化学伯苓班招生简介

南开大学伯苓学院

- 2009年，教育部实施“基础学科拔尖学生培养计划”，简称"珠峰计划"。是国家为回应"钱学森之问"而推出的一项人才培养计划，旨在培养中国自己的学术大师。
- 南开大学首批入选—成立南开大学伯苓学院。伯苓学院分为数学、物理、化学和生物四个伯苓班。其中化学伯苓班每年从新生中选拔50人，配备一流的师资，提供一流的学习条件，创造一流的学习环境与氛围，创新培养方式，探索创新型化学人才培养模式，努力使受该计划支持的学生成长为化学相关学科领域的领军人物，并逐步跻身国际一流科学家队伍。

化学伯苓班培养方案

- 专业必修课基本在两年内修完
- 单独小班上课，配备一流教师
- 政治课重新整合，英语课由外籍教师承担
- 每月两次伯苓讲座(固定周五晚上)
- 定期组织到科研院所和高校参观交流
- 资助出国交流交换学习，资助参加学术会议
- 大二以后，按研究生模式配备导师，进行科研活动
- 毕业生全部具有推荐免试攻读研究生资格

化学伯苓班选拔

选拔对象： 化学作为第一志愿报考南开大学的新生。

化学学院新生不用报名，全体参加选拔，入围面试名单后再核实是否愿意进入伯苓班以及化学是否为第一志愿。

选拔办法： 笔试+面试

笔试科目： 数学(50分)、物理(50分)、化学(100分)、英语(100分)

根据考试结果划定单科和总分分数线，确定面试名单。经过面试，最后录取50人，分成两个班。

化学伯苓班退出机制

自愿退出：学生发现自己不适合，主动提出退出

挂科退出：必修课挂科，自动退出

中期考核：两年后，根据学分绩和综合素质考核进行排名，只保留20人左右，其他人根据志愿选择转入其他本科专业。

- 伯苓班退出后，挂科记录不带入新专业。
- 若必修课学分绩排名在转入专业的前50%，仍可参加保研。
- 愿意从事科研的学生，也可全天候进入实验室参加科研活动
- 出国交流也将获得部分或全额资助

化学伯苓班转入机制

只有大一完成后一次转入机会。

普通班学生若想转入伯苓班需满足以下条件：

- 跟随分子科学与工程专业选修比普通班提前修读的《有机化学2-1》、《有机化学2-2》和《有机化学实验2-1》（需先修有机化学2-1）三门专业必修课程，同时跟随分子科学与工程或化学类专业修完其他正常开设的必修课程如《大学语文》和指定选修课程，按教学进度取得相应的公共必修课（A类）学分以及与伯苓班学生相同的专业必修课（B和C类）学分。
- 第一学年必修课（ABC类）平均学分绩排名进入伯苓班必修课学分绩排名的前50%。

化学伯苓班科研与创新能力培养计划

- 实验室体验计划（大一上学期）
- 暑期科研训练（大一夏季学期）
- 国创、百项(大二下)，伯苓班学生必须主持承担创新项目
- 大二结束，选择科研导师，按研究生培养模式进入实验室进行科研训练和研究课题的开展。每人资助经费1-3万元。

一学期结束学生需提交中期考核报告，一学年结束学生需提交年度考核报告并参加由伯苓班工作小组安排的答辩。

根据学生参加科研训练的情况，鼓励导师每月从科研经费中支付给学生一定的实验补贴（参考值400元/月）。

未通过年度考核的学生，退出伯苓班。

伯苓讲座

每月聘请两位著名化学家和青年学者为本科生作伯苓讲座并分享科研体会。

2016.03.25，洁净能源电化学转化 ——兼谈当代化学研究的特点，
庄林教授，武汉大学

2016.04.29，追求卓越之路——我的实验科学研究之路，
杨学明院士，中科院大连化物所

2016.05.27，To Travel and To Arrive. A Journey of Natural Product Synthesis，
李昂研究员，中科院上海有机所

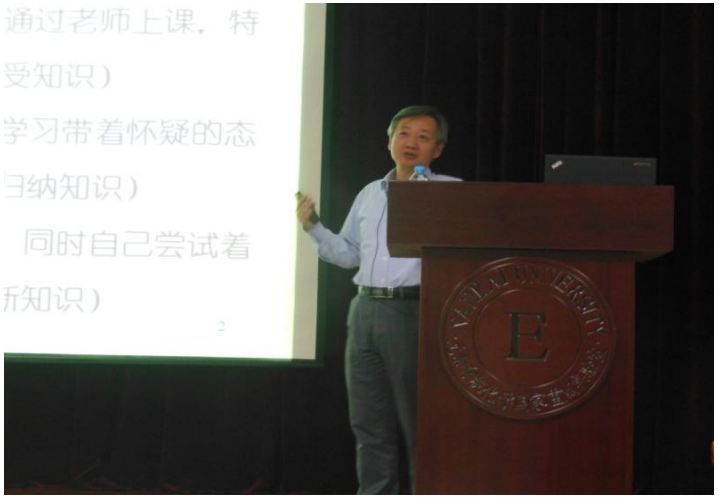
2016.09.30，创新研究三部曲，唐本忠院士，香港科技大学

2016.10.28，碳纳米和高分子功能材料及其在绿色能源中的应用研究，
陈永胜，南开大学

2016.11.25，走进奇妙的多孔世界—分子筛纳米孔材料的构筑与应用，
于吉红院士，吉林大学

2016.12.30，双金属有机合成试剂化学：协同效应与深新信，
席振峰院士，北京大学

伯苓讲座



2014年9月26日厦门大学田中群院士

2015年4月24日中科院大连化物所包信和院士

2015年3月27日北京大学吴云东院士

2016年9月30日香港科技大学唐本忠院士

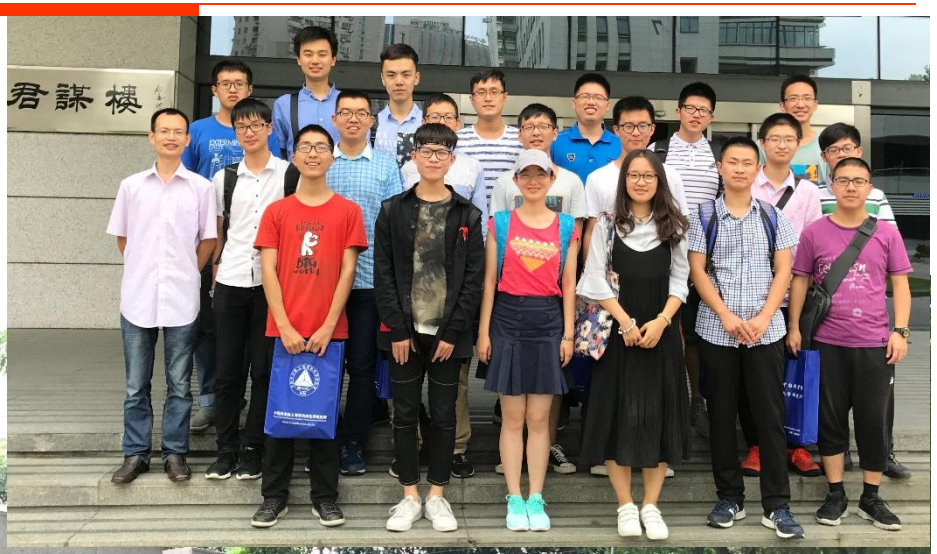
国内学术交流

资助参加学术会议：

2016年7月，2013和2014级伯苓班部分学生参观中科研大连化学物理研究所

国内学术交流

资助参观学术机构：

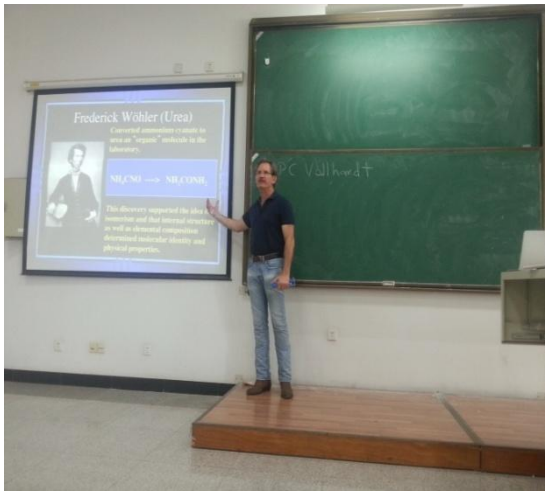


2017年9月8日，2015级伯苓班学生参观中科院上海有机化学研究所

国际交流

夏季学期聘请外籍教授授课(2015年)：

- **Principles Inorganic Chemistry, Prof. Annie Katherine Powell, Karlsruhe Institute of Technology, Germany.**
- **Fundamentals of Organic Chemistry, Prof. Jay S. Siegel, University of Zurich, Switzerland.**
- **Macromolecular Chemistry: An Introduction, Prof. Julian X.X. Zhu, University of Montreal, Canada.**
- **Fundamental of Spectroscopy, Prof. Ayyalusamy Ramamoorthy, University of Michigan, USA**



国际交流

资助学生在学期间出国交流：

- **短期交流**：2012级15人，2013级6人，2014级3人，2015级2人
  UCBerkeley暑期学校，19人
  UCB和UCLA CSST暑期项目，5人
  Mitacs Globalink Internship项目，2人

- **中长期交流**：2012级6人，2013级13人，2014级11人
  MIT, U of Cambridge, Scripps Research Institute,
  Yale U, UCLA, U of Michigan, UIUC, Northwestern U,
  University of Toronto, Purdue U, Indian U,
  Humboldt-Universität zu Berlin,
  National University of Singapore

国际交流

2012级化学伯苓班学生到国际著名高校参加6个月科研训练名单：

序号	学号姓名	国家机构	USNews美国化学排名	USNews世界大学排名	导师
1	1210849李哲夫	美国Northwestern University	7	25	Mark A. Ratner
2	1210810李晓彤	美国UCLA	15	8	Paul Weiss
3	1210737李日尧	美国Indiana University, Bloomington	24	114	David Giedroc
4	1210702邸正傲	英国Cambridge University	-	6	Julian Hibberd
5	1210847李任和	加拿大University of Toronto	-	14	Mark Lautens
6	1210774杨洋	德国Humboldt-Universität zu Berlin	-	77	Christian P. R. Hackenberger

国际交流

2013级化学伯苓班学生到国际著名高校参加6个月科研训练名单：

序号	学号姓名	国家机构	USNews美国化学排名	USNews全球大学排名	导师
1	1310835卢佳	美国MIT	1	2	Mei Hong
2	1310785王梓琛	美国Scripps Research Institute	7	-	Keary M. Engle
3	1311219孙明康	美国Yale University	12	14	Mingjiang Zhong
4	1310734何鹏	美国Yale University	12	14	Hailiang Wang
5	1313051郭富城	美国The University of Michigan	15	17	A. Ramamoorthy
6	1210752秦修轶	美国 UIUC	6	47	J. Rodríguez-López
7	1310215牧一江	美国 UIUC	6	47	David Sarlah
8	1310847王怿冉	美国Northwestern University	7	25	T. David Harris
9	1310745李亮	美国Northwestern University	7	25	T. David Harris
10	1310896朱传州	美国Purdue University	21	90	Alexander Wei
11	1310894郑子琪	加拿大University of Toronto		21	Geoffrey A. Ozin
12	1310754刘畅	National University of Singapore		50	Shaoqin Yao
13	1310774王坤梁	National University of Singapore		50	Shaoqin Yao

国际交流

2014级化学伯苓班学生到国际著名高校参加6个月科研训练名单：

序号	学号姓名	高校研究所	USNews美国化学排名	USNews全球大学排名	导师
1	1410906宁佳鑫	Harvard University	4	1	Xin Li
2	1410743毕成	Scripps Research Institute	7	-	Phil S. Baran
3	1413095李子奇	Scripps Research Institute	7	-	Jin-Quan Yu
4	1410975肖旖杨	Scripps Research Institute	7	-	Keary Engle
5	1410191宫旭	University of Chicago	12	13	Scott Snyder
6	1410807王杭	Yale University	12	14	Andre Talyor
7	140868常雪莹	UCLA	15	10	Louis-S. Bouchard
8	1411137王焜昱	Northwestern University	7	25	T. David Harris
9	1410944赵子仪	Northwestern University	7	25	T. David Harris
10	1410823肖奎	Northwestern University	7	25	Fraser Stoddart 2016年诺奖
11	1410811王瑞祥	Johns Hopkins University	24	11	Marc Greenberg

国际交流：短期项目

2012级化学伯苓班学生参加美国加州大学伯克利分校暑期学校留影

国际交流：中长期项目

交流时间：2015年8月22日至2016年2月20日

交流地点：英国University of Cambridge, Prof. Julian Hibberd课题组

毕业去向：英国University of Cambridge, PhD student

邸正傲

学号1210702

交流感言：

剑桥的六个月生活十分充实和丰富，剑桥的人文、自然风物之美和学术气氛之浓厚在我心中留下深刻印象。随处可见古老的哥特式建筑，而令无数人魂牵梦萦的康河便穿梭在这些最古老和著名的建筑之中，走出中心不远可见大片的草地，盎然的绿色令人忘却这里竟是一所学校。除风光之外，更应提的是剑桥频繁的学术活动，丰富的学术交流与合作和平等、自由的交流氛围。

国际交流：中长期项目

邸正傲的国外导师反馈意见：

I was impressed by Zhenago Di during his stay. He worked hard and developed a good understanding of the wider project that he was working on quickly. He learnt the molecular biology skills in the lab very well. And in doing so, he contributed to our ongoing research programmes, and to our understanding of how to assemble artificial protein scaffolds in plants.

Because he was so keen to get a lot done, I felt that he probably tried to do too many things simultaneously, and this lead to some of them not working. This is not a major criticism, and is common in a "keen to succeed person" at his stage, and it something that I think he is now aware of and so can control this in the future.

In summary, Zhengao made and excellent contribution to my laboratory during his stay. The work he conducted was a very good standard.

国际交流：中长期项目

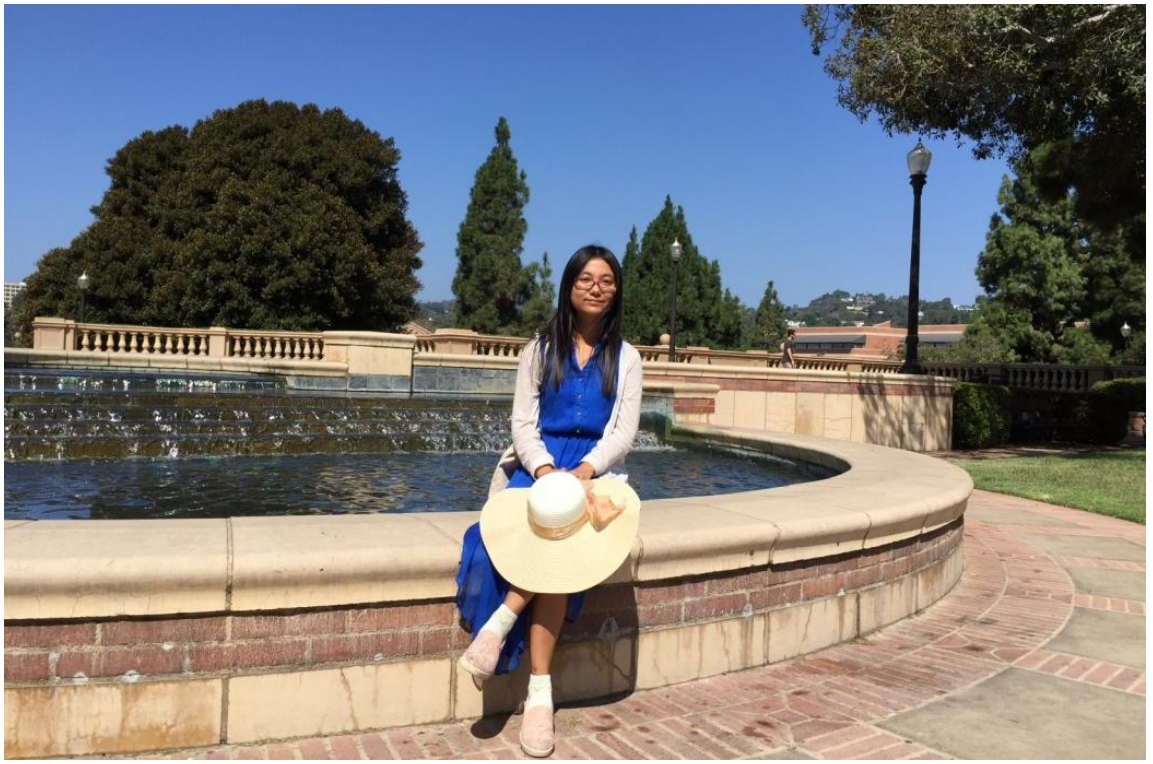
交流时间：2015年10月15日至2016年3月29日

交流地点：美国University of California, Los Angeles, Prof. Paul Weiss课题组

毕业去向：美国Northwestern University, PhD student

李晓彤

学号1210810



交流感言：

通过此次交流，我不仅增强了实验技能，还拓宽了自己的学术视野，并提高了英语学术交流能力，自身的科研素养得到很大提高。

国际交流：中长期项目

李晓彤的国外导师反馈意见：

Xiaotong was a terrific student with us, who was one of the hardest working and most persistent students in my group.

She did a great job in her research, put together a beautiful presentation on it by herself, and gave a superb talk. Her science and communication skills are both superior.

On arrival at UCLA, Xiaotong jumped right in. She was able to learn new techniques from chemical characterization to microbiological preparation and familiarized herself with the relevant literature. She is already excellent at setting up simultaneous, different experiments to have high productivity, more along the lines of a productive senior graduate student. She makes sure each experiment is taken to completion with care. It is an underestimate to say that she has a positive attitude; she has an infectious enthusiasm for science, both what she is doing and the world beyond. She works very well with others, which is a requirement on this project. She is showing signs of independence, following up on project ideas from discussions. In the lab, Xiaotong functionalized and tested surfaces for cell patterning experiments. She cultured *Shewanella* cells on chemically patterned surfaces and imaged them with optical and fluorescence microscopies.

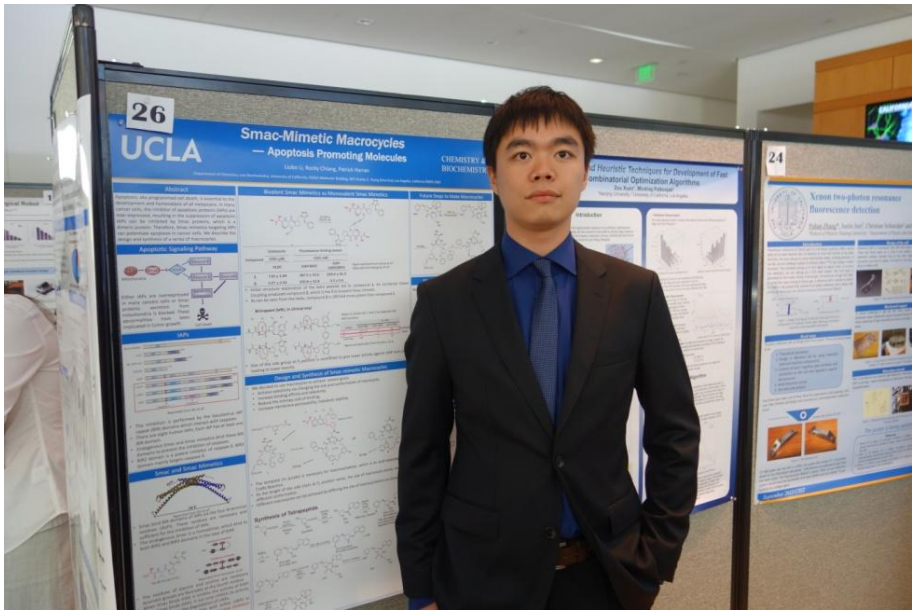
I worked hard to get her a fully funded position in our PhD program and was very disappointed that she decided to go to another university.

国际交流：中长期项目

交流时间：2015年7月5日至2015年9月11日, UCLA CSST项目

交流地点：美国University of California, Los Angeles, Prof. Patrick Harran组

毕业去向：美国University of California, Los Angeles, PhD Student



李浏博

学号1213214

交流感言：

在UCLA十周，专业素养和专业技能都得到极大的提升。参加CSST项目的同学来自国内各高校各专业领域，CSST为我们提供了交流的平台。在第二周和第九周都有peer seminar。在seminar 上能听到同专业不同领域的工作，去到别的seminar 还能听到不同专业的工作，从而了解不同学科的发展前景，同时也为学科交叉埋下了种子。

国际交流：中长期项目

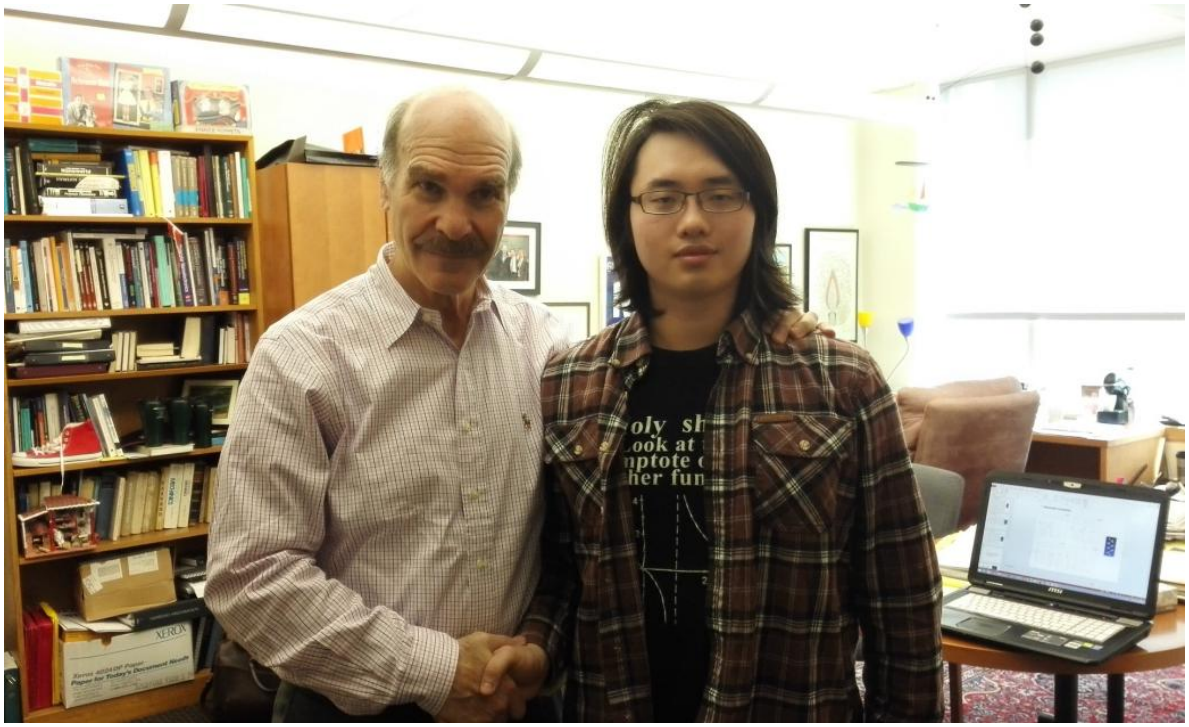
交流时间：2015年9月15日至2016年3月17日

交流地点：美国Northwestern University, Prof. Mark Ratner课题组

毕业去向：美国University of Chicago, PhD student

李哲夫

学号1210849



交流感言：

跟随Ratner教授进行科研的这段经历对我影响很大。不仅仅是因为学到的知识和技能、或者是他的推荐信，更是因为我见识到了一个世界级科学家的思维方式与习惯。这六个月的经历在我看来无比宝贵，非用perfect不能表达。

国际交流：中长期项目

李哲夫的国外导师反馈意见：

Zhefu is a very nice person who speaks English quite well and writes English very well. He is a questing investigator, looking at related papers, discussing his results with others in the group, preparing reports for me, learning new skills involving computation and understanding, and always willing to work hard to find some new ideas, concepts, and results.

Zhefu's focus was on the formal and computational approaches that we have taken to the dielectric behavior of organic molecules, and to an attempt to understand structure/function relationships in capacitance. He has prepared a paper which I anticipate will be easily published. It shows that for some systems, the Hammett fit is excellent, and on other systems, the Hammett fit simply doesn't work. These results all came in during the last two months of Zhefu's visit, so that we did not have time to advance these interesting questions. Zhefu did prepare a draft of a paper, and Tobin Marks and I are working on it at the moment.

Zhefu is very hardworking, very nice, very interested, and very cooperative. He is not super brilliant, but he has a great work ethic, and a deep sense of questioning some suggestions from other people. I believe that he will do very well at the University of Chicago, and I anticipate that he will return to China with very strong credentials in the area of theoretical chemistry of molecular behavior. Thank you for sending him to us. It has been a great pleasure.

国际交流：中长期项目

交流时间：2015年9月18日至2016年4月1日

交流地点：加拿大University of Toronto, Prof. Mark Lautens课题组

毕业去向：美国University of Chicago, PhD student

李任和

学号1210847

交流感言：

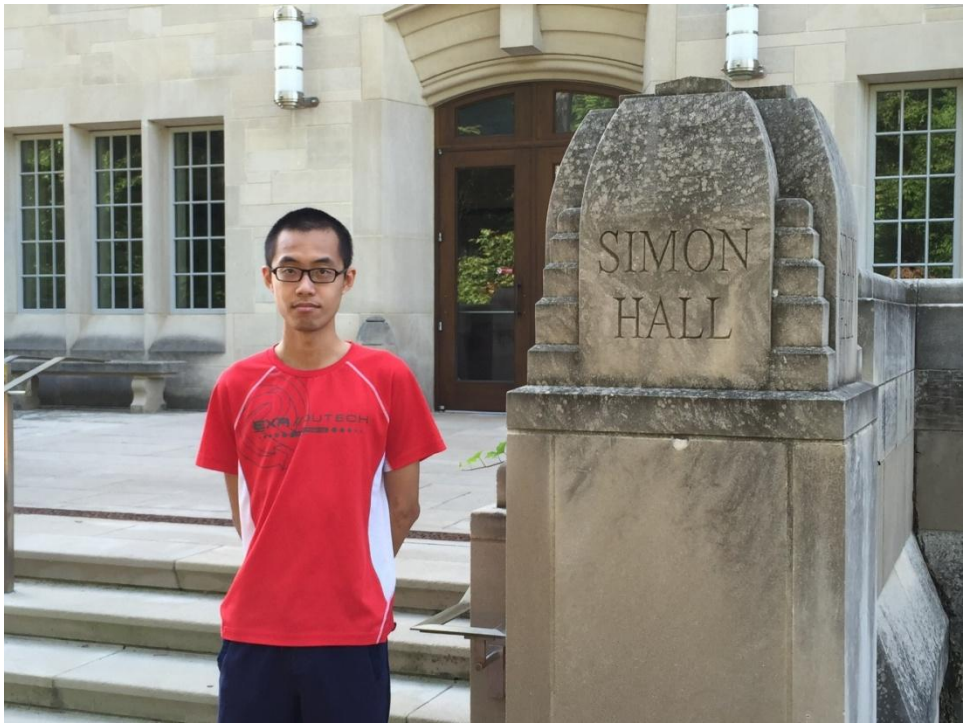
这次交流经历帮助我提前适应了北美的科研环境，并很大程度上提升了我的口语能力。我觉得很重要的一点，就是找一个在乎你并愿意帮助你的导师。对于学生，要努力提升自己在导师眼里的存在感，同时最大限度地投入到自己的project中。交流是努力提升自身的最好途径，我们应该抓住这个机会。

国际交流：中长期项目

交流时间：2015年8月2日至2016年1月1日

交流地点：美国Indiana University Bloomington, Prof. David Giedroc课题组

毕业去向：University of California Davis, PhD student



李日尧

学号1210737

交流感言：

在5个月的时间里，我切实地体验了在美国作为一名研究生的学习与生活。这段经历让我更加清楚地认识到出国读研的利弊，结合自身实际情况进行职业规划。

国际交流：中长期项目

李日尧的国外导师反馈意见：

Riyao did everything that he was asked to do, and contributed key experimental findings to a project directed by his graduate student mentor, Aaron Lee. I anticipate that Riyao will earn co-authorship on at least one published manuscript.

Riyao is excellent listener, and an excellent experimentalist. Mr Lee commented that once you showed Riyao how to do something once, he can then work independently. He also was strongly motivated to succeed and learn in this environment. For example, he taught himself how to make calorimetric titrations, which are very difficult to master.

Riyao’ s oral communication skills, while quite adequate, will have to improve so that he is better prepared for a workplace where English is the spoken language. I have no doubt that This will improve with practice, particularly if he is to attend graduate school in the US (this is his plan).

In my estimation, he has a very bright future as an experimentalist and scientist.

国际交流：中长期项目

交流时间：2015年6月27日至2015年9月19日，Mitacs Globalink Internship项目

交流地点：加拿大 University of British Columbia, Prof. Mark MacLachlan组

毕业去向：美国New York University, PhD student

徐哲

学号1210770

交流感言：

Mitacs暑期实习项目不仅帮助我拓展了理论知识、增进了实验技能、更帮助我结识了不同领域的朋友与学者，工业实习与研讨会更是为职业规划指明了方向。

国际交流：中长期项目

徐哲的国外导师反馈意见：

Zhe was an excellent student - he was hard working, motivated, and a very good coworker. He got along well with my group and they enjoyed having him here. Zhe got some nice results on a challenging project (magnetic nanomaterials) - I expect we will publish a paper on this work, but there are still more experiments to be done. Overall, I was pleased with Zhe's preparation and performance!

国际交流：中长期项目

交流时间：2015年9月22日至2016年4月10日

交流地点：德国Humboldt-Universität zu Berlin, Prof. Christian Hackenberger组

毕业去向：美国Cornell University, PhD student

杨洋

学号1210774

交流感言：

在这次交流中，我真正地完成了一个独立的课题，并且在过程中独立解决问题，参加组会汇报。这样的交流机会不仅让我充分了解了科研工作从选题到实验到解决问题以及分析数据撰写论文的全部过程，还提高了我的独立工作和思考的能力，真的让我受益匪浅。

国际交流：中长期项目

杨洋的国外导师反馈意见：

Yang did a fantastic job in the lab, was very open and communicative and very hard working. His results on probing the stability of phosphoramidate-linked PEG-peptides, for which he developed a very nice synthetic/HPLC assay, will be very likely included in a research paper, which we are in the process of preparing. I therefore can only give my highest recommendations for Yang and would give him the highest grade possible for his practical work (in the German system 1,0; in the American system A).

From a program perspective I think it is great that your university offers such extended research stays abroad for your very best students. Therefore, your students will have a chance to get their first international training, which is key to succeed in the science world later on. I can only support you in continuing this program.

国际交流：中长期项目

交流时间：2015年6月27日至2015年9月21日，Mitacs Globalink Internship项目

交流地点：加拿大Concordia University, Prof. Pat Forgione课题组

毕业去向：美国The Scripps Research Institute, PhD student

刘洛言

学号1210741

交流感言：

Mitacs暑期实习不仅提高了我的科研素养，更是教会我如何在实验室工作和洗衣做饭等生活琐事中间合理安排时间。和一同参加Mitacs的来自世界各地的伙伴们的交流中更是学到了与人沟通的技巧。希望学弟学妹们都能走出去体验一下，相信一定会有不小的收获！

国际交流：中长期项目

刘洛言的国外导师反馈意见：

I have known Luoyan (Roy) since June 2015 when he began a 12-week MITACS sponsored Globalink exchange program in my laboratory.

Roy was a mature student with good initiative. He quickly learned the organic synthetic techniques required to accomplish the research. Since his time in my lab was very short, a research project was chosen that required very little initial training, and as such his project was at an undergraduate level and not the type of project I typically give to students conducting longer research projects, typically 4 or more months. However, he was impressive in his accomplishments and consistently looked for additional duties throughout his 12 weeks. Although his English-language skills are not strong, they were sufficient that communication was rarely an issue and should only improve with time. I believe he has the potential as a graduate student and recommend him to continue his studies.

国际交流：中长期项目

交流时间：2016年7月30日至2017年2月1日

交流地点：美国Massachusetts Institute of Technology, Prof. Mei Hong课题组

毕业去向：转年出国

卢佳

学号1310835

毕业中学：

河北石家庄市

第二中学

专业：化学伯苓

学分绩：83.363

专业排名：12/16

交流感言：

有机会到MIT这样一所世界顶级大学做科研是我一段非常难忘的回忆。实验室安全防护措施全面，师兄姐的热情帮助让我快速融入了课题组。在这样浓厚的学术氛围中，我们要积极主动与他人交流，不断提升自我，同时又要培养独立思考的能力。这次交流经历开阔了我的眼界，让我从中获益匪浅。

国际交流：中长期项目

卢佳国外导师的反馈意见：

This email is to confirm that Jia Lu worked in my lab from August 2016 to Jan 31, 2017. She was a diligent student, worked both at regular hours and on weekends. She participated in all my group meetings and also attended some of the departmental seminars. She assisted one graduate student in peptide synthesis and NMR data analysis. She also learned NMR experiments with another graduate student. She is self motivated and independent.

国际交流：中长期项目

交流时间：**2016年8月3日至2017年2月3日**

交流地点：**The Scripps Research Institute，Prof. Keary Engle 课题组**

毕业去向：**中科院上海有机化学研究所，博士生**

王梓琛

学号1310785

毕业中学：

河北保定一中

专业：化学伯苓

学分绩：**81.856**

专业排名：**14/16**

交流感言：

通过这六个月的交流，让我对美国的科研与文化有了新的了解，有了进一步的成长与发展。在Scripps的半年，我体会到了美国文化的开放包容，科研工作的孜孜以求，我认识了许多新的朋友，开阔了自己的思维与视野。

国际交流：中长期项目

王梓琛国外导师的反馈意见：

Zichen performed extremely well during his internship. He will **be a co-author on a paper** (2nd or 3rd author) on alkene 1,2-carboamination that we will submit to JACS within the next month. **He solved two important problems** during his 6-month in my lab. First, he identified improved conditions for using aryl iodide electrophiles as coupling partners in the reaction through systematic screening. (Previously, we only had vinyl iodides working well.) Second, he more or less independently developed a viable synthetic route to a new class of "chiral ammonia" equivalents that I was interested in. This required a lot of perseverance and hard work because the most obvious routes based on the literature did not work. In his final weeks in the lab, he finally found a workable synthetic route, and even though these nucleophiles did not perform as we hoped, I was extremely impressed with his tenacity in solving this problem. He worked very hard, but also found time to explore San Diego and take a few short trips. His English improved quite a bit during his internship, and it appeared that he gained a lot of confidence in this area. He fully participated in all of our group meetings and group social activities and was very popular. Overall, Zichen was **an excellent ambassador for Nankai University**, and he will have my very strongest support throughout his future career. I plan to take at least one (hopefully two) more Nankai students from this program next year. I look forward to make great interactions with Nankai University in the future.

国际交流：中长期项目

交流时间：2016年9月1日至2017年3月1日

交流地点：美国Yale University, Prof. Mingjiang Zhong课题组

毕业去向：美国Carnegie Mellon University, PhD student

孙明康

学号1311219

毕业中学：

山东聊城一中

专业：化学伯苓

学分绩：88.702

专业排名：3/16

交流感言：

耶鲁的六个月，不仅让我开拓了视野，确定了博士期间的方向，还锻炼了我与人交流和表达自己想法的能力。我很幸运地遇到了真正愿意帮助我并不断鼓励我的老师和师兄师姐，体会到了开放，拼搏的实验室环境，懂得了如果要在一个领域内有所成就需要付出的努力和艰辛。

国际交流：中长期项目

孙明康国外导师的反馈意见：

Mingkang came from Nankai University with outstanding intellectual ability in chemistry, and particularly impressive fundamental knowledge of physical and organic chemistry. He worked in my lab under the supervision of my postdoctoral scholar, Dr. Zihao Guo, on a highly challenging project – i.e., bioinspired design and synthesis of well-controlled branched macromolecules. Although polymer science is a new field for Mingkang, this never became an issue due to his amazing learning capability (even compared to graduate students and postdoctoral scholar). I should re-emphasize that **Mingkang's excellent contribution to my lab was without too much guidance from me or his postdoctoral mentor. His independency and creativity in research made his productivity as high as a well-trained graduate student in my lab!** Dr. Guo told me that Mingkang could always adopt new knowledge very quickly and correctly apply it into his project. In addition to his great lab work, he regularly reported his progress to me in the forms of reports and presentations. His English writing is exceptionally good and logic among all international students I've ever mentored. Mingkang will continue to pursue his PhD at Carnegie Mellon University (CMU) under the supervision of **Prof. Krzysztof Matyjaszewski**, who shared that he was so excited with Mingkang's upcoming arrival and join this summer. Indeed, I am confident that Mingkang will be a positive and valuable graduate of Nankai University and an excellent addition to the program at CMU.

国际交流：中长期项目

交流时间：2016年8月20日至2017年5月10日

交流地点：美国Yale University, Prof. Hailiang Wang课题组

毕业去向：美国University of Notre Dame, PhD student

何鹏

学号1310734

毕业中学：

湖南湘潭县

第一中学

专业：化学伯苓

学分绩：87.391

专业排名：4/16

交流感言：

在耶鲁大学交流的八个多月里，不管是在学习还是生活上，我学习到了很多，也得到了很多人的帮助。在和他们的交流过程中，我获益良多，开拓了眼界也认识到了自己的不足。非常感谢化学学院能给我这次出国交流的机会，让我能够进入到国外顶尖学府去交流和学习，接触到了一个全新的世界。

国际交流：中长期项目

何鹏国外导师的反馈意见：

Peng had worked in a research group at Nankai University before he came to my lab. My coaching plan for him was to let him start from assisting a Ph.D. student and then move him on to an independent project which was to serve as his undergraduate thesis research. Peng first worked with my 2nd year Ph.D. student, Yiren Zhong, on studying the surface chemistry of sulfur cathodes in Li-S batteries. The studies allowed us to gain insight into the chemistry on sulfur cathode surfaces and derive design principles for better electrode materials and structures. **Good progress was made and we have already put together two manuscripts. Peng's contribution has made him a major contributing author for both papers.** After that, Peng was assigned to work on constructing sulfur cathode material structures based on metal-phthalocyanines (MPcs) and studying the dependence of the electrochemical properties of the cathodes on the molecular structures of the MPcs. This was a relatively independent project. I was glad that Peng did it very well and collected enough data for his thesis work. Peng is a hard-working student. He worked in the lab almost every single day. He got along with other group members very well. I heard from them that Peng is a good cook which I believe shares some common skill sets with a good synthetic chemist. One specific area that Peng needs to improve in is oral communication. He seemed to be shy and less confident in his spoken English. However, if he did open his mouth and talk, we had no problem understanding him and communicating with him during our regular meetings.

国际交流：中长期项目

交流时间：2016年8月1日至2017年1月31日

交流地点：美国University of Michigan, Ann Arbor, Ayyalusamy Ramamoorthy组

毕业去向：北京大学，博士生

郭富成

学号1313051

毕业中学：

安徽界首市

第一中学

专业：化学伯苓

学分绩：89.808

专业排名：1/16

交流感言：

在本科阶段能够去国外顶尖大学经历一番确实是一个不错的事情，无论是在学术见解还是见识远见方面，都必将有一个很大的提升，国外对于性格的培养，阅历的增强，英语的训练，都是一个绝佳的环境，希望借助于这一契机，让自己走得更高、更远。

国际交流：中长期项目

郭富成国外导师的反馈意见：

Mr. Guo came to my lab for 6 months. During his stay in my lab, he closely worked with my graduate student, Ms. Sarah Cox, on a project to investigate the effect of small molecular compounds to inhibit the aggregation of Alzheimer's amyloid-beta peptide. Mr. Guo was trained very well to carry out sample preparation and fluorescence experiments using a 96 well plate fluorimeter. He worked very hard to complete the experimental analysis of more than 500 compounds. This project resulted has identified several excellent candidates for an efficient inhibition of amyloid aggregation. We are now working on to evaluate their efficacy further at a larger scale as well as using a variety of other techniques. **While these preliminary results are exciting, Guo will be a co-author of a publication based on this study** when we complete it within this year. Mr. Guo was a sincere, dedicated, hard working and friendly student. He got along very well with everyone in my lab. He gave a couple of presentations in my group meeting, and I was very impressed with his final presentation (before he left my lab) on his research work. Mr. Guo also learned a great deal of literature behind the amyloid research, and also about the biophysical techniques. This is an outstanding research experience and his English speaking skills improved dramatically during his stay in my lab. Because of the above‐mentioned reasons, I am very pleased with Mr. Guo performance in my lab, and **I give my highest recommendation**. I look forward to training more such excellent students from Nankai University.

国际交流：中长期项目

交流时间：2016年7月15日至2017年2月15日

交流地点：加拿大University of Toronto, Prof. Geoffrey Ozin课题组

毕业去向：转年出国

郑子琪

学号1310894

毕业中学：

河北安国中学

专业：化学伯苓

学分绩：83.755

专业排名：11/16

交流感言：

出国交流对我来说是一次极佳的成长机会。申请、签证、租房、独自在国外生活等经历让我更成熟、更独立。这些体验是在本校学习得不到的。在科研的过程中认识了好多人，他们在学习生活中也给予了我巨大帮助。

国际交流：中长期项目

郑子琪国外导师的反馈意见：

Ziqi Zheng's research project is solar fuels. The focus of his work has been on the synthesis, characterization and testing of a variety of nanocrystals for photothermal production of solar fuels, such as CO, methane or methanol. His goal was to manipulate through chemistry the combination of different metal and metal oxide nanocrystal heterojunctions and explore how this manifests in the reactivity patterns and the selectivity patterns for CO_2 reduction in gas phase photothermal catalysis. Ziqi has managed to successfully synthesize Cu decorated ZnO, Pd decorated Nb_2O_5, $Cu@In_2O_3$, $Cu@Nb_2O_5$, photodeposited $Au@In_2O_3$ and $Au@In_2O_3$. He has subjected them to preliminary photothermal testing. He also tested some other promising nanomaterials synthesized by other people in my group. The results emerging from his experiments are looking very promising and my PhD student is working to enrich those results.

His undergraduate background in China is solidly couched in chemistry which has enabled him to seamlessly integrate his skill set with his projects in my research group. From what I have learned by working with Ziqi is that he is a very smart student with a solid understanding of materials science and chemistry. Like many of my students in the past, Ziqi is yet another one of those smart students who are excited by the challenges that science offers. He has demonstrated the passion, persistence, patience, and experimental and analytical skills in chemistry to stand a very good chance of making innovative, important and technologically relevant contributions to the field.

国际交流：中长期项目

交流时间：2016年9月14日至2017年3月31日

交流地点：美国University of Illinois at Urbana-Champaign, J. R. Lopez组

毕业去向：美国University of Illinois at Urbana-Champaign, PhD student

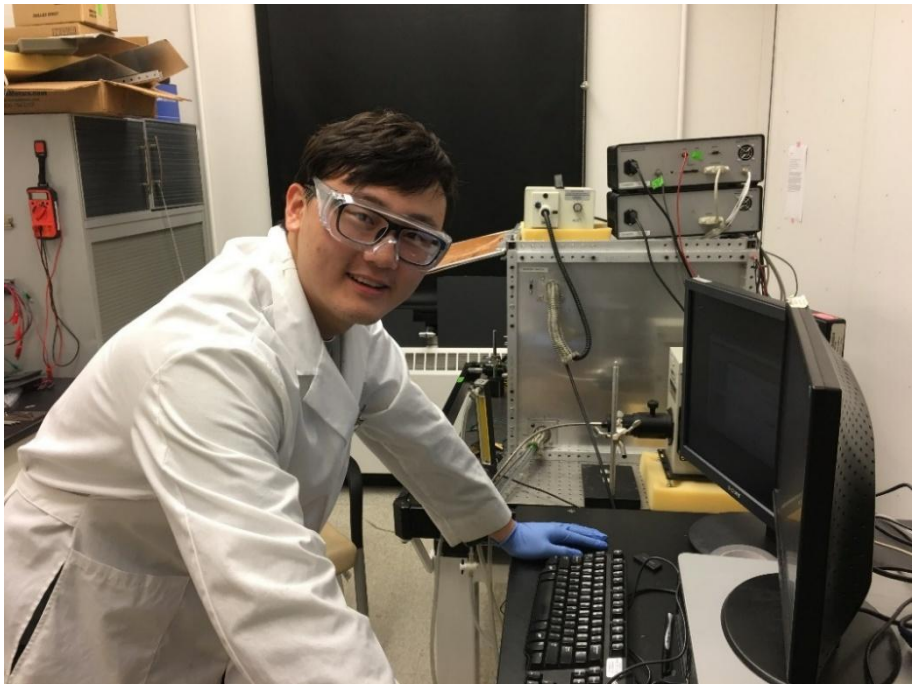
秦修轶

学号1210752

毕业中学：

湖南

长沙市一中



专业：化学伯苓

学分绩：86.049

专业排名：7/16

交流感言：

非常感谢南开化学学院能给我这样一个到世界一流大学实验室实习的机会，我学到了更深层次的知识，有机会接触最新的思想，也锻炼了我的自学、表达、动手能力。我在那认识了很多可爱的朋友们，希望以后能和他们度过充实而欢乐的五年博士生涯。

国际交流：中长期项目

秦修轶国外导师的反馈意见：

I am enthusiastically writing this letter with my strong endorsement of the work and performance that Xiuyi (Terry) Qin displayed during his 6-month stay in my laboratory at UIUC. I am glad about giving him an opportunity to participate in my program, as **he is a very talented, hard-working and well-rounded student**. As I have been mentor to about 20 undergraduate researchers in my laboratory, have participated for the past four years in the admissions and recruiting committee for the chemistry department and for the REU program, and act as faculty advisor to the undergraduate chapter of the ACS at UIUC, I can compare Terry to undergraduates graduating from UIUC and those accepted into our program in past years, in terms of scientific maturity, motivation and potential to enhance the learning environment. **I would place Terry in the top 15% of graduating students, and the top 20% of applicants to our program**. His performance of course earned him a place in our own graduate program.

Terry was a great citizen in the lab and a great team player. He displayed a very positive attitude towards experiments and a polite and cheerful personality. He had a good dominion of English and there were no obvious linguistic or cultural barriers for him to adapt in the laboratory setting.

国际交流：中长期项目

交流时间：2016年7月15日至2017年9月18日

交流地点：美国University of Illinois at Urbana-Champaign, David Sarlah组

毕业去向：香港大学, PhD student

牧一江

学号1310215

毕业中学：

浙江杭州

富阳中学

专业：化学伯苓

学分绩：86.856

专业排名：6/16

交流感言：

只有出了国才会发现原来自己真的很渺小，才会知道原来自己的生活环境很单一，外面的世界更加丰富多彩。同时当你看到了世界上最顶尖的实验技术时，你也会产生很大的动力，你会希望有一天能站在他们的高度上，追求更加广阔的平台。

国际交流：中长期项目

牧一江国外导师的反馈意见：

In the my group, Mr. Yijiang Mu assisted a second year graduate student in the synthesis of lycoricidine. Upon his arrival, he joined my synthesis team and was tasked with performing the same duties as a first year graduate student. This included: i) completing multi-step chemical syntheses of target molecules/substrates and ligands and understanding some fundamental aspects of organometallic chemistry. During his stay, Yijiang completed the synthesis of several compounds, and learned how to conduct new experiments, specifically involving dearomatizations with arenophiles. Through a combination of hard work and intelligent analysis, **he was able to independently troubleshoot several problematic reactions**. He also performed well in both group meetings and literature surveys, though his English was not fluent. It is important to note that Yijiang was exceptionally homesick as well had a challenging time communicating with his lab teammates, most likely because he was not proficient in language. After a bit more than two months here, he came to my office and asked if he can leave before the end of his internship as he wanted to return to China. Nevertheless, he is a great student with a lot of motivation for organic chemistry and tremendous potential.

国际交流：中长期项目

交流时间：2016年8月10日至2017年3月30日

交流地点：美国Northwestern University, Prof. T. David Harris课题组

毕业去向：美国Northwestern University, PhD student

王怿冉

学号1310847

毕业中学：

山西太原五中

专业：化学伯苓

学分绩：87.282

专业排名：5/16

交流感言：

在西北大学的八个月，是我大学期间成长最快的时期。西北大学悠久的人文历史，优美的湖畔风景，先进的仪器设备，融洽的合作环境，丰富的学术交流，给在这里做研究的人提供了完美的科研环境。感谢化学学院提供给我们这个机会，改变了我的人生轨迹，让我触及原来遥不可及的世界一流科研平台，给我打开一扇全新世界的大门。希望学弟学妹们也好好珍惜这个机会，做自己想做的事情，创造更大的自我价值！

国际交流：中长期项目

王怿冉国外导师的反馈意见：

Yiran was a **fantastic addition** to my lab, and I am very grateful to Nankai University for sending me such an **excellent student**.

Yiran's project involved the synthesis and studies of two-dimensional metal-semiquinoid magnets. Yiran has been able to synthesize the 2,5-dinitro-substutited solid. With the help of a graduate student, Yiran then measured the magnetic behavior of this solid to reveal a significantly lower ordering temperature relative to the dichloro analogue. Yiran has also been able to synthesize a series of analogous solids with interlayer cations of varying size, where this cation variation modulates interlayer spacing. She is now in the process of examining how the magnetic behavior changes as a function of this spacing, in an effort to better understand the nature and dimensionality of magnetic order in these materials. **I expect 1-2 publications to result from Yiran's work in my lab, with at least one featuring her as first author**.

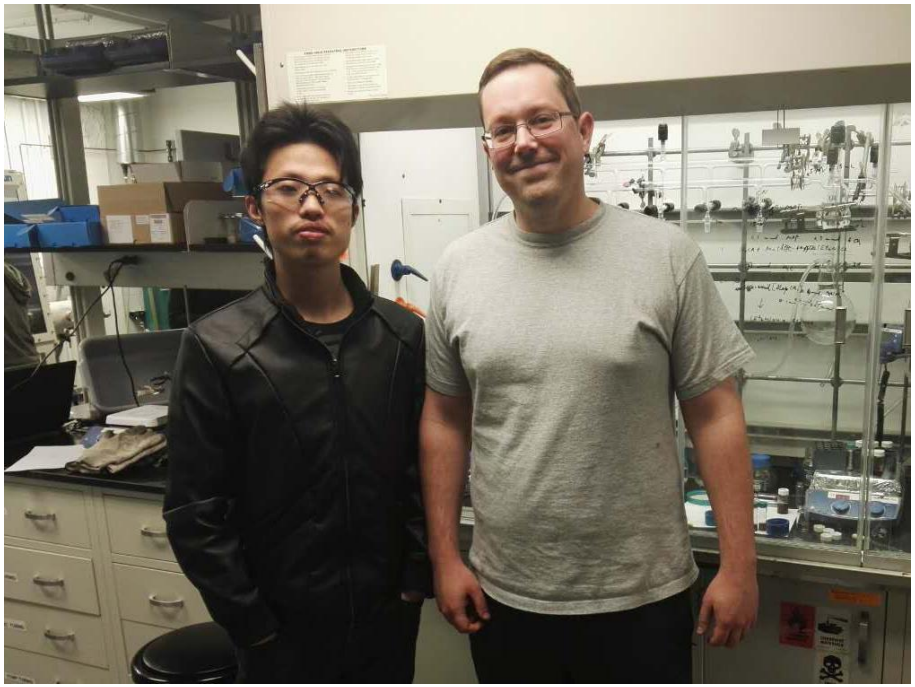
In sum, Yiran has been a dedicated and enthusiastic member of my research lab. I am also happy to report that she has decided to carry out her Ph.D. research here at Northwestern. This is great news for our chemistry program, as **I'm certain Yiran will make both Nankai and Northwestern proud**!

国际交流：中长期项目

交流时间：2016年8月15日至2017年3月31日

交流地点：美国Northwestern University, Prof. T. David Harris课题组

毕业去向：北京大学，博士生



李亮

学号1310745

毕业中学：

北京

第八十中学

专业：化学伯苓

学分绩：88.755

专业排名：2/16

交流感言：

我非常感谢也非常珍惜这次由南开大学化学院资助的科研实习的机会。在这段时间里，我学习了很多有用的理论知识与实验技能，对科研以及科研工作者的认识也更近了一步，更有机会发表高水平的文章。这段经历为我之后的科研工作甚至学术生涯打下了良好的开端。

国际交流：中长期项目

李亮国外导师的反馈意见：

Liang was a fantastic addition to my lab, and I am very grateful to Nankai University for sending me such an excellent student.

Liang's project involved the synthesis and studies of two-dimensional metal-semiquinoid magnets. More specifically, Liang's work has focused carrying out post-synthetic metal and linker exchange on these materials, in an effort to realize magnets with higher ordering temperatures and coercivities. I am thrilled to say that **he has excelled in both areas**! These are extremely challenging projects, ones that I normally would not give to an undergrad, but it was clear to me very early that Liang has what it takes to master a big challenge. A postdoc in my group will now take over for Liang to finish this work. Ultimately, **I expect 1-2 publications to directly result from Liang's work in my lab, with at least one featuring him as first author**. Both publications will be sent to the prestigious Journal of the American Chemical Society. Perhaps more importantly, **the fundamental routes toward metal and linker exchange that Liang has worked out will drive new research in my lab for the next several years.** In sum, Liang has been **a dedicated and enthusiastic member** of my research lab. I wish I could have Liang stay in my lab to pursue graduate research!

国际交流：中长期项目

交流时间：2016年7月13日至2017年1月25日

交流地点：美国Purdue University, Prof. Alexander Wei课题组

毕业去向：转年出国

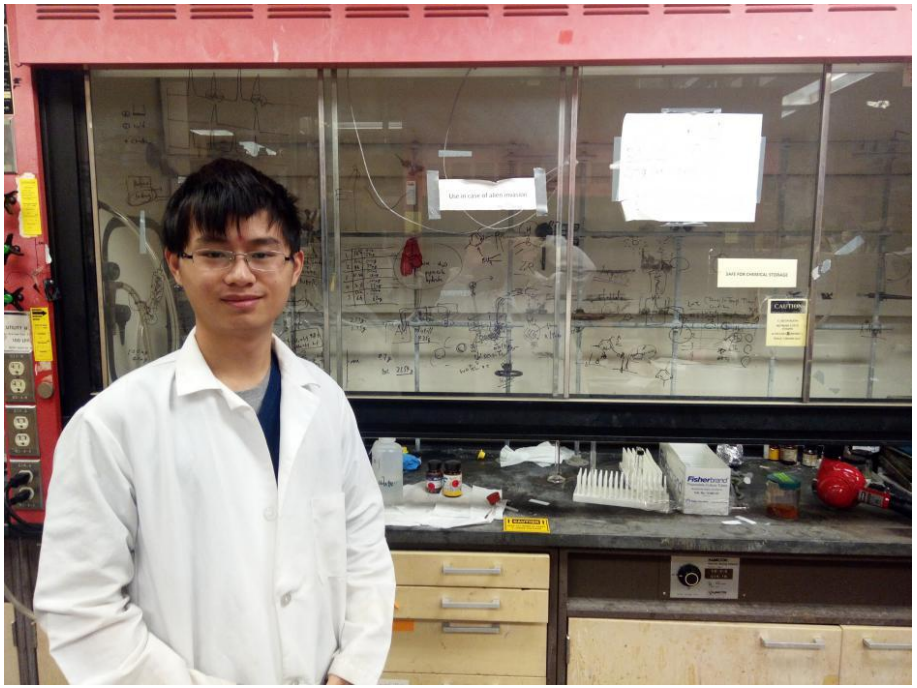
朱传州

学号1310896

毕业中学：

安徽

颍上第一中学



专业：化学伯苓

学分绩：82.718

专业排名：13/16

交流感言：

感谢学院能给我这次出国交流的机会，这次交流对我来说是非常新鲜的挑战，快乐与困难同在，感受不一样的环境和氛围，锻炼了我科研工作能力。努力向上，相信登上不同的山峰才会有不同的风景！

国际交流：中长期项目

朱传州国外导师的反馈意见：

Chuanzhou (Joey) has overall done a very commendable job learning new skills in synthesizing metal-ligand complexes, and also in producing conductive thin films from carbon nanotubes cast onto disposable plastic substrates, using roll-to-roll equipment in our Birck Nanotechnology Center. During his time with us, he conducted the synthesis of three chelating ligands, and essentially taught himself how to make and purify these compounds by chromatography and vacuum sublimation. Compared to another student starting at the same time, Joey was much quicker and more talented, on the same level as a senior in my group who is currently applying for graduate school. However, despite his excellent aptitude in the lab, Joey was not yet mature enough to pursue independent work, primarily because of his limited ability to communicate. He is rather shy and introverted, and did not practice the habit of interacting regularly with other group members, or share his thoughts about future plans. It led to several minor but noteworthy mistakes that could have been easily avoided by seeking advice from a more experienced lab member. I have stressed to him the importance of teamwork and self-integration within our group activities; time will tell whether he can put these ideas to practice in future efforts. Overall, I am glad to have gotten to know Joey, and I look forward to hearing about his continued growth as a scientist and as a person.

国际交流：中长期项目

交流时间：2016年9月1日至2017年3月17日

交流地点：新加坡National University of Singapore, Prof. Yao Shao Qin课题组

毕业去向：美国 Pennsylvania State University, PhD Student

刘畅

学号1310754

毕业中学：

江西师大附中

专业：化学伯苓

学分绩：85.236

专业排名：8/16

交流感言：

Yao Group这个大家庭让我感觉到很温暖。不管是教授还是组里的每位师兄师姐，他们都在我需要帮助的时候给我指导、和我探讨、一起解决问题，他们都让我变得更好，让我的课题一点点充实、成长。这段经历让我接触到了更多专业的知识、科研的思路，让我做事的心态与方法有了很大转变。在自己未来的博士生生活中，我也要做到考虑更加细致、准备更加充分、做事更加从容，用积极的心态去迎接挑战。

国际交流：中长期项目

刘畅国外导师的反馈意见：

Chang is a **young researcher with good potential and devotion**. In the first month Chang was assigned a project on the study of using organosilica nanocapsules to deliver proteins. Though a novice in this area, Chang is always ready to learn. He painstakingly read wide ranging literatures and quickly absorbed the key points to which he needed to pay attention. And in the first several days he learned from our research fellows a variety of necessary experimental skills. By learning to perform his experiments properly and systematically, in the end of that month, he reported to me an optimized preparation protocol of nanocapsules for protein delivery. Another important characteristic of Chang is that he is a methodical researcher who is always prepared for the next. In his monthly report uploaded in our lab intranet he notes down clearly what he has done, what he is doing and what he will do. Chang also has a good habit to record all the problematic issues in his notebook. When problems arose he always discussed with senior fellows and checked his detailed notebook, trying to find out what going wrong. He is a hard-working person who is always perfecting himself and his research project. At personal level, Chang is a gentle and optimistic boy. He is always full of energy. Every time when he passed me by, I would receive a big smile and a warm “Hi, professor”. He gets along well with others in our lab and has demonstrated his excellent social ability to keep a good relationship with group members in his future group. In summary, over the past 6 months, I do see his growth towards a good young scientist in future.

国际交流：中长期项目

交流时间：2016年9月1日至2016年11月15日

交流地点：新加坡National University of Singapore, Prof. Shaoqin Yao课题组

毕业去向：德国读研（申请中，至6.2日收到明斯特大学语言条件录取通知）

王坤梁

学号1310774

毕业中学：

湖南

长沙雅礼中学

专业：化学伯苓

学分绩：84.576

专业排名：9/16

交流感言：

短短两个多月收获非常特别的经历，包括实验室的日常、与课题组教授的相处与当地的文化和语言环境。期间尤其感谢，来自实验室师兄师姐多方面的建议和帮助，以及国内师长亲友的支持与鼓励，使得我能够面对交流期间的诸多困难并做出适当的选择。同时也感谢学院对交流项目的大力推动。

化学伯苓班毕业去向

- 2014届毕业生18人，当年出国5人，当年出国率28%。保送读研13人，保研比例72%。
- 2015届毕业生16人，当年出国5人，当年出国率31%。保送读研11人，保研比例69%。
- 2016届毕业生20人，当年出国11人，当年出国率55%。保送读研8人，保研比例40%。来年出国1人，占比5% 。
- 2017届毕业生16人，当年出国7人，当年出国率44%。保送读研6人，保研比例38%。来年出国3人，占比19%

2016届化学伯苓班毕业生去向统计

序号	学号姓名	国家机构	USNews全球大学排名
1	1210702邸正傲	英国University of Cambridge (转年)	6
2	1213214李浏博	美国University of California, Los Angeles	8
3	1210847李任和	美国University of Chicago	10
4	1210849李哲夫	美国University of Chicago	10
5	1210741刘洛言	美国The Scripps Research Institute	-
6	1210774杨洋	美国Cornell University	21
7	1210810李晓彤	美国Northwestern University	25
8	1210770徐哲	美国New York University	34
9	1210737李日尧	美国University of California, Davis	39
10	1210821裴忆鸥	日本University of Tokyo	31
11	1210771闫鑫	美国University of Florida (转年)	82
12	1210753沈宇	新加坡Singapore Management University	
13	1210696陈锦翔	中科院上海有机化学研究所	
14	1210845李聪	北京大学	
15	1210725金科	复旦大学	
16	1210728郎锟	南开大学	
17	1210864王天一	南开大学	
18	1210815刘珞珈	南开大学	
19	1210817刘月	南开大学	
20	1210769徐亦凡	南开大学	

2017届化学伯苓班毕业生去向统计

序号	学号姓名	国家机构	USNews 全球大学排名
1	1310847王怿冉	美国Northwestern University	25
2	1210752秦修轶	美国University of Illinois at Urbana-Champaign	47
3	1310754刘畅	美国Pennsylvania State University	56
4	1311219孙明康	美国Carnegie Mellon University	67
5	1310734何鹏	美国University of Notre Dame	156
6	1310215牧一江	香港大学	106
7	1310785王梓琛	中科院上海有机化学研究所	
8	1310759刘综赐	中科院上海有机化学研究所	
9	1313051郭富成	北京大学	
10	1310745李亮	北京大学	
11	1310870黄明耀	南开大学	
12	1310456张畅	南开大学	
13	1310774王坤梁	德国待定	
14	1310894郑子琪	转年出国	
15	1310835卢佳	转年出国	
16	1310896朱传洲	转年出国	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