



東京大学
THE UNIVERSITY OF TOKYO



Corporate Internship Report

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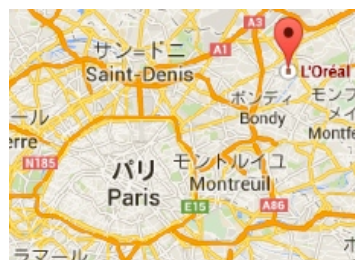
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1 August 2014 – 25 October 2014

L'Oréal R&I Advanced Research, Aulnay-sous-Bois - France

Introduction

The L'Oréal group is the world's largest cosmetic company, headquartered in France. Their sales in 2013 amounted to about €23 billion. L'Oréal has operations in over 130 countries, employing 77,500 people. 3.7% of consolidated sales is invested in research and development, which accounts for 4,009 of its employees in 19 research centers in the world. In 2013, it applied for 624 patents. I did my three months internship at L'Oréal R&I Advanced Research in Aulnay-sous-Bois from 1 August 2014 to 25 October 2014. Here I report what I have done and felt there.



Research Topics

My research theme was "Synthesis and Evaluation of novel dyes for hair" in Hair Coloration Team of Chemistry Department. Current commercial hair coloring products can be divided into two main categories according to the chemistry involved: oxidative coloration and direct (nonoxidative) coloration. In the former method, dye precursors were applied to the hair and then oxidized to afford dyes inside the hair. In the latter method, dyes were directly applied to the hair fiber. I synthesized a novel dye precursor for the oxidative coloration in the first half of my internship, and succeeded to improve its coloration performance compared to that of previous dye precursor. In the second half, I proposed a new concept for the

development of an efficient direct hair dye by combining my expertise in PhD course and enriched know-how of L'Oréal. Although I cannot mention the detail here due to the confidential reasons, I feel I could succeed to trigger the research to demonstrate our concept.

Communication with researchers and interns

I was strongly aware that L'Oréal put an emphasis on communication between colleagues to make trust relationship. In the company, tasks are well divided for efficiency. Thus, making trust relationship and smooth communication are indispensable in order to proceed research rapidly. When you meet close persons like room members, you are supposed to shake hands with men and do "bise (kiss on the cheek)" with women everyday. Appealing that you are open-minded is important to make the relationship better even if you cannot speak French. In addition, a new employee (not intern) will be given the list of people who he will work with in the future, and he has to meet them in lunch or cafe time before the actual collaboration. Therefore, they usually take 1.5 or 2 hours lunch and cafe break to talk about many things. Of course, not only domestic communication but also international network is important. I met a Singaporean doctor and Japanese researcher who temporarily came to Aulnay to make network in France. I think the communication between laboratories in our university should also be promoted further for making an innovation.



Conclusion

I was the first Japanese intern in Aulnay. Acceptance of me is a kind of challenge for them either. I was really happy that I could propose the new concept for novel hair dye and hear that they want accept another Japanese intern in the future. It was definitely valuable to have opportunity working in the company as well as thinking about family and Japan. I renew my pledge that I have to acquire reall skills and go enter the world to work in order to reward the support of many people, foundation and government that I have gotten so far.

Acknowledgement

I would like to first express my gratitude to all members of Hair Coloration Team for their kind backup and teaching me french language and culture. Especially I wish to thank Dr. Aziz FADLI and Dr. Zhibo LIU. Without their help, the successful completion of this project and even surviving in Paris would not have been possible. Although the three months were indeed short, however, working in L'Oréal had already become a part of my life when I finished my internship. I couldn't believe that I really have to leave there on the last day.

I am deeply grateful to my supervisor Prof. Takuzo Aida for providing me with this valuable opportunity by helping me to contact with L'Oréal.

Finally, I wish to thank Program for Leading Graduate Schools (MERIT) for realizing this internship by the financial support to go and live France.

