

京都大学若手人材海外派遣事業 ジョン万プログラム
研究者派遣プログラム

英文報告書

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1. 渡航者 (日本語)			
氏名	永木 愛一郎	採択年度	平成 25 年度
部局	工学研究科	電話	
職名	講師	メール	
研究課題名	フローマイクロリアクターを用いた有機金属反応 Organometallics Reaction Using Flow Microreactors		
海外渡航期間	平成 25 年 7 月 30 日～ 平成 25 年 11 月 7 日		
渡航先 (英語表記)	国名：イギリス 大学等研究機関名：ブリストル大学 研究室名等：Aggarwal Research Group 受入研究者名：Professor Varinder Kumar Aggarwal		
2. 渡航の報告 (英文)			
<p>渡航先の研究環境、研究者との交流、研究発表の状況等、渡航中の滞在経験について英語(500～1000語)で記述して下さい。受入研究者と撮影した写真や研究発表で用いた図等について、可能な範囲で別添として提出して下さい。ページ数については増加してもかまいません。 この報告は、ジョン万プログラムの成果として、京都大学ホームページ(英文)などに掲載されることがあります。</p>			
<p>My visit to University of Bristol through John Mung Program has provided me with several valuable experiences which cannot be obtained elsewhere.</p> <p>One of the most important achievements is the promotion of the ongoing collaborative research between Yoshida Lab and Aggarwal Lab. There was plenty of time to discuss about the research with Professor Aggarwal as well as fellow researchers at his laboratory on a daily basis. A number of discussions contributed to the research by helping solve experimental problems, finding new directions for the research and deepening the tie between Yoshida Lab and Aggarwal Lab. The new collaborative research of preparation of chiral boronic ester using flow microreactors was initiated during my stay in addition to the ongoing work.</p> <p>I was given the opportunity of giving a seminar on my own research of organolithium chemistry using flow microreactors at University of Bristol. There were over 40 people attended my seminar. This seminar introduced not only my research at Yoshida Lab but also some of research works at Kyoto University. I received compliments on high standard of the research and keen interests in the research from several scholars and am actively searching potential collaborative work with them in the future.</p> <p>At Aggarwal Lab, all the students had very high dedication for their research projects. Their motivation and performance was very impressive. There were several possible reasons to cause their activeness on their research. Firstly, Professor Aggarwal highly emphasized daily student education in his laboratory management. He valued discussions with students on their research and spent a lot of time on mentoring students on a daily basis. The professor himself</p>			

directly gave advice, instructions and encouragement to all of undergraduate, master degree and PhD students. The direct discussion with the professor let students realize the importance of thier research and therefore helped keep thier motivation high. Secondly, there was always welcoming atmosphere for discussions and exchange of opinions in the laboratory. Professor Aggarwal, other staffs and students had numerous opportunities for group discussions about thier research at weekly meetings, seminars and coffee breaks. During those group discussions, seniors like professors and postdoc researchers tended to act as facilitators and encouraged younger students to give thier opinions. Hence, studnets were trained to think deep about thier research as well as other people' s work and also conduct experiments actively and independently. The student-centered laboratory management worked very well at Aggarwal Lab and significantly contributed on high productivity of his laboratory. This style of management seemed to be adopted in other laboratories at University of Bristol and students had high motimvation overall. I believe this management techinque is benefitial to not only students but also to laboratory staffs and universities by keeping high productivity on research. I would like to adopt this technique now on.

I had a number of worthful experiences during my visit at Aggarwal Lab through John Mung Program. The collaborative research was significantly advanced to the next level and I personally gained invaluable insight to the labaratory management. I conclude my stay was very fruitful and will contribute greatly to future research work and to improve labaratory environment.