# 大阪大学工業会海外交流助成金 「渡航報告」

〔教員の部〕

## 海外渡航報告書

知能·機能創成工学専攻 平田研究室 助教 新口 昇

【参加会議】17th International Symposium on Electromagnetic Field in Mechatronics, Electrical and Electronic Engineering(ISEF2015)

【開催場所】Valencia, Spain

【渡航期間】Sep. 7 - Sep. 14, 2015

ISEF2015 は隔年開催で、定期的に参加している学会の1つである。前回はマケドニアのオフリドというアクセスが困難な都市で開催されたが、今回はスペインのバレンシアでの開催のため、アクセスが比較的良好で、前回より参加者が多いように思えた。本学会はロシアや東欧諸国からの参加者が多いが、今回はスペインでの開催ということもあり、西欧諸国からの参加者も多かった。

本会議は、Universitat Politècnica de València (UPV)で3日間開催され、私の発表は学会初日の午後に設定されていた。前日の夕方に、同行した学生がポスターを紛失するトラブルが発生し、ポスターではなく、宿泊先で印刷してもらったパワーポイントを掲示して発表しようと思っていたが、幸運にも学会会場のそばに印刷屋さんがあり、ポスターを印刷することができた。今後は、ポスターの紛失に備え、パワーポイントを印刷しておくべきという教訓を得ることができた。

ポスター発表では、日本人を含むたくさんの方々と英語で議論することができた。ネイティブスピーカーが少ないため、それほど早口で質問されるわけではないが、独特のなまりが入った口調で話す人もいて、質問の意味を理解することが困難な場合があった。しかし、総じて無難に発表を終えることができた。

本会議が行われたバレンシアは、スペインの第3の都市ではあるが、それほど有名な観光地ではない. バレンシアには学生時代に旅行で来たことがあったが、メトロが開通しており、市内の移動が便利になっていた. 学会の空き時間にバレンシア旧市街を観光したが、見どころは少ない上、日中の気温は30℃を超えており、湿度も高く、あまり快適ではなかった. しかし、パエリア発祥の地だけあり、パエリアを中心としておいしい食事を堪能できた.

最後に、今回の渡航費を補助してくださった大阪大学工業会に感謝の意を表します.



ポスター発表



バレンシア旧市街のカテドラル

海外交流助成金「渡航報告」は、提出されたままを掲載しております。

## **Report on Attending the International Conference TMS2015**

Name: Biao Chen (Ph. D student, second year)

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#### Conference activities:

Conference name: TMS 2015 144<sup>th</sup> Annual Meeting & Exhibition

Time and place: March 15-19, 2015

Place: Orlando, Florida, USA

Main activities: giving two oral talks on the conference, titled "Crack Formation in Powder Metallurgy CNT/Al Composites during Post Heat Treatment" and "PM Aluminum Matrix Composites Reinforced with  $Al_4C_3$  Nano-Rods".









Conference hall

My oral talk

Group dinner

Meeting researchers

#### Gaining and Afterthoughts

This is my first time to attend the TMS conference. It is really a big annual event for world-wide researchers on materials science and technology. From the event, I gained much valuable experience to improve my research subject. Since I had to give oral talks, I had the opportunity to share my research progress and to listen to the suggestion from other researchers and experts. This process improved my skills to better present my work and enhanced my understanding on my own study. I also attended many branch meetings on different topics. Some of the topics were quite different from my study, but they were also interesting to me. Some useful information inspired my research ideas. During the breaks, I met and communicated with many scientific researchers studying carbon nanotubes reinforced metallic materials. Some of them are the authors of the articles I have read before. By sharing our interests and viewpoints, I learnt much on the development of metal matrix composites in the world, especially in America. These treasured experiences did a great favor to my researches.

At last, I would like to acknowledge the Osaka University Engineering Society because of its significant financial support for my conference attending.

## Reports on the attendance of the 5th Asian Chromosome Colloquium and 2nd UK-Japan chromosome structure workshop in Bangkok, Thailand

April 29-30th, May 1st 2015

by Rawin Poonperm

Doctoral student, Laboratory of Dynamic Cell Biology (Fukui Lab)

Department of Biotechnology, Graduate School of Engineering, Osaka University

The 5th Asian Chromosome Colloquium was held at Faculty of Science, Kasetasart University in Bangkok, Thailand, on April 29-30th 2015. The conference focused on research works on chromosome science which cover a wide range of study of chromosome structure, chromosome evolution and epigenetics. Several plenary lectures were also presented to introduce about chromosome gnomic and new technology in chromosome research. Although, Chromosome structure and chromosome architecture are the main of my interest, I also learned various aspects of new advances and researches on chromosome study from several researchers all around the world.

In addition, I also joined a special meeting, 2nd UK-Japan chromosome structure workshop which was also held at Kasetsart University on the 1st of May 2015. This workshop is collaboration between University College London, UK and Osaka University, Japan in order to study chromosome structure using various kinds of observation techniques such as microscopy or X-ray imaging. In this workshop, I also presented my current data here and got several great comments and questions from the audiences.

It was a great experience for me to attend international chromosome conference and special meeting at the same time. These expand my knowledge of chromosome and cell biology, and definitely assist me to improve my further study. Therefore, I appreciated the financial support offered by Osaka University that provided me a great opportunity to learn new things in the conference and together gave me a chance to visit my home country.



# Report on the attendance of the 5<sup>th</sup> Asian Chromosome Colloquium In Bangkok, Thailand from 29<sup>th</sup> April 2015 – 1<sup>st</sup> May 2015

Ву

#### Rinyaporn Phengchat

Doctoral student, Laboratory of Dynamic Cell Biology, Department of Biotechnology, Graduate School of Engineering, Osaka University

The 5<sup>th</sup> Asian Chromosome Colloquium (ACC5) was held at Kasetsart University, Bangkok, Thailand and there are many participants, not just only in Asia, attending this meeting. Presentations in this meeting covered all fields in chromosome study ranging from the study about structure and organization of chromosomes to genome study which is encoded in chromosomes.

The topic that I was interested in is about chromosome architecture including how chromatin is organized with in the nucleus and how it condense and form metaphase chromosome during cell division. There are many recently developed microscopic techniques that have been using for study chromosome structure including both optical microscopic techniques (e.g. high-resolution fluorescence microscopy, fluorescence lifetime imaging microscopy) and electron microscopic techniques (e.g. 3D serial block face imaging, focused ion beam/scanning electron microscopy (FIB/SEM)). Interestingly, X-ray microscope which has a resolution near atomic level which is higher than electron microscope was applied for chromosome imaging as well.

In the ACC5, I had an opportunity to present my research as well. Basically in my research, I am using fluorescence microscopic techniques to study chromosome condensation in mitosis under the influence of chromosome condensation factors. And after the presentation, I got many questions and suggestions which are really helpful for my research. So attending this chromosome meeting was a great experience. It is not just for educating how advance the chromosome study is but giving me a chance to present my works to other chromosome scientists also.

