

工系3学院学生国際交流基金プログラム

帰国報告書

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所属・研究室・学年： 理工学 電子物理工学専攻 河野研究室 博士3年	
派遣先大学・専攻： ケンブリッジ大学 Engineering Department	
受入研究室・教員名： Stephan Hofmann	
派遣期間： 平成 29 年 5 月 24 日 ～ 平成 29 年 7 月 24 日	
申請カテゴリ： <input checked="" type="checkbox"/> (C1)SERP <input type="checkbox"/> (C2)AOTULE <input type="checkbox"/> (C3-a)部局間協定校 <input type="checkbox"/> (C3-b)全学協定校 <input type="checkbox"/> (C4)その他	
研究(プロジェクト)題目： Single Layer CVD Graphene with Plasmonic Antenna for Highly Sensitive Detection in Terahertz Spectrum	

- A) 帰国後1か月以内に工系国際連携室宛 (ko.intl@jim.titech.ac.jp) にMS Wordファイルにて提出ください。
- B) SERP・AOTULEで派遣された場合は、受入教員の評価書も添付して下さい。
- C) この表紙を含まず、ページ数は2～4ページ、ファイルサイズは3MB以内としてください。
- D) 研究室や宿舎内の様子の写真、図表、イラスト、滞在中のその他の写真などは挿入可です。ただし、それらを掲載する際には簡単な説明を加えて下さい。
- E) 提出された報告書の2ページ目以降を工系のホームページに掲載いたします。また、別途、学内広報誌「東工大クロニクル」の執筆をお願いすることがあります。

報告書必須記載事項

1. 派遣大学の概要(所在地、創立、規模など)
2. 留学準備など
3. 所属研究室での研究概要とその経過や成果、課題など
4. 所属研究室内外の活動・体験(日常生活・余暇に行った事など)
5. 留学先での住居(寮、ホームステイ等)、申し込み方法、ルームメイトなど
6. 留学費用(渡航費、生活費、住居費、保険料)など
7. 今回の留学から得られたもの、後輩へのメッセージ、感想、意見、要望
8. その他 *任意
(留学先で困ったこと/帰国後の進路(就職・進学・長期留学))

東京工業大学 工系3学院学生国際交流基金

帰国報告書

派遣年月:平成29年5月~7月

氏 名:Deng Xiangying

所 属:理工学 電子物理工学専攻 博士3年

派 遣 先: ケンブリッジ大学

The University I applied to visit is University of Cambridge. This is one of the oldest Universities in United Kingdom, and is also one of the most famous Universities in the world. University of Cambridge locates in Cambridge city near London. Its campus locates in center town and west Cambridge relatively, but its colleges locate at most areas of the city. As far as I know, Cambridge University and Oxford University are the only two Universities in UK that has the culture of College. Colleges are different than “departments”. The colleges are like student support agencies, that will offer dorms, student cafeterias, events, and even scholarships to students in the college, exactly the same as the four colleges in Harry Potter. But I was not lucky enough to be admitted to a college.

Before going to Cambridge University, I had lots of preparations. I had checked the weather, transportation, accommodation, and public security information of Cambridge, to make sure that I will be able to experience a safe and convenient visit. There are two main points that need to be careful when visiting Cambridge. There is no subway in Cambridge, while bus is usually not convenient but expensive. The cheapest way for transportation is hiring a bike. For two months stay, hiring a bike takes only 55 GBP, while taking bus may take more than 250 GBP. The second point is that the weather in Cambridge is strange, and that the weather forecast is not trustable. It might be raining everyday at every moment. Considering I have hired a bike, an umbrella is not practical. Instead, a waterproof jacket is the best everyday choice in Cambridge.

It was really difficult to apply for a dorm for only two month, especially that the time I visit was not really during their summer holiday. I finally found a rental house, I have my own bedroom, but I need to share kitchen and bathroom with the other 5 people. The rent was 500GBP per month including all utilities. My housemates are from Germany, Ireland, Nigeria, and China. They are all very friendly. A good English speaking skill really helps building a good relationship between housemates. The foods in restaurants are usually expensive. It may take at least 600 GBP per month on meals if eating out everyday. But cooking at home will save a lot.

My visiting project is about “Single Layer CVD Graphene with Plasmonic Antenna for Highly Sensitive Detection in Terahertz Spectrum”. The lab that I visited is experienced in CVD graphene growth and device fabrication. I have learnt about graphene transfer techniques during my visit, discussed about device design with other lab members, and conducted the fabrication of CVD mono-layer graphene device fabrication. The lab members are all very kind and friendly, and they are all willing to help me. Besides our daily work in the lab, all the lab members always go to lunch together at the student cafeteria. Sometimes

they also go for coffee after lunch. These give everyone a good chance to communicate, chat about daily life, talk about future plan, discuss about experiment progress, and exchange ideas.

There are also various activities to do beyond the lab working. I have went to watch the Cambridge May bumps, tried in-door rock climbing with my housemates, being invited to a formal dinner by a lab member, and traveled to London for sight seeing. It was definitely a great experience visiting Cambridge University, and I am very grateful for being supported by Engineering Department of Tokyo Tech for this visit. I hope that I can set up and maintain a long-term collaboration with Cambridge University, and make contribute to the scientific research in Tokyo Tech.



Group photo in meeting room



Group photo in coffee corner



Photo in student room



Formal dinner in Pembroke College



Cambridge May Bump



Sight Seeing



(次ページ以降に記入してください。)