刘志影

中共党员（2014年应届毕业研究生）

上海大学 质谱仪实验室 手机：18817394853

分析仪器机械设计方向 E-mail: [zyliujh2013@sina.cn](mailto:zyliujh2013@sina.cnm)

教育及工作背景

2011.9-2014.6 上海大学 机械设计 硕士

2010.7-2011.8 合肥科烨电物理设备制造有限公司 技术员

2006.9-2010.6 合肥工业大学 机械设计制造及自动化 学士

专业技能

* **专业技能：**熟练**Solidworks2008**、**CATIA V5**建模及 **AutoCAD 2007**制图，熟练运用**Office**办公软件

熟练**FLUENT**流体仿真，**ANSYS Workbench 13.0**力学仿真及**OriginPro**数据处理

熟练**C**语言面向过程程序设计，计算机等级二级（C语言）

* **英语水平：** **CET-6**，具有良好的英语写作，翻译能力，能用英语进行日常交流

实习及工作经历

**2012.10- 2013.9 广州禾信分析仪器有限公司 结构设计工程师 实习**

* **PM2.5在线检测仪器进样装置的机械结构设计**。查找国内外相关文献，确定进样装置的基本构型；以保证检测仪正常运行为前提来设置进样装置的入口压力，使用**FLUENT**软件模拟空气在该类型进样装置中的压力及速度分布，以该压力及速度分布为输入条件模拟空气溶胶中混入的**PM2.5**颗粒的运动轨迹及聚集程度；通过模拟确定了进样装置特征参数与PM2.5颗粒聚集程度的关系，以此确定了进样装置的最优参数；使用**SolidWorks2008**绘制进样装置的模型，并根据加工厂商反馈的设备能力及加工手段修改数模，绘制进样装置的总成图及零件图；编制进样装置设计说明书。

**2011.10- 2012.9 上海大学质谱仪实验室 研习生 实习**

* **微米级颗粒束束宽测量装置的结构设计**。选择易加工的轻便铝合金LY12作为壳体材料，计算当测量装置内部真空度为10-4Pa时腔体所需的壁厚和连接螺栓规格及数量，并使用**ANSYS Workbench 13.0**仿真检查腔体的应力集中点；借鉴螺旋测微仪及差动螺旋机构的原理，设计了用于操纵刀口挡板移动的位移台，20℃时其移动精度可达到1微米。

**2010.7-2011.8 合肥科烨电物理设备制造有限公司 技术员 全职**

* 参与合肥中科院等离子体物理研究所《国际热核聚变反应计划》项目，负责反应堆的供电供冷装置升级。使用**CATIA V5**建立反应堆供电供冷装置数模，模拟该装置装配工艺；局部零部件结构优化及装配工艺改进；绘制装置总成图及零件图经审批后送交供应商加工；使用ANSYS Workbench13.0仿真，优化装置外壳体和隔断热辐射杜瓦壳的结构。

科研成果

**论文** **刘志影**,李磊,李梅等.单颗粒质谱仪进样装置的设计与模拟[J].质谱学报,2013

**专利** 一种空气动力聚焦颗粒装置：中国,201320461690.1[P].2013-07-30

校园活动

2011.9-11 参加学院迎新晚会，表演开场舞

2007.9-11 参加合肥工业大学大学生科技创新协会，任宣传部副部长，策划校第十届机械人大赛的宣传计划

荣誉奖励

2013.11 上海大学优秀学生 2010.06 欧瑞康·莱宝企业奖学金

2009.11 合肥工业大学校一等奖学金 2008.11 合肥工业大学校三等奖学金，三好学生

2007.11 合肥工业大学校一等奖学金，三好学生

Jane Liu

Member of CPC（The fresh graduate student in 2014）

Shanghai University Mass Spectrometer Lab Tel：18817394853

Analysis Instrument Mechanical Design E-mail: [zyliujh2013@sina.cn](mailto:zyliujh2013@sina.cnm)

Education and Work Experience

2011.9-2014.6 Shanghai University Mechanical Design Master’s Degree

2010.7-2011.8 Hefei Keye electric physics equipment Co., Ltd. Technician

2006.9-2010.6 Hefei University of Technology Machine Design, Manufacturing & its Automation Bachelor’s Degree

Skills

* **Skills：**Proficient in **Solidworks2008**, **CATIA V5**, **AutoCAD 2007**，Proficient in **MS Office**

Proficient in **FLUENT**, **ANSYS Workbench 13.0** and processing data with **OriginPro**

Proficient inprocedure oriented programming with **C** Language; CRE 2 Level（C Language）

* **English：CET-6**，good at reading, writing and translating, able to communicate with others in English

Interning and Work Experience

**2012.10- 2013.9 Guangzhou Hexin analytical instruments Co., Ltd. Structure Design Engineer Intern**

* **Structure Design of the Sampling Device of On-line Detecting PM2.5 Instrument**. Determine the basic configuration of this device by referring to the related literature widely; Set the inlet pressure of the sampling device to ensure the normal operation of analytical instrument, simulate the contours of gas pressure and velocity in this device by **FLUENT** software and the trajectories and focused level of **PM2.5** particles mixed in the air at the above air condition; Find out the relationship of characteristic parameters of this device and focused level of particles, so the optimal parameters is confirmed; Build the model of the sampling device by SolidWorksand modify it according to manufacturer machining method and the power of processing equipment; Complete the assembly drawing of this device and detail drawings; Draft the design specification of sample device.

**2011.10- 2012.9 Shanghai University MS Lab Graduate Intern Intern**

* **Structure design of the micron device measuring particle beam width**. Choose aluminum alloy LY12 as shell material for easy machining and light weight; Calculate the cavity wall thickness, connection bolts specification and quantity, and check the focal point of stress **ANSYS Workbench 13.0** under the condition of high vacuum with 10-4Pa；Design move device using manipulating knife-edge panel according to the principle of spiral micrometer gauge and differential screw mechanism，and the moving precision of device can reach 1 micron when 20℃.

**2010.7-2011.8 Hefei Keye electric physics equipment Co., Ltd. Technician Full-time**

* Participate in the plan of International Thermonuclear Experimental Reactor, responsible for upgrading supply power and coolant device. Build the model of this device by **CATIA V5** and simulate the assembly process; Optimize local parts structure and improve the assembly process; Complete the assembly drawing of this device and detail drawings, and contact the supplier for processing after examination and approval; Optimize the structure of the cavity and dewar off the thermal radiation by ANSYS Workbench13.0.

Scientific Payoffs

* **LIU Zhiying**, LI Lei, LI Mei, et al. Design and Simulation of Sampling Device in Single Particle Mass Spectrometer[J].Journal of Chinese Mass Spectrometer Society.2013
* A device of aerodynamic focusing particles：CHINA,201320461690.1[P].2013-07-30

Campus Activities

2011.9-11 Attend a college party to welcome the new student, perform the greeting dance

2007.9-11 Join in the Association of Technological Innovation of HFUT, serve as vice manager of Propaganda department and plan the publicity program of the school’s 20th robot contest.

Honors and Awards

2013.11 Shanghai University excellent student 2010.06 Oerlikon Leybold Industry Scholarship

2007-2009 First-class Scholarship, Third-class Scholarship and merit student