Sepaths 操作流程

1 准备工作	1.1 检查电源线、通讯线，打开电脑和仪器的电源开关、打开 Sepaths 软件。 1.2 通讯连接：【系统设置】—【PC 通信】 ：（若通讯成功，则收集室灯的亮灭可控。若失败，则查看串口线是否松动，并将软件关闭，将仪器的电源关掉后重新接好串口，再重复上述操作。） 1.3 核对溶剂：【系统设置】— ，检查溶剂量是否够实验所需，不够需添加。 1.4 压力设置：（压力调节必须从低压向高压调节） 1） 输入总压力：氮气钢瓶输出端的压力为 0.5MPa，安全阀压力调为 0.15Mpa/20PSI，检查仪器各个部位是否漏气； 2） 溶剂压力： 参考压力为 0.08 MPa/10PSI- 0.1Mpa/15PSI； 3） 萃取压力：A、样品体积<=20ml 时， 10PSI；B、当样品体积>20ml 时，且使用的是“萃取柱”时，压力 4-15PSI；C、当样品体积>20ml 时，且使用的是“萃取盘”时，压力 10-15PSI； （以上的压力是针对自来水所做的参考，使用时可根据所做水样的浑浊度适当的调节压力）。 1.5 准备样品：V<=20ml 时用小体积配件，V>20ml 时用样品瓶并将小体积的配件去掉； 1.6 准备收集瓶：根据需要可以清洗并放置双排收集瓶，默认为内侧 1 号位； 1.7 安装萃取柱或萃取盘：务必在使用前或使用后拆卸、并用乙醇清洗保存； 1.8 检查废液桶是否已满；从前往后依次是废水管、有机废液管、有机废液管；
2 方法与批表的编辑	2.1 新建方法：点击 ,【方法名称】—【萃取模式】—【方法类型】—【控制模式】，然后按照方法的需求依次选择左侧的相应项目，再根据需要选择与其对应的溶剂、体积、浸泡时间等，提示：样品体积要求是真实值，仪器不能实现部分进样。然后点击左右侧的【确认】按钮，在弹出的对话框内编辑“文件名称”及“保存位置”。 2.2 加载方法：若没有现成的方法，则需要新建方法，若有以前编辑的方法，则可以直接加载。 ，然后根据实验需要，依次勾选【A2~A6】,最后在点击右侧的 保存退出。并且可以更换其它通道的方法实现不同方法的批次运行，默认是萃取柱，使用萃取盘则需要设置。 2.3 运行方法：点击按钮开始运行方法，运行过程中也可以点击 按钮停止正在运行的方法。停止后若需要重新加载方法，则需要断开通讯重新连接 。 2.4 上样结束提示功能：软件根据需要在右侧边栏有提前结束上样并继续方法按钮，以及上样结束后是否暂停方法并等待用户确认后继续运行后续方法的选项。 2.5 中英文界面：软件可以切换中英文，注意事项：语言切换只能在断开通讯的情况下进行，并且中英文界面下编辑的方法不可通用。
3 结束工作	3.1、检查收集瓶中的收集液的体积是否正确、一致。 3.2、将溶剂及萃取压力表调到 0，氮气钢瓶阀门关闭。 3.3、必须将萃取柱或萃取盘的柱塞拆下用乙醇进行清洗（以防止交叉污染）。 3.4、将工作台上的快插接头插入到固定接口处，以防止交叉污染。 3.5、依次将仪器的软件、主机及电脑关闭，清理试验台。

友情提示：如有操作或应用上的疑问，24 小时拨打 13810692460 谢新刚 交流，谢谢！

Operations Guide of Sepaths

1 Preparation work	**1.1 Please Check power and PC COM lines.** Then push the power button and open the software of Sepaths. **1.2 PC-COM Connection:**[System sets]-[PC COM], Please check the instrument and select the COM port number.（Tips: Please click the lamp picture .The light can be controlled and PC COM connection is successful. If not, please close the software and turn off the instrument. Please check the lines and repeat above operations）. **1.3 Check Solvents:**[System sets]-[Solvent set],Please select the solvent names for eight solvent bottles and make sure the volume of solvent is enough to the experiment. **1.4 Set up pressure value:**（Please adjust the pressure from lower pressure to the aim- pressure ） 1）Input pressure: Please adjust the safe valve and make sure the input pressure is below 60PSI/0.4Mpa. Make sure the gas pipeline without gas leak . 2）Solvent pressure: About 15 PSI/0.1Mpa; 3) Extraction pressure (Below pressure value is from drinking water and for reference only, can be adjusted.) A) Sample volume<=20ml /Cartridge or disk /About 10PSI B) Sample volume >20ml /Cartridge only/About 4-15PSI C) Sample volume >20ml /Disk only/About 10-15PSI **1.5 Prepare sample:** If Volume<=20ml, please install small volume adapter. If Volume>25ml, please use sample bottle only. **1.6 Prepare vial of collection:** Please wash and dry the vials. There are two collection positions. Position one is fixed and position two can be choosed . **1.7 Prepare cartridges and disks:** Please wash cartridge adapters and disk adapters with cleaning water and ethanol before and after every experiment. **1.8 Check waste liquid barrel:** There are three waste liquid tubes. First is waste water tube. Another two are waste organic solvents tubes.
2 New and Load Method	**2.1 New Method:** Please choose [Extraction Type] first. The sample volume must be quantified, because Sepaths only treat the whole sample. **2.2 Load Method:** If we do not have the method, please new a method. If we have a method, please load the method directly. Each channel can choose the same or different method. And from the channel one to channel six, the same method will be run at the same time. For example, channel one and channel three are both method two, and channel two and channel four are both method one. After click start button, the method two will be run first, the method one will be run second. **2.3 Run Method:** After loading method and everything is ok, Please click start button and the method will be run. If we click the stop button, we can choose stop method or pause method. If we have chosen pause method, click the start button and the method will go on. When every step of SPE method is completed, Sepaths will tell the operator through buzzer. **2.4 Check sampling step:** We can choose to pause the method after the step of sampling automatically and to check the sample bottles. If sample bottles are empty, please click button of Sure and the next steps will be going on. **2.5 Chinese and English software surface:** It is important that English methods should only be used in English software and Chinese method should be used in English software.
3 Finish work	3.1 Check the volume of collected liquid and make sure it is right. 3.2 Please close the solvent pressure and extractor pressure .If it is necessary, we need close the valve of nitrogen. 3.3 Please uninstall the adpters of cartridges or disks and wash with water and ethanol in order to avoid the cross contamination. 3.4 Please turn off the software and instrument. 3.5 Finally, clean the lab table and leave with smile.

Tips: If you have any questions about Sepaths, phone number 138-1069-2460 (Mr Xie) or email xgxie@labtechgroup.cn