## 温州肯恩大学理工学院科研实验室工作规程

## (试行)

### 第一章 总则

- 第一条 为进一步加强理工学院科研实验室的管理,维护学院科研秩序,预防和减少科研实验室安全事故的发生,保障师生的生命与财产安全,根据《中华人民共和国高等教育法》、《高等学校实验室消防安全管理规范》《浙江省高等学校实验室安全管理办法》、《温州肯恩大学消防安全管理规定(试行)》(温肯大发〔2024〕7号)等相关法规制度,结合我院实际,制定本规程。
- 第二条 本规程适用于理工学院下设的,及学院负责管理的所有科研实验室、科研平台、实践科研活动的场所,以下全部简称为"科研实验室"。

### 第二章 科研实验室用房申请

- 第三条 科研实验室用房采用申请制,申请人应具有良好的思想政治素质和学术道德,具有一定的学术造诣,且具有明确的研究方向。
- **第四条** 实验用房申请使用周期为三年,可多次申请,也可提前结束。
  - 第五条 科研实验室各课题组教师科研用房面积由学院

根据相关规定统筹分配。

第六条 申请人应与学院签订《科研实验室使用协议书》。

第七条 签订协议后,根据《温州肯恩大学实验室准入管理规定(试行)》(温肯大发〔2020〕23 号)申请开通门禁。

### 第三章 安全管理责任

**第八条** 学院院长是学院各实验室安全责任人,实验室负责人是各实验室的安全管理人。

**第九条** 根据"谁使用、谁负责,谁主管、谁负责"和"管业务必须管安全"的工作原则,各科研实验室严格落实分级安全责任制。学院院长与各科研实验室负责人签订安全责任书,各科研实验室负责人与各科研实验项目负责人签订安全责任书。

第十条 科研实验室安全包括防火、防爆、防毒、防菌、防污染、防辐射,应急事故处理和救援,安全防护设施建设等内容。科研实验室负责人应根据不同的实验室类型,参照国家、教育部、省市和学校的安全管理制度,分别制定本实验室的安全管理规定和实施细则。

第十一条 科研实验室负责人负责本实验室的日常安全管理和运行工作。使用该科研实验室的人应严格遵守制度,接受负责人的监督、检查和管理。

**第十二条** 科研实验项目负责人落实实验室相关管理制度,确保各实验成员遵守管理制度开展科研活动。

### 第四章 日常安全管理

第十三条 执行实验室安全准入制度:

- (一) 与实验相关的教职工(实验室工作人员和教师) 必须经过实验室安全知识培训并通过考核,使用有特殊资质 要求的设备或实验室前,必须取得相关的资质证书;
- (二) 科研实验项目负责人负责对学生的实验安全知识培训,学生通过安全考核,并签订《安全承诺书》,才可开通对应的实验室门禁:
- (三) 短期实验人员须经过安全培训并获得科研实验 室负责人同意,并向实验中心备案。
- 第十四条 执行实验项目安全审核评估制度。学院院长组织科研实验室负责人和科研实验项目负责人对在研项目的安全评估与审查:
- (一) 对具有安全风险的实验项目应及时向实验中心报备,该科研实验项目负责人应在具备必要的安全防护设施前提下才可开展实验;
  - (二) 对具有危险性的项目应进行严格监管和审查:
- (三) 对特别危险且不具备实验条件, 达不到安全要求的项目应不予批准。

第十五条 执行实验室开放期间的安全管理制度:

(一) 实验人员应遵守实验室相关的管理制度开展实

验;

- (二) 在实验室开展实验原则上须两人以上在场,以应 对紧急情况:
- (三) 实验进行中原则上必须全程有人值守,如果实验人员必须在实验的某一过程或时段离开(例如运行电泳等),必须向导师报备,告知内容包括但不限于实验内容,无人监督的时长,以及如何在紧急情况下终止;
- (四) 本科生、研究生自主设计的实验方案,开展前必须获得指导教师和科研实验室负责人的许可;
- (五) 依据《温州肯恩大学危险化学品安全管理规定 (试行)》(温肯大发〔2020〕23号)做好实验试剂化学品的 采购、领取、存储、使用等工作;
- (六) 依据《温州肯恩大学实验室耗材管理规则(试行)》 (温肯大发〔2020〕23 号)、《温州肯恩大学采购管理办法 (2021 修订试行稿)》(温肯大发〔2021〕58 号)、《温州肯恩 大学资产管理办法(2019 修订)》(温肯大办〔2019〕39 号) 做好实验室耗材、仪器设备的采购、保管、使用等工作;
- (七) 依据《温州肯恩大学实验室废弃物管理规定(试行)》(温肯大发〔2020〕23号) 规范处置实验过程中产生的废弃物, 做好分类存储、及时登记、定期清运等相关工作:
- (八) 科研仪器设备需要定期检查与维护,并做好使用记录;

- (九) 安全防护设施设备需要定期维护。实验室应根据实验性质和需求配备必要的护目镜、手套、口罩、面具等个人防护器材,定期检查消防设施(灭火器、灭火毯、消防沙箱等)、洗眼器、紧急喷淋等应急设施,确保完好有效。
- 第十六条 执行科研实验室值日制度。科研实验室负责 人应建立实验室值日制度,以保持实验室内整洁有序。当日 实验结束或所有人员离开实验室时,值日人员应当查看并关 闭仪器设备、水、电、气和门窗,并据实登记当日情况。
- 第十七条 执行实验室安全事故报告制度。凡发生火灾、保障、人身伤害以及剧毒品、易制毒品、放射源、致病性病原生物被盗、被抢、丢失、泄露等安全事故,必须第一时间报告给院长,启动应急处置预案,不得瞒报、漏报、谎报或迟报。

### 第五章 实验室安全检查

- 第十八条 依据实验室危险源分类和安全风险等级,各 科研实验室应定期开展自查,并配合学校、学院定期开展的 实验室安全检查。
- 第十九条 科研实验室负责人对发现的安全问题和隐患进行梳理,及时采取措施,要求并监督相关人员于限期内整改完成;无法立即整改的则要制定整改方案,明确整改措施和期限,并做好临时防护措施。

第二十条 各科研实验室应制订各类安全应急救援预案,安全风险等级为一、二级的实验室应每年开展一次针对性的应急演练,所有相关人员每两年参加一次应急演练;安全风险等级为三、四级的实验室须每年安排人员参与一次应急演练。

### 第六章 奖惩机制

- 第二十一条 实验人员按照实验室现行管理办法和规定 进行教育和惩戒,必要时取消违规人员门禁并禁止其进入实 验室。
- 第二十二条 各科研实验室应按照本规程要求,重视实验室安全工作。对未按照要求履行实验室安全管理责任,违反实验室安全管理规定的给予相应的处罚,情节严重的将关停该实验室直至完成整改;造成安全事故的,按相关法律法规处理。
- **第二十三条** 给予在实验管理工作中表现优异的人员表彰和奖励。

### 第七章 科研实验室用房收回

- 第二十四条 因科研项目结束不再申请、科研项目不被 批准、项目负责人离职或退休等情况下,学院可与科研实验 项目负责人协商达成一致后,对实验区域进行收回再安排。
  - 第二十五条 因科研实验区域收回,科研项目结束,科研

实验项目负责人需盘点所采购的试剂耗材与仪器设备,由学院收回入库。

## 第八章 附则

第二十六条 本规程未尽事宜,按校内其他实验室管理制度执行。

第二十七条 本规程自发布之日起实施,由理工学院负责解释。

# Research Laboratory Management Measures of Wenzhou-Kean University's College of Science, Mathematics and Technology (Trail)

#### **Chapter 1 General Principle**

**Article 1** To further strengthen the management of research laboratories at Wenzhou-Kean University ("WKU"), maintain the order of scientific research, prevent and reduce laboratory safety accidents, and ensure the safety of life and property of faculty, staff and students, these measures are formulated in accordance with the "Higher Education Law of the People's Republic of China", "Fire Safety Management Code for Laboratories in Colleges and Universities", "Zhejiang Province Safety Management Measures for Laboratories in Colleges and Universities", "Wenzhou-Kean University Fire Safety Management Regulations (Trial)", and other relevant laws and regulations, combined with the actual situation of College of Science, Mathematics and Technology ("CSMT") at WKU. Article 2 These regulations apply to all research laboratories, research platforms, and venues for practical research activities under the College of Science and Engineering or managed by the College. Hereinafter, all such facilities are collectively referred to as "research Laboratories."

### **Chapter 2 Application for Research Space**

**Article 3** The use of research space is based on an application system. Applicants should have good ideological and political qualities and

academic ethics, have high academic attainments, and have a clear research direction.

**Article 4** The application period for the research space possession is three years, with multiple applications allowed, and it can be terminated early.

**Article 5** The research laboratory area for each research PI will be allocated by the college according to relevant regulations.

**Article 6** Applicants should sign the "Research Laboratory Usage Agreement" with the college.

**Article 7** After signing the agreement, apply for access control according to the "Laboratory Access Management Regulation at Wenzhou-Kean University (Trial)".

### **Chapter 3 Safety Management Responsibilities**

**Article 8** The Dean of the College is the safety responsible person for all laboratories within the college, while the laboratory heads are the safety managers of their respective laboratories.

**Article 9** Following the principles of "whoever uses it, is responsible for it, whoever manages it, responsible for it" and "management must include safety management", each research laboratory strictly implements a hierarchical safety responsibility system. The <u>college dean</u> signs a safety responsibility agreement with <u>each laboratory coordinator</u>, and the coordinator signs a safety responsibility agreement with each <u>principal</u>

#### investigator (PI).

Article 10 Research laboratory safety includes fire prevention, explosion prevention, poisoning prevention, pathogen prevention, pollution prevention, radiation prevention, emergency accident handling and rescue, construction of safety protection facilities, etc. Laboratory coordinator should formulate safety management regulations and implementation details based on the type of laboratory, referring to national, educational, provincial, and school safety management systems.

**Article 11** The research laboratory coordinator is responsible for the routine safety management and operation of the laboratory. Personnel of that laboratory must strictly follow the rules and accept the supervision, inspection, and management of the coordinator.

**Article 12** The principal investigator shall implement the relevant laboratory management regulations and ensure that all research members abide by the regulations while conducting research activities.

### **Chapter 4 Routine Safety Management**

Article 13 Implement the laboratory safety access system:

(1) Relevant faculty and staff (laboratory staff and teachers) must undergo laboratory safety knowledge training and pass an assessment. They must obtain relevant qualification certificates before using equipment or laboratories that require special qualifications.

- (2) The principal investigator is responsible for providing students with safety training. Students should pass the safety assessment and sign a "Laboratory Safety Acknowledgement Form" before they gain access to the corresponding laboratory;
- (3) Short-term personnel must undergo safety training, obtain the consent of the laboratory coordinator, and be registered with the Lab Center of CSMT.

**Article 14** Implement the research project safety review and evaluation system. The dean of the college organizes laboratory coordinators and each PI to evaluate and review the safety of ongoing research projects:

- (1) Projects with safety risks must be reported to the Lab Center in a timely manner. PI must have necessary safety protection facilities in place before conducting experiments;
- (2) Hazardous projects should be strictly supervised and reviewed;
- (3) Projects that are particularly dangerous and do not meet experimental conditions and safety requirements should not be approved.

Article 15 Implement safety management during laboratory open hours:

- (1) Laboratory personnel must follow relevant management regulations while conducting experiments;
- (2) In principle, experiments must be conducted with at least two people present to handle emergencies;
- (3) Experiments must be supervised throughout. If personnel need to leave

during a certain process or period (e.g., running electrophoresis), they must report to their supervisor, detailing the experiment content, duration of unsupervised time, and emergency termination procedures;

- (4) Undergraduate and graduate students' self-designed experiments must be approved by their supervisor and the laboratory coordinator before starting;
- (5) Comply with the "Regulations on the Control Over Safety of Hazardous Chemicals at Wenzhou-Kean University (Trial)" for the procurement, receipt, storage, and use of chemical reagents.
- (6) Manage the procurement, storage, and use of laboratory consumables and equipment in accordance with the "Laboratory Consumables Management Regulation at Wenzhou-Kean University (Trial)", "Measures for the Administration of Procurement at Wenzhou-Kean University (Modified in 2021 for trial implementation)" and "Measures for Assets Management at Wenzhou-Kean University (Modified in 2019)";
- (7) Properly dispose of waste generated during experiments in accordance with the "Laboratory Waste Disposal Regulation at Wenzhou-Kean University (Trial)", ensuring classified storage, timely registration, and regular disposal;
- (8) Regularly inspect and maintain research instruments and equipment, and keep usage records;
- (9) Safety protection facilities and equipment need to be regularly

maintained. Laboratories should be equipped with necessary personal protective equipment such as goggles, gloves, masks, and face shields according to the nature and requirements of the experiments. Regularly check emergency facilities like fire extinguishers, fire blankets, fire sandboxes, eyewash stations, and emergency showers to ensure they are in good condition.

Article 16 Implement the research laboratory duty system. Laboratory coordinator should establish a duty system to maintain the laboratory clean and orderly. At the end of the experiment or when all personnel leave the laboratory, the duty personnel should check the status of equipment, water, electricity, gas, and closed doors and windows, etc., and record the daily status.

Article 17 Implement the laboratory safety incident reporting system. Any occurrence of fire, security, personal injury, theft, loss or leakage of highly toxic substances, precursor chemicals, radioactive sources, pathogenic microorganisms, or other safety incidents must be reported to the dean as soon as possible, activate emergency response plan. Concealing, underreporting, false reporting, or delayed reporting is not allowed.

### **Chapter 5 Laboratory Safety Inspection**

**Article 18** According to the classification of laboratory hazards and safety risk levels, each research laboratory should conduct regular self-inspections and cooperate with the regular safety inspections organized by

the university and college.

Article 19 Laboratory coordinator should sort out identified safety issues and hazards, take timely measures, and supervise relevant personnel to make rectifications within a time limit. If immediate rectification is not possible, a rectification plan must be developed, specifying rectification measures and deadlines, and temporary protective measures should be taken.

Article 20 Each research laboratory should formulate various safety emergency response plans. Laboratories with safety risk level-1 or level-2 should conduct targeted emergency drills once a year, with all relevant personnel should participate in emergency drills at least once every two years. Laboratories with safety risk level-3 or level-4 should arrange for personnel to participate in emergency drills once a year.

### **Chapter 6 Rewards and Punishments Mechanism**

**Article 21** Laboratory personnel shall be penalized in accordance with the current laboratory management regulations and rules. If necessary, access control privileges of the violator may be revoked, and they may be prohibited from entering the laboratory.

**Article 22** Each scientific research laboratory should attach importance to laboratory safety work according to these measures. Those who fail to fulfill laboratory safety management responsibilities and violate laboratory

safety management regulations will be punished accordingly. In serious cases, the laboratory will be shut down until rectification is completed. If a safety accident occurs, it will be handled according to relevant laws and regulations.

**Article 23** Personnel who perform excellently in laboratory management will be commended and rewarded.

#### **Chapter 7 Reclamation of Research Space**

**Article 24** When research projects end, are not approved, or when project PI resign or retire, the college may negotiate with the project PI to reclaim and reassign the laboratory space.

**Article 25** When laboratory space is reclaimed due to the end of a research project, the PI must inventory the purchased reagents, consumables, and equipment, which will be reclaimed and stored by the college.

### **Chapter 8 Supplementary Articles**

**Article 26** Matters not covered in these measures will be implemented according to other laboratory management regulations of WKU.

**Article 27** These measures will be implemented from the date of publication and will be interpreted by the College of Science, Mathematics and Engineering.

#### **Appendix 1:**

## **Research Laboratory Space Form**

No.

Division/Center					
Principal Investigator (PI)					
Anticipated	Date Space Needed	From to			
Requested	Special Equipment Needs				
facilities Needed	Gas requirements				
1,0000	Special electricity requirements				
Current Gra	ant Support				
	Brief Description of Research Focus:  Signature of Applicant:				
		Date:			
	Deci	ision from CSMT			
Assigned Laboratory Location					
Bench Space:					
Signature of	CSMT:				
		Date:			

<u>Note:</u> Send the completed form to the CSMT Dean (<u>alwong@kean.edu</u>) and Lab Center (<u>wkusciencelab@wku.edu.cn</u>)

#### **Appendix 2:**

### **Research Laboratory Usage Agreement**

The College of Science, Ma	athematics a	and Technol	ogy (C	SMT) ag	grees to allow	v the
Principal Investigator (PI)				_ to occi	upy the labor	atory
	_ (Locati	ion) from	ı			to
	(Date),	strictly	for	the	purpose	of
				·		

The CSMT will provide basic facilities and general equipment in the research laboratory (see the 'Laboratory Move-In Checklist'). The PI will be responsible for all other prerequisites to conduct his/her study or experiments.

The PI is the first person responsible for the security of the research area. He/She will be held responsible for any penalties, damages, or theft incurred while using the laboratory.

The PI understands that lab safety is the most important. He/She shall take full responsibility for the security of the research project, for supervising lab members in his/her research group, ensuring the safety of research materials and equipment, and for preventing damage or loss to public property.

The PI agrees to abide by all national, provincial, and local laws while using the Lab, as well as all the regulations at Wenzhou-Kean University. He/She is required to conduct irregular self-inspections of the lab and cooperate with regular safety inspections by the Campus Safety Inspection Team.

The PI ensures that the risk assessment and relevant emergency response plan have been done for the project and that the lab members have accepted relevant training.

The PI understands that work in this laboratory can result in exposure to dangerous chemicals or biologically infectious materials. The PI shall provide proper safety gear at all times, including protective eyewear, gloves, and lab coats.

The PI shall make no alterations to the lab without prior written approval from the

college. It is required that the Laboratory be restored and returned to the CSMT in its original condition at the end of the use term.

If the PI and his/her research group use the laboratory in violation of regulations, the CSMT reserves the right to close the laboratory and take the space back.

The PI and the CSMT warrant that they have fully read and agree to the terms of this Agreement. The individual signing below on behalf of CSMT warrants that he/she has the authority to bind CSMT to the terms of this Agreement.

PI NAME	CSMT
Signature	Signature
Date:	Date:

### **Appendix 3:**

# **Laboratory Move-In Checklist**

Laboratory Application No		
Lab Coordinator:		
Contact #:		
Faculty ID cards issued to:		
Lab Location:		
Equipment Checklists: Circle Y/N to note whether functioning correctly	; add c	comments if needed
Safety Equipment:		
Emergency shower access	Y	N
Eyewash station working well?	Y	N
Fire extinguisher charged?	Y	N
Chemical (fume) Hood (certified)?	Y	N
Biological Safety Cabinet (certified)?	Y	N
Flammable chemicals cabinet?	Y	N
Common Equipment access:		
Autoclave	Y	N
Dishwasher	Y	N N
Laundry machine	Y	N N
Ultrasonic Cleaners	Y	N
Ice Maker	Y	N
Water Purification	Y	N
Dry Oven	Y	N
CO <sub>2</sub> Incubator	Y	N
4°C Freezer	Y	N
Centrifuge	Y	N
Cell counter	Y	N
Optical Microscopy	Y	N
Biological Safety Cabinet	Y	N

Laboratory	Equipment:				
Refrigerator (type		)	Y	N	
4°	C Freezer (type	)	Y	N	
-2	0°C Freezer (type	)	Y	N	
-8	0°C Freezer (type	)	Y	N	
In	cubator (type	)	Y	N	
O	ven (type	)	Y	N	
M	ficrowave (type	)	Y	N	
Ва	alance (type	)	Y	N	
Н	ot plate (type	)	Y	N	
pH	H meter (type	)	Y	N	
Ro	otating evaporator(type	)	Y	N	
Sh	naker (type	)	Y	N	
Va	acuum pump (type	)	Y	N	
Vo	ortexer (type	)	Y	N	
W	ater bath (type	)	Y	N	
Ot	ther (specify):		Y	N	
Existing Is (1) (2) (3) (4)					
Lab Coore	dinator:		Date	:	