab-related-safety-regulations-rules-sharing/>

2.2 Personnel Access & Training

- Complete the 'Lab Personnel Matrix' to assign safety training content for each position
- Each lab must have a dedicated full-time or part-time safety officer (undergraduate students not eligible)
- Ensure all personnel pass the MOODLE access test and complete authorization
- Conduct annual safety skills assessment for lab personnel

Reference: Lab Personnel Matrix & Training Materials
<https://sites.gtiit.edu.cn/ehs/safety-information-sharing/training-material/>

2.3 Risk Assessment & Experiment Analysis

- Report Major Changes (**MoC**) in the lab to EHS Office
- Complete **Experiment Hazard Analysis (EHA)** before all experiments
- File medium/high-risk experiments and those involving **Important Hazard Sources** with EHS
- Reassess before new experiments, equipment, or condition changes
- Review EHA at least once per academic year
- Ensure control measures specified in EHA are implemented

**Important Hazard Sources:* Explicitly defined in the "University Laboratory Safety Inspection Checklist", including toxic/hazardous chemicals (highly toxic, explosive precursors, drug precursors, explosives, etc.), dangerous gases (flammable, explosive, toxic, asphyxiating, high-pressure), animals and pathogenic microorganisms, radiation sources and ray devices, isotopes and nuclear materials, hazardous mechanical processing equipment, strong electrical/magnetic and laser equipment, special equipment, etc.

**Major Changes:* Addition, decommissioning, or disposal of key equipment (special equipment, medium/high-risk equipment); changes in key lab personnel such as Principal Investigator, Lab Manager, etc.

Reference: EHA Template / Major Change Registration Form
<https://sites.gtiit.edu.cn/ehs/safety-information-sharing/training-material/>

2.4 Chemicals Management

- **Conventional Chemicals:** Return to storage cabinet promptly after use
- **Controlled Chemicals:**
 - All controlled chemicals must be purchased through Central Warehouse
 - Submit EHA to EHS Office before collection
 - **Drug Precursors:** ≤50kg per lab
 - **Explosive Precursors:** ≤2kg per lab
 - **Highly Toxic Chemicals:** ≤1kg per lab; must be used up on the same day
 - Implement "Five Duals" system with double-person double-lock, dedicated storage
 - Conduct write-off every 6 months

Reference: Controlled Chemicals List & Additional Information
<https://sites.gtiit.edu.cn/ehs/lab-related-safety-regulations-rules-sharing/>

2.5 Safety Inspections

- Conduct regular self-inspections according to lab safety level
- Supervise regular inspections of fume hoods, gas lines, fire protection facilities, etc.
- Cooperate with program and university-level safety inspections and implement corrective actions

Reference: Lab Self-Inspection Form (Internal Template)

<https://sites.gtiit.edu.cn/ehs/safety-information-sharing/training-material/>

Reference: University Laboratory Safety Inspection Checklist (Ministry of Education)

<https://sites.gtiit.edu.cn/ehs/lab-related-safety-regulations-rules-sharing/>

2.6 Personal Protective Equipment (PPE)

- Correctly identify occupational health factors for each position
- Ensure PPE configuration matches experimental requirements: safety glasses, long-sleeve lab coats, work shoes, etc.

2.7 Emergency Response

- Immediate accident reporting chain: Lab PI → Emergency Response Team → Campus Management → Local Police (for controlled chemical loss)
- High-definition cameras must be installed at highly toxic chemical use points and connected to campus monitoring system

For more lab-related information, please visit:

<https://sites.gtiit.edu.cn/ehs/>

EHS Office Contact Information:

Email: ehs@gtiit.edu.cn

Office: A202, NC / A301, SC