温州肯恩大学文件

温肯大发〔2026〕18号

关于印发
《温州肯恩大学实验室安全管理办法》的通知

各部门、各学院：

《温州肯恩大学实验室安全管理办法》已经2026年第四次校务会审议通过，现印发给你们，请遵照执行。

温州肯恩大学

2026年3月18日

温州肯恩大学实验室安全管理办法

第一章 总　则

第一条 为切实提升实验室安全管理水平，防范安全事故，保障师生人身和学校财产安全，确保教学科研活动顺利开展，依据《高等学校实验室工作规程》《高等学校消防安全管理规定》《浙江省高等学校实验室安全管理办法》《高等学校实验室安全规范》等相关法律法规，结合我校具体情况，特制定本办法。

第二条 本办法中的“实验室”是指学校开展教学、科研、技术服务等活动的所有实验、实训场所，包括实验准备室、试剂室、药品库、材料仓库和其他附属用房等，以房间为管理单元。

第三条 学校认真贯彻落实国家有关法律法规，依据不同实验室的安全风险和安全管理等级，实行分级分类管理。各学院、部门应结合本办法和本单位实验室实际工作要求，制定相应的实验室安全管理制度和事故处置预案。

第四条 学校高度重视实验室安全，将其纳入日常工作重点，并为实验室安全管理提供必要的人力、资金和设备支持，实行规范化、常态化管理。全体师生员工都有责任和义务共同推动建设安全、高效、节能环保的实验室环境。

第二章 管理体系和安全责任

第五条 严格按照“党政同责、一岗双责、齐抓共管、失职追责”和“管行业必须管安全、管业务必须管安全、管生产经营

必须管安全”的要求，在学校统一领导下，构建由学校、二级单位、实验室组成三级联动的实验室安全管理责任体系。

第六条 学校党委书记和校长是学校实验室安全工作的第一责任人，全面负责学校实验室安全工作；实行分管副校长领导下的分工负责制，根据“谁主管、谁负责，谁使用、谁负责”的原则，逐级分层落实实验室安全责任，并层层签订安全责任书。

第七条 学校成立实验室安全工作领导小组，由分管安全工作校领导和学术事务副校长共同担任组长，成员由相关职能部门和有关专家组成。其主要职责为：全面贯彻落实国家和省市关于高校实验室安全工作的法律法规和政策文件；制定学校实验室安全工作方针，确定实验室安全工作政策和原则；统筹规划学校实验室安全工作，研究部署重大事项和工作举措；指导和督促实验室落实安全管理责任和隐患排查，确保教学和科研活动安全有序进行等。

第八条 教学部（实验室管理中心）是学校实验室管理的归口职能部门，负责传达、贯彻上级部门相关政策法规，完善全校性实验室安全管理规章制度；负责各类实验室数据收集、汇总和申报；根据学校发展要求，统筹做好各类实验室的空间规划；指导和监督全校危险化学品和危险废弃物的全程管理；协助后勤与资产管理部（党委安全保卫部）做好实验室安全管理等相关工作。

第九条 后勤与资产管理部（党委安全保卫部）是学校安全管理工作归口职能部门，牵头组织各学院、部门开展实验室安全

检查、评估、演练等，督促实验室安全隐患整改，指导做好实验室安全事件的处置。实验室改建、扩建及二次装修按照学校相关规章制度进行审批和实施，实施前的安全评估结果以及验收结论中的安全相关内容通报后勤与资产管理部（党委安全保卫部）。

第十条 科研与资助项目管理办公室负责做好科研实验室、科研平台、科研实验项目的安全管理、评估、监督、检查等相关工作。

第十一条 学生事务部是学校学生管理的归口职能部门，负责对违反实验室安全制度学生的处理等相关工作。

第十二条 各学院、部门主要负责人是本单位实验室安全工作的第一责任人，其主要职责为：贯彻实验室安全法律法规，与学校签订安全责任书；制定本单位实验室安全管理细则，制订实验室安全工作计划，定期执行实验室安全检查，解决实验室安全重要事项；负责并配合实验室安全事故调查、责任认定等。

第十三条 实验室安全负责人是本实验室的安全责任人，全面负责本实验室的安全工作。实验室安全管理员是本实验室的安全管理人，负责配合实验室安全责任人落实本实验室安全责任和规章制度（包括操作流程、应急预案、实验室准入等），组织、督促相关人员做好实验室安全工作；配合开展实验室安全检查，并落实安全隐患整改；做好安全信息的汇总、上报等工作；组织本实验室所有工作人员、学生安全培训及安全责任书签订等。

第十四条 实验指导教师在实验教学、科研实验期间承担实

验室安全直接责任，须切实提高实验室安全责任意识，加强对学生的教育和管理，全面落实安全措施。

第十五条 进入实验室的所有人员均应对实验室安全和自身安全负有责任。在实验室内须遵循各项安全管理制度，严格按照实验操作规程开展实验，严格遵照实验室废弃物分类收集方法，配合实验室安全责任人做好实验室安全工作，排除安全隐患，避免安全事故的发生。

第三章 安全教育与管理

第十六条 实验室安全教育培训制度。

各学院、部门按照“全员、全程、全面”的管理原则，结合实验室特点，对师生开展专业性的安全教育培训、急救知识培训与操作和各种预案演练等活动，通过案例式教学、规范性培训和定期的检查考核等方式，不断提高广大师生的安全意识和对安全风险的科学认知水平。

第十七条 实验室安全准入制度。

进入实验室参与课程学习、实训和科学研究的学生必须接受实验室安全教育培训，并通过实验室安全基础知识考试，取得合格证书，方可进入实验室开展相关活动。非本校人员进入实验室学习工作，须提前经各学院、部门审核备案。各学院、部门可根据本单位实验室特点，制订实验室安全教育与人员准入细则。

第十八条 实验室安全审核和报备制度。

（一）新建实验室，应把安全风险评估与审核作为建设立项

的必要条件。扩建、改造实验场所，应根据相应法律法规对建设方案进行评估，明确和落实建设项目立项、规划、设计、施工等环节的安全责任，充分考虑安全环保因素，建立审核把关工作流程，并向学校职能部门报告，获得批准后实施；对实验室小型改建、二次装修，应采用符合安全和环保要求的材料，不得堵塞消防通道，不得影响消防设施使用。项目建设验收时，要同步进行安全验收。

（二）对存在不安全因素的实验项目要事先进行安全风险评估，明确标识安全隐患和应对措施，重点对化学、生物、辐射等具有潜在危险、环境污染的科研项目进行严格的审核、评估，规定应具备的安全设施、特殊实验室资质等条件，并向学校职能部门报告，获得批准后实施。

第十九条 实验室消防安全管理。

（一）严格落实各项消防安全管理措施，保证消防器材定点存放，性能良好，任何人不得损坏、挪作他用。过期或失效的消防器材应当及时更换。疏散通道、安全出口、消防车通道保持畅通，禁止堆放杂物。

（二）实验楼每层应在醒目位置粘贴实验室消防疏散线路图，建立健全实验安全操作规程。

（三）存放易燃易爆物品实验室的电器设备应符合防爆要求，实验用加热设备和燃料使用要符合防火要求。

（四）实验室须配备选型正确和有效的灭火器材。普通实验、

实训室配备干粉灭火器、水基灭火器等；大型精密仪器设备实验室配备二氧化碳灭火器；自然科学类实验室根据实验室特点，配备干粉灭火器或二氧化碳灭火器、沙土、灭火毯等。

（五）实验室人员应接受消防安全知识和相关技能培训，了解不同火源所对应的灭火方法，熟悉本岗位的防火要求，掌握所配灭火器的使用方法，会使用消防器材扑救初期火灾，熟悉火警、自救等程序。

第二十条 实验室化学品安全管理。

（一）实验室危险化学品是指具有毒害、腐蚀、爆炸、燃烧、助燃等性质，对人体、设施、环境具有危害的剧毒化学品和其他化学品，包括根据国家各有关部门最新文件界定的剧毒化学品、爆炸品、易制毒化学品、易制爆化学品、精神麻醉药品等管制类化学品和一般危险化学品。

（二）在使用危险化学品时，须严格按照国家法律法规以及学校的相关规定执行；加强所有涉及管制类化学品的教学、实验、科研及其活动环节的安全监督与管理，包括购买、运输、存贮、使用、生产、销毁等全过程。

（三）严格控制危险化学品单次采购量，合理、按需采购，减少实验室存储量。

（四）采购管制类化学品时，应由使用人填报申购单，经所在单位、学校职能部门审核，由学校管制类化学品管理部门统一报当地公安部门批准后，向具有经营相应管制类化学品资质的供

应商采购。严禁私自购买，严禁向无合法资质的厂商购买。

（五）使用管制类化学品必须严格安全措施，实行“双人保管、双人收发、双人使用、双人运输、双把锁”的“五双”管理制度。

（六）危险化学品应置于适当的容器中并标明名称，根据物质不同特性分类、分项存放在危险化学品存储柜，由专人负责保管。因相互作用而可能产生气体、火焰或爆炸的化学品，必须分隔存放。腐蚀品下垫防腐蚀托盘，置于试剂柜下层。

（七）建立危险化学品管理台账，规范危险化学品使用和处置，确保物品台账与使用登记、库存物资之间的账账相符、账物相符。管制类化学品须建立申购、领用、使用、回收、销毁的全过程记录和控制制度。

（八）在使用压力气瓶前应进行安全状况检查并定期检测，严禁使用不符合安全技术要求的气瓶。易燃气体气瓶与助燃气体气瓶不得混合保存和放置；易燃易爆气体及有毒气体气瓶必须安放在符合贮存条件的环境中，配备监测报警装置。竖立放置的气瓶必须使用固定链或底座，防止倾倒。

第二十一条 实验室生物安全管理。

（一）实验室生物安全主要涉及病原微生物安全、实验动物安全、转基因生物安全等方面。

（二）按照国家法律法规及学校相关规定，落实生物安全实验室的建设、管理和备案工作，获取相应资质；规范生化类试剂、

用品和实验动物的采购、实验操作、废弃物处理等工作程序。

（三）病原细菌、病毒、疫苗、麻醉和精神类药品等实验样品必须专人负责，实行“双人双锁、双人领用”，建立申购、领取、发放、使用、储存、销毁登记制度，做好详细记录；严禁乱扔、乱放、随意倾倒。

第二十二条 实验废弃物安全管理。

（一）实验废弃物的安全管理是指在教学、科研、分析检测等实验室日常活动中产生的可收集气体、液体及固体等废弃物的安全处置。学校委托有资质的专业处置单位进行实验废弃物清运和处置，各学院、部门应科学规范地做好实验废弃物的收集和暂存，各实验室应对实验废弃物做好无害化处理。

（二）化学实验废弃物实行品种分类、固体液体分类收集、封口，外贴专用废弃物标签，注明名称、主要成分、危险类别、责任人等信息，选择合适的地方隔离暂存，禁止混放。

（三）生物活性实验废弃物，特别是细胞和微生物（细菌、真菌和病毒等）必须及时灭活和进行消毒处理。动物尸体或被解剖的动物器官必须按要求消毒，并用专用塑料袋密封后冷冻储存，统一处理。动物排泄物及与动物有关的垃圾必须消毒处理后方可运出。对有人、畜或人畜共患疾病的病原体的实验室废弃物，须经严格消毒、灭菌等无害化处理后，送有资质的专业单位进行销毁处理。生物实验器械与耗材、塑料制品应使用特制的耐高压超薄塑料容器收集，定期灭菌后进行回收处理；废弃的玻璃制品和

金属物品应使用专用容器分类收集，统一回收处理。

（四）对有毒有害气体和烟尘，应尽可能采取正确的吸收方式，减少排放量；加强通风、除尘和个人防护设备的管理，确保人身和环境安全。

第二十三条 实验室设备安全管理。

（一）各学院、部门应建立实验室仪器设备管理制度，各实验室应落实专人做好设备台账，仪器设备管理员应做好仪器设备的维护、保养工作，保证仪器设备安全运行。对具有危险性和安全隐患的设备采取严密的安全防范措施。对超期服役的设备应及时报废，消除安全隐患。

（二）仪器设备操作人员应进行安全培训，了解仪器设备的性能特点，熟练掌握操作方法，严格按照操作规程开展实验教学和科研工作。具有危险性的仪器设备，须在专职管理人员同意和现场监管下，方可进行操作。特种设备操作人员，上岗前须通过专门培训，经特种设备安全监督管理部门考核合格，取得《特种设备作业人员证》，持证上岗。

（三）大型或特种仪器设备应制定相应的管理、使用操作及维护保养等制度，操作规程必须上墙或在显要位置明示，落实专业技术人员或教师专管，建立完整的技术档案，并严格执行；所有大型仪器原则上都应进入学校大型仪器共享管理平台，实行专管共用，资源共享，面向校内外开放，为师生和社会服务。

第二十四条 实验室耗材安全管理。

（一）实验室耗材是指教学和科研中使用的不属于固定资产的物品，如生物材料、饲料、试剂盒、低值仪器仪表、玻璃器皿等。

（二）耗材坚持按需采购、边用边购、厉行节约的原则，杜绝因过度采购造成货物积压等浪费现象。实验室耗材采购按照《温州肯恩大学采购管理办法》等相关规章制度执行，各学院、部门可根据本单位实际情况，制订采购管理细则。

（三）各学院、部门应明确本单位的耗材管理人员，严格落实耗材的计划、购置、验收、保存、使用和回收，定期核对检查，做好出入库记录，保持账账相符，账物相符。

（四）对具有特殊储存条件或存在安全风险的耗材，应按规定分类存放、标识清晰，并配备相应的防护和安全措施；过期、变质或损坏的耗材应及时处置，严格按照《温州肯恩大学实验室废弃物安全管理办法》要求执行，不得随意丢弃或混入一般废弃物。

第二十五条 实验室水电安全管理。

（一）按相关规范安装用电、用水设施和设备，定期组织开展实验室电源、开关、插座、水源、水管、水龙头等检查，排除安全隐患；实验室固定电源插座未经允许不得拆装、改线，不得乱接、乱拉电线，不得使用多级联用插座板等。

（二）实验室内应使用空气开关，并配备漏电保护器；电器设备和大型仪器须接地良好，不得超负荷用电；对电线老化等隐

患应定期检查并及时排除。使用高压电源工作时，操作人员须穿绝缘鞋、戴绝缘手套并站在绝缘垫上；严禁用潮湿的手接触电器和用湿布擦电门，擦拭电器设备前应确认电源已切断。

（三）尽可能选择潜在危险性小的加热设备，实验室内严禁使用电取暖器、热得快、明火电炉，加热设备的四周不能堆放纸箱等易燃杂物；操作人员或实验室安全责任人要做好安全防范措施，在使用完毕后断开电源，确定安全后使用人才能离开实验室。

第二十六条 实验室安全设施管理。

（一）具有潜在安全隐患的实验室，须根据潜在危险因素和仪器设备类型，配置合适的消防器材、监控、烟雾报警、危险气体报警、应急喷淋、洗眼装置、通风系统（必要时加装吸收系统）、防护罩、警戒隔离等安全设施。

（二）实验室安全责任人应定期检查安全设施，做好设备维护保养、检修和更新工作，确保其完好可用。

第二十七条 实验室环境安全管理。

（一）粘贴实验室安全制度标牌。各实验室必须明确安全责任人，并制作安全信息牌挂在门口；将有关实验室规章制度及设备操作规程上墙；根据实验室的潜在危险情况粘贴警示标志；结合各自实验室的特点粘贴安全教育标语等，形成实验室安全文化氛围。

（二）定期组织检查和督查实验室环境卫生。各实验室须保持实验室环境整洁有序，仪器设备布局合理；实验材料、实验剩

余物和废弃物应当规范、及时处置。

（三）注重实验室使用安全管理。实验结束时，实验室管理或使用人员必须查看仪器设备、水、电、气和门窗关闭等情况，确保实验室安全；实验过程中，必须有人值守；夜间进行实验，需2人值守；不得在实验室留宿；节假日值班，应将实验室安全巡查作为重要内容，做好记录，发现问题及时处置和报告。

（四）加强实验室出入管理。安排专人负责实验室钥匙的配发和管理，严禁私自配制钥匙或借给他人使用；必须保留一套所有房间的备用钥匙，由单位办公室或大楼值班室保管，以备紧急之需；使用电子门禁的大楼和实验室，必须对各类人员设置相应的权限，对门禁卡丢失、人员调动或离校等情况应及时采取更新措施。

（五）加强实验室变更安全管理。对实验室使用功能进行变更时，须报教学部（实验室管理中心）审核批准；对实验室消防等安全设施进行更改时，须报后勤与资产管理部（党委安全保卫部）审核批准；及时做好人员变动时实验室和设备交接手续，不留安全死角；实验室搬迁或废弃实验室处置，要查清实验室存在的易燃易爆等各种危险品，逐一登记造册，严格按照国家相关要求规范处理，在确认危险排除后，选择具有资质的处置单位对废弃实验室进行拆迁施工。

（六）对于以上条款未涵盖的实验室安全工作，按国家有关法律法规和规章制度加强管理。

第四章 安全检查与隐患整改

第二十八条 树立“隐患就是事故”的观念，依法依规建立实验室安全事故隐患排查、登记、报告、整改等制度，实行“闭环管理”。

第二十九条 开展实验室安全检查与抽查，建立检查与抽查工作档案。检查与抽查的主要内容基于最新发布的《浙江省高等学校实验室安全检查项目表》。

第三十条 各学院、部门应对检查中发现的安全问题和隐患进行梳理，及时采取措施进行整改并督查整改情况；对不能及时消除的安全隐患，隐患单位应及时向后勤与资产管理部（党委安全保卫部）报告，提出整改方案，落实整改责任人，确定整改措施、期限；安全隐患尚未消除的，应专人负责采取防范措施。对违反国家有关法律法规、学校规章制度和整改不力、问题严重、隐患屡屡发生或拒不整改的实验室，将对其进行通报和公示，责令停用整改并督查整改完成情况。

对实验室安全隐患，任何单位和个人不得隐瞒不报或拖延上报。

第五章 事故处理与奖惩措施

第三十一条 实验室发生事故时，应及时妥善做好应急处置工作，保护好现场，防止事态扩大和蔓延。发生较大险情时，应立即向学院、部门和学校分管领导报告，并根据相关应急预案启动学校安全应急体系。对隐瞒或歪曲事故真相者，从严处理。

第三十二条 发生实验室事故后，当事人、实验室相关人员以及事故学院、部门要配合相关职能部门，迅速查明事故原因，明确事故性质。

第三十三条 所有实验室工作人员和管理者都有维护实验室公共安全、保护公共财产不受损失的职责和义务。因发生事故而造成不良后果和财产损失者，将视情节根据相关规定给予纪律处分，并责令赔偿损失；造成重大事故者，将依法依规追究责任人的行政和法律责任。

第三十四条 对实验室安全管理工作不到位，出现安全事故的学院和部门，将追究单位领导和责任人的责任；对造成重大损失或人员伤亡事故的，将依法追究有关人员的法律责任。

第三十五条 对于一贯遵纪守法，在保证设备安全运行及文明操作实验中有显著成绩者；发现重大事故隐患，积极采取措施补救、排除险情，避免或减少伤亡事故发生或国家财产损失者；事故发生时，奋力抢救生命和国家财产有突出贡献者，学校将给予表彰和奖励。

第三十六条 对违反本办法的实验室和个人，学校、学院和部门有权停止其实验和作业，令其限期整改，情节严重的给予封停。凡被责令整改的实验室，要采取相应的限期整改措施，经有关部门检查合格后，方可恢复工作。

第六章 附　则

第三十七条 本办法若与上级部门的规定相冲突，按上级部

门规定执行。

第三十八条 各学院、部门可以根据本办法，结合本单位实验室工作实际，制订实验室安全管理相关制度。

第三十九条 本办法自公布之日起施行，由教学部（实验室管理中心）负责解释。

温州肯恩大学办公室　　2026 年 3 月 18 日印发

Wenzhou-Kean University Laboratory Safety Management Regulations

Chapter I General Provisions

Article 1 To effectively improve laboratory safety management, prevent safety accidents, protect the life and property of faculty, staff and students, and ensure the smooth progress of teaching and research activities, these Regulations are formulated in accordance with the *Higher Education Laboratory Work Rules*, *Higher Education Institution Fire-Safety Management Provisions*, *Zhejiang Province Higher-Education Institution Laboratory Safety Management Regulations*, *Higher Education Institution Laboratory Safety Standards*, and other relevant laws and regulations, in combination with the actual conditions of Wenzhou-Kean University.

Article 2 The term "laboratory" in these Regulations refers to all experimental or training facilities used for teaching, research, technical services, and related activities, including preparation rooms, reagent storage rooms, chemical storage warehouses, materials warehouses and other auxiliary rooms. Each room shall be treated as the basic management unit.

Article 3 The University shall implement classified and graded management for laboratories according to their safety risks and safety management levels. Each college or department-level unit shall, in line with these Regulations and the actual work requirements of its laboratories, formulate corresponding laboratory safety management rules and accident response plans.

Article 4 The University attaches great importance to laboratory safety and incorporates it into daily priorities, providing necessary human, financial and equipment support for laboratory safety management and carrying out standardized and normalized management. All

faculty, staff and students have the responsibility and obligation to jointly build a safe, efficient, energy-saving and environmentally friendly laboratory environment.

Chapter II Management System and Safety Responsibilities

Article 5 In strict accordance with the requirements of joint party-government responsibility, dual responsibility for one post, collaborative governance, accountability for negligence and whoever is in charge of the sector must also be in charge of safety, whoever is in charge of the business must also be in charge of safety, whoever is in charge of production and operation must also be in charge of safety, the University, under unified leadership, shall establish a three-tier laboratory-safety responsibility system linking the University, college or department-level units and laboratories.

Article 6 The Party Secretary and the Chancellor are the primary persons responsible for University laboratory safety, bearing overall responsibility for laboratory safety work. A division-of-responsibility system under the Vice Chancellor in charge shall be implemented. Following the principle of whoever is in charge is responsible, whoever uses is responsible, laboratory safety responsibilities shall be assigned level by level, and a laboratory safety responsibility agreement shall be signed at each level.

Article 7 The University shall set up a Laboratory Safety Leadership Group, co-chaired by the Vice Chancellor in charge of safety and the Vice Chancellor for Academic Affairs, with members from relevant functional departments and experts. Its main responsibilities are: to fully implement national, provincial and municipal laws, regulations and policies on laboratory safety in higher-education institutions; to formulate the University’s laboratory-safety guidelines, policies and principles; to make overall plans for laboratory-safety work and study

and deploy major issues and regulations; to guide and supervise laboratories in fulfilling safety responsibilities and hazard investigation, ensuring safe and orderly teaching and research activities.

Article 8 The Office of Academic Affairs (Laboratory Management Center) is the functional department responsible for laboratory management. Its duties include: conveying and implementing relevant policies and regulations of higher authorities; formulating and improving university-wide laboratory safety rules; collecting, summarizing and reporting laboratory-related data; coordinating laboratory space planning; guiding and supervising the whole-process management of hazardous chemicals and hazardous wastes; assisting the Office of Logistics and Assets Management (Security Center) in laboratory safety management.

Article 9 The Office of Logistics and Assets Management (Security Center) is the designated functional department in charge of safety management. It shall: take the lead in organizing laboratory safety inspections, assessments and drills; urge rectification of hidden hazards; guide the handling of laboratory-safety incidents; receiving notifications regarding safety assessment results prior to the implementation of laboratory renovation, expansion, or secondary decoration projects, as well as safety-related conclusions from project acceptance, in accordance with the University's relevant regulations.

Article 10 The Office of Research and Sponsored Programs shall be responsible for safety management, assessment, supervision and inspection of research laboratories, research platforms and research projects.

Article 11 The Office of Student Affairs is the functional department responsible for student management and shall be responsible for taking measures concerning students who

violate laboratory safety regulations.

Article 12 The head of each college or department-level unit is the primary person responsible for laboratory safety of the unit. Duties include: implementing laboratory safety laws and regulations and signing a laboratory safety responsibility agreement with the University; formulating detailed laboratory safety rules and annual work plans; conducting regular laboratory safety inspections and solving major safety issues; cooperating in accident investigation and liability determination.

Article 13 The laboratory safety supervisor is the person directly responsible for the safety of the laboratory, bearing overall responsibility for its safety work. The laboratory safety administrator is the safety manager of the laboratory, assisting the supervisor in implementing safety responsibilities and rules (including operating procedures, emergency plans, and laboratory access); organizing and supervising personnel to carry out safety work; cooperating in safety inspections and rectification; summarizing and reporting safety information; organizing safety training and signing a laboratory safety responsibility agreement for all laboratory personnel and students.

Article 14 Laboratory instructors bear direct safety responsibility during laboratory teaching and research experiments. They must enhance safety awareness, strengthen education and management of students, and fully implement safety measures.

Article 15 Anyone entering a laboratory is responsible for laboratory safety and personal safety. All persons must observe safety rules, strictly follow laboratory operating procedures, collect laboratory waste according to prescribed classification, cooperate with the laboratory safety supervisor, eliminate hidden dangers and prevent accidents.

Chapter III Safety Education and Management

Article 16 Laboratory Safety Education and Training System.

Following the principle of all personnel, whole process, all aspects, each college or department-level unit shall, in light of laboratory characteristics, provide professional safety education, first-aid training and emergency drills, and continuously raise safety awareness and understanding of safety risks through case-based teaching, standardized training, and regular inspections and assessments.

Article 17 Laboratory Access Management Regulations.

Students who enter laboratories for courses, training or scientific research must receive laboratory safety education and training and pass a basic laboratory safety examination to obtain a qualification certificate before starting related activities. Non-University personnel must be approved and registered in advance by the relevant college or department before entering laboratories for study or work. Each unit may formulate detailed education and access rules according to its laboratory characteristics.

Article 18 Laboratory Safety Review and Reporting System.

18.1 For new laboratories, safety risk assessment and review shall be a prerequisite for project approval. For expansion or renovation, the construction plan shall be evaluated in accordance with laws and regulations, safety responsibilities shall be clarified in each stage, including project initiation, planning, design, and construction. Safety and environmental factors shall be fully considered, an audit workflow shall be established, and the project shall be reported to the functional department for approval before implementation. Small-scale renovations or secondary refurbishments shall use safe and environmentally friendly materials,

and shall not block fire exits or impede the use of fire protection facilities. A safety acceptance review must be conducted concurrently with the final project acceptance.

18.2 Research projects with unsafe factors shall undergo prior safety risk assessment, identify hazards and countermeasures, and be strictly reviewed and evaluated—especially projects involving chemicals, biology, radiation and other potential dangers or environmental pollution—specifying required safety facilities and special laboratory qualifications, and shall be reported to the functional department for approval before implementation.

Article 19 Laboratory Fire Safety Management.

19.1 Strictly implement fire safety regulations, ensure that fire equipment is stored at fixed positions and in good performance, and prohibit damage or unauthorized use. Expired or invalid equipment shall be replaced promptly. Evacuation routes, safety exits and fire engine access shall remain clear; stacking of miscellaneous articles is prohibited.

19.2 Each floor of laboratory buildings shall display laboratory fire evacuation diagrams, and sound laboratory operating procedures shall be established and maintained.

19.3 Electrical equipment in laboratories storing flammable or explosive materials shall be explosion-proof; heating equipment and fuels shall meet fire prevention requirements.

19.4 Laboratories shall be equipped with properly selected and effective fire extinguishers: ordinary laboratories and training rooms shall be equipped with dry powder or water-based fire extinguishers; laboratories housing large precision instrument shall be equipped with carbon dioxide fire extinguishers; natural science laboratories shall be equipped, as appropriate to their characteristics, with dry powder or carbon dioxide fire extinguishers, sand, and fire blankets.

19.5 Personnel shall receive fire safety training, know how to extinguish different types

of fire, be familiar with post fire prevention requirements, master the use of provided extinguishers, be able to fight incipient fires and know fire alarm and self-rescue procedures.

Article 20 Laboratory Chemicals Safety Management.

20.1 Laboratory hazardous chemicals refer to chemicals that are toxic, corrosive, explosive, combustible or oxidizing and hazardous to humans, facilities or the environment, including controlled chemicals (highly toxic chemicals, explosives, precursor chemicals for drug production, explosive precursor chemicals, and psychotropic and narcotic drugs), as defined in the latest regulations issued by relevant national authorities, as well as general hazardous chemicals.

20.2 The use of hazardous chemicals must comply with national laws and University rules. The supervision and management of the whole process (purchase, transport, storage, use, production, destruction) involving controlled chemicals must be strengthened.

20.3 Single-purchase quantities of hazardous chemicals shall be strictly controlled and purchased on demand to reduce laboratory inventory.

20.4 When purchasing controlled chemicals, the user shall fill in a requisition form, obtain approval from the unit and the functional department, and the University's controlled chemicals management department shall submit the requisition to the local public security authority for approval before purchase from qualified suppliers. Private purchase or purchase from unqualified suppliers is strictly prohibited.

20.5 The use of controlled chemicals must follow strict safety regulations and implement the Five Two-Person Management System: two-person custody, two-person receipt and issue, two-person use, two-person transport, and two locks.

20.6 Hazardous chemicals shall be placed in suitable containers with clear labels, classified and subdivided based on properties and stored in dedicated cabinets by designated personnel. Chemicals that may interact to produce gas, flame or explosion must be stored separately. Corrosives shall be placed on anti-corrosion trays in lower shelves.

20.7 A management ledger shall be kept to standardize use and disposal, ensuring consistency among accounts and between accounts and physical inventory. Controlled chemicals shall be subject to a complete record-keeping and management system covering the entire process, including requisition, issuance, use, recovery, and destruction.

20.8 Before using gas cylinders, their safety status shall be inspected and they shall be tested regularly; use of non-conforming cylinders is prohibited. Flammable gas cylinders and oxidizing gas cylinders may not be stored or placed together; flammable, explosive or toxic gas cylinders must be stored in qualified environments with monitoring and alarm devices. Upright cylinders must be fixed with chains or bases to prevent tipping.

Article 21 Laboratory Biosafety Management.

21.1 Laboratory biosafety mainly covers pathogenic microorganisms, laboratory animals, and genetically modified organisms.

21.2 In accordance with national laws and University rules, biosafety laboratories shall be constructed, managed and filed, and corresponding qualifications obtained; procedures for purchasing, operating and disposing of biochemical reagents, supplies and laboratory animals shall be standardized.

21.3 Pathogenic bacteria, viruses, vaccines, psychotropic and narcotic drugs, and other experimental samples must be managed by designated personnel, implementing two-person

custody with two locks and two-person issuance. A record-keeping system shall be established for requisition, issuance, use, storage and destruction, with detailed records maintained. Unauthorized disposal of materials is strictly prohibited.

Article 22 Laboratory Waste Management.

22.1 Laboratory waste refers to the safe disposal of gaseous, liquid and solid wastes generated in teaching, research and testing. The University commissions qualified professional disposal units for collection and disposal; each unit shall properly collect and temporarily store waste, and each laboratory shall carry out proper treatment of experimental waste to ensure it is rendered harmless.

22.2 Chemical laboratory waste shall be classified by type and separated into solid and liquid, sealed and labeled with name, main components, hazard category, and responsible person, and temporarily stored in isolation. Mixing is prohibited.

22.3 Bioactive laboratory waste, especially cells and microorganisms (bacteria, fungi, viruses), must be inactivated and disinfected promptly. Animal carcasses or organs must be disinfected, sealed in special plastic bags and frozen for unified disposal. Animal excreta and related garbage must be disinfected before removal. Waste containing pathogens of human, animal, or zoonotic diseases must be strictly disinfected or sterilized before destruction by qualified units. Biological instruments, consumables, and plasticware shall be collected in designated high-pressure-resistant plastic containers, sterilized and recycled. Glass and metal waste shall be collected separately in designated containers for centralized recycling.

22.4 Toxic or harmful gases and fumes shall be properly absorbed to reduce emission; ventilation, dust removal, and personal protective equipment shall be well managed to ensure

human and environmental safety.

Article 23 Laboratory Equipment Safety Management.

23.1 Each unit shall establish an equipment management system. Each laboratory shall maintain an equipment ledger and assign designated personnel for maintenance to ensure safe operation. Dangerous or potentially hazardous equipment shall be strictly safeguarded. Equipment that has exceeded its service life shall be scrapped promptly to eliminate hazards.

23.2 Equipment operators must be trained to understand performance and operating methods and strictly follow laboratory operating procedures. The operation of dangerous equipment requires consent and on-site supervision of designated management personnel. Special equipment operators must undergo special training, pass assessment and obtain a *Special Equipment Operator Certificate* before working.

23.3 Large or specialized instruments shall have management, operating, and maintenance procedures established and prominently displayed. They shall be managed by professional personnel, maintain complete technical records, and be strictly enforced. In principle, all large instruments shall be included in the University's large instrument sharing platform for centralized management and shared use, accessible to both the university community and the public, serving faculty, students, and society.

Article 24 Laboratory Consumables Safety Management.

24.1 Laboratory consumables refer to items that are not classified as fixed assets, used in teaching and research, such as biological materials, feed, assay kits, low-value equipment and instruments, glassware, and similar items.

24.2 Consumables shall be purchased on demand and used as purchased to avoid waste.

Purchase shall follow the *Measures for the Administration of Procurement at Wenzhou-Kean University*; each unit may formulate detailed purchase rules.

24.3 Each unit shall designate a consumables manager, strictly implement planning, purchasing, acceptance, storage, use and recycling, check regularly and maintain accurate records.

24.4 Consumables with special storage conditions or safety risks shall be stored separately with clear labels and corresponding protective measures. Expired, deteriorated or damaged consumables shall be disposed of in accordance with the *Laboratory Waste Management Regulations* and may not be discarded at will.

Article 25 Laboratory Water and Electricity Safety Management.

25.1 Electrical and water facilities shall be installed in accordance with applicable standards. Regular inspections of power supplies, switches, sockets, water sources, pipes, and taps shall be carried out to eliminate safety hazards. Fixed power sockets shall not be dismantled or rewired without authorization, and unauthorized wiring or daisy-chaining of power strips is strictly prohibited.

25.2 Laboratories shall be equipped with circuit breakers and residual current devices. Electrical equipment and large instruments shall be properly grounded and shall not be overloaded. Won or deteriorated wiring shall be inspected regularly and replaced promptly. When working with high-voltage power, operators must wear insulating shoes and gloves and stand on insulating mats. Touching electrical equipment with wet hands or wiping switches and equipment with wet cloths is strictly prohibited. Power must be confirmed off before cleaning equipment.

25.3 Heating equipment that poses minimal risk shall be selected. Electric heaters, immersion heaters, and open-flame electric stoves are strictly prohibited in laboratories. Combustible materials, such as cartons, shall not be placed around heating equipment. Operators or laboratory safety supervisors shall take appropriate safety precautions, disconnect power after use, and ensure the equipment is safe before leaving the laboratory.

Article 26 Laboratory Safety Facilities Management.

26.1 Laboratories with potential safety hazards shall be equipped with suitable fire extinguishers, monitoring systems, smoke alarms, hazardous gas alarms, emergency showers, emergency eyewash stations, ventilation systems (with absorption systems if necessary), protective shields, caution barriers, and other safety facilities, based on the potential hazards and the types of instruments and equipment present.

26.2 Laboratory safety supervisors shall regularly inspect safety facilities, and maintain and update them to ensure availability.

Article 27 Laboratory Environmental Safety Management.

27.1 Laboratory safety signage shall be posted. Each laboratory must clearly identify the laboratory safety supervisor and display a safety notice board at the entrance. Relevant laboratory rules and equipment operating procedures shall be prominently displayed. Warning signs shall be posted in accordance with potential laboratory hazards. Safety-education slogans shall be displayed as appropriate to foster a culture of laboratory safety.

27.2 Regular inspections and supervision of laboratory hygiene shall be conducted. Laboratories shall be kept clean and orderly, and equipment shall be arranged appropriately. Laboratory materials, residual substances, and waste shall be disposed of in a timely and proper

manner.

27.3 Laboratory safety during use shall be emphasized. At the end of experiments, personnel shall check equipment, water, electricity, gas, and doors and windows to ensure laboratory safety. Experiments shall be supervised at all times, and night experiments shall have at least two persons on duty. Remaining in the laboratory overnight is strictly prohibited. During holidays, laboratory-safety inspections shall be conducted, recorded, and any issues shall be promptly addressed and reported.

27.4 Laboratory access control shall be strictly enforced. A designated person shall manage the distribution and custody of laboratory keys. Unauthorized duplication or lending of keys is strictly prohibited. A complete set of spare keys for all rooms shall be kept by the unit office or building duty room for emergency use. For laboratories or buildings with electronic access, appropriate permissions shall be set for all personnel, and access rights shall be promptly updated in the event of card loss, personnel transfer, or departure from the University.

27.5 Laboratory safety during modifications shall be enhanced. Any changes in laboratory functions shall be submitted to the Office of Academic Affairs (Laboratory Management Center) for approval. Any alterations to laboratory safety facilities, including fire protection systems, shall be submitted to the Office of Logistics and Assets Management (Security Center) for approval. Handover procedures for laboratories and equipment shall be completed promptly upon personnel change to avoid safety gaps. Prior to relocation or decommissioning laboratories, including flammable and explosive substances, shall be identified and recorded. Disposal shall comply strictly with national regulations, and demolition or removal may only

be carried out by qualified disposal units after all hazards have been eliminated.

27.6 Laboratory-safety matters not covered above shall be handled in accordance with national laws and regulations.

Chapter IV Safety Inspection and Hazard Rectification

Article 28 Promote the principle that a hazard constitutes an accident, and establish procedures for hazard investigation, registration, reporting, and rectification in laboratories with closed-loop management.

Article 29 Carry out laboratory safety inspections and spot checks and keep inspection archives based on the latest *Zhejiang Province Higher-Institution Laboratory Safety Inspection Checklist*.

Article 30 Each unit shall identify and assess issues and hazards discovered during inspections, take timely measures to rectify them, and supervise the implementation of corrective actions. For hazards that cannot be eliminated immediately, the unit shall report to the Office of Logistics and Assets Management (Security Center), propose a rectification plan, assign a responsible person, and set deadlines. Designated personnel shall implement preventive measures until the hazards are fully eliminated. Laboratories that violate laws, regulations, or university rules, or fail to rectify serious or repeated hazards, shall be subject to public notification and announcement, be ordered to suspend operations for rectification, and be monitored until completion.

No unit or individual may conceal or delay reporting of safety hazards.

Chapter V Accident Handling, Rewards and Penalties

Article 31 When a laboratory accident occurs, emergency measures shall be promptly and

properly carried out to secure the scene and prevent the situation from worsening or spreading. In the event of a major hazard, the unit shall immediately report to the college, department, and university leaders in charge and activate the University's emergency response system in accordance with relevant emergency plans. Any concealment or falsification of facts shall be dealt with strictly.

Article 32 After an accident, the individuals involved, relevant laboratory personnel, and the responsible college or department shall cooperate with relevant functional departments to promptly determine the causes and nature of the accident.

Article 33 All laboratory personnel and managers shall have the duty and responsibility to maintain laboratory safety and protect public property. Personnel who cause adverse consequences or property damage shall be subject to disciplinary action and ordered to compensate for losses in accordance with relevant regulations. Personnel responsible for major accidents shall be held accountable under applicable administrative and legal provisions.

Article 34 Colleges or departments that fail to implement adequate laboratory safety management and experience safety accidents shall have their unit leaders and responsible personnel held accountable; where major losses or casualties occur, relevant personnel will be investigated for legal liability.

Article 35 Persons who consistently obey laws and regulations, demonstrate outstanding performance in ensuring safe and proper operation of equipment, identify major hazards and take prompt measures to prevent or mitigate casualties and property loss, or make outstanding contributions in safeguarding lives and university property during accidents, shall be commended and rewarded by the University.

Article 36 The University, colleges, and departments have the authority to suspend the experiments or operations of laboratories or individuals that violate these Regulations, order them to carry out rectification within a specified time, and, in serious cases, impose suspension. Laboratories ordered to suspend operations may only resume work after inspection and approval by the relevant departments.

Chapter VI Supplementary Provisions

Article 37 Should any provision of these Regulations conflict with higher-level rules, the higher-level rules shall prevail.

Article 38 Each college or department-level unit may formulate detailed laboratory-safety rules in line with these Regulations and its actual work.

Article 39 These Regulations shall come into force on the date of issuance and shall be interpreted by the Office of Academic Affairs (Laboratory Management Center).