



The York/Tohoku Symposium on Magnetism and Spintronics
Atsufumi Hirohata, Koki Takanashi and Kevin O'Grady

Background

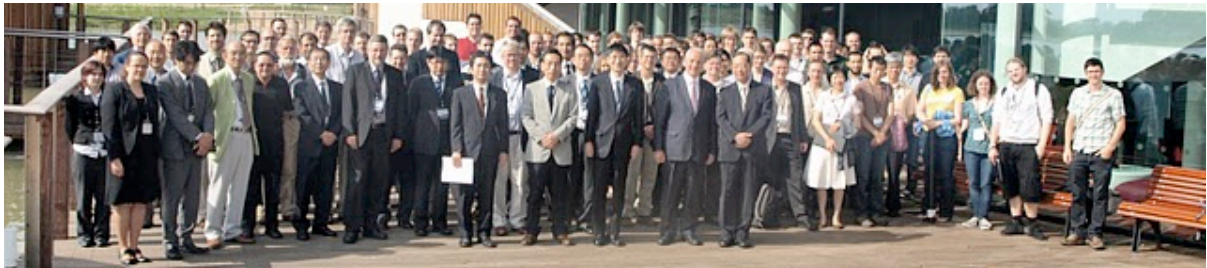
This symposium was originally conceived as part of a series that have been held following the signing of a cooperation agreement between the University of York and Tohoku University in 2006. This agreement was based upon existing collaborations between Professor Kevin O'Grady and Professor Hiroaki Muraoka of RIEC at Tohoku. There was also a strong personal link between the Vice-Chancellor of York, Professor Brian Cantor and Professor Akihisa Inoue who at that time was the Vice President of Tohoku University and is now the President. Generally the joint workshops have been small with perhaps four or five academics from either side being able to visit.

Following the appointment in York of Dr Atsufumi Hirohata the connections to Tohoku University and elsewhere in Japan have expanded significantly. In particular we now have two EPSRC/JST joint projects, one with Professor Hideo Ohno of Tohoku University and the other with Professor Seiji Mitani of the NIMS Institute in Tsukuba. A further strong link with NIMS has been established due to a one year fellowship supported by JSPS for Dr Andrew Pratt of the York Institute for Materials Research who visited Dr Yasushi Yamauchi working in the field of surface analysis. Both the EPSRC/JST grants require us to hold a workshop and a decision was made to merge the two workshops into one. This provided funding for four Japanese professors to visit York.

Dr Hirohata then applied for support from JSPS under their Symposium Scheme for Japanese researchers based in the U.K. and we received support for a further five Japanese scientists to attend the symposium plus a most generous contribution of £2,000 towards the expenses associated with its organisation. Subsequently we discovered that some senior colleagues from Germany also have a joint programme with Tohoku and two senior German academics decided to attend. To achieve a balanced programme we then invited seven senior academics working in the field from other UK institutions to participate in the symposium and many of these individuals decided to bring their students to attend.

A further three senior Japanese professors then decided to fund themselves to attend the symposium resulting in 13 Japanese speakers, 5 speakers from other UK institutions, 2 from Germany and 9 from York. This produced an extremely strong programme.

The Symposium



The symposium was held in the Ron Cooke Hub on the brand new East Campus of the University of York. Accommodation was provided for the invited speakers in a local 4-star hotel with other accommodation being arranged by participants themselves. The symposium proved incredibly popular with the British magnetism community. The Institute of Physics Magnetism Group provided £500 for student travel as did the UKRI Chapter of the IEEE Magnetics Society. This enabled a large number of students to attend but many other academics from UK institutions attended simply because of the quality of the programme. A programme of this quality for a local or even national meeting is extremely unusual and it was noted that we included six former Distinguished Lecturers of the IEEE Magnetics Society amongst the invited speakers.

The symposium opened with a welcome address from the Vice Chancellor of the University of York, Professor Brian Cantor, and remarks from Professor Toshiya Ueki the Executive Vice-President of Tohoku University. A formal welcome was presented by Professor Kozo Hiramatsu on behalf of JSPS.



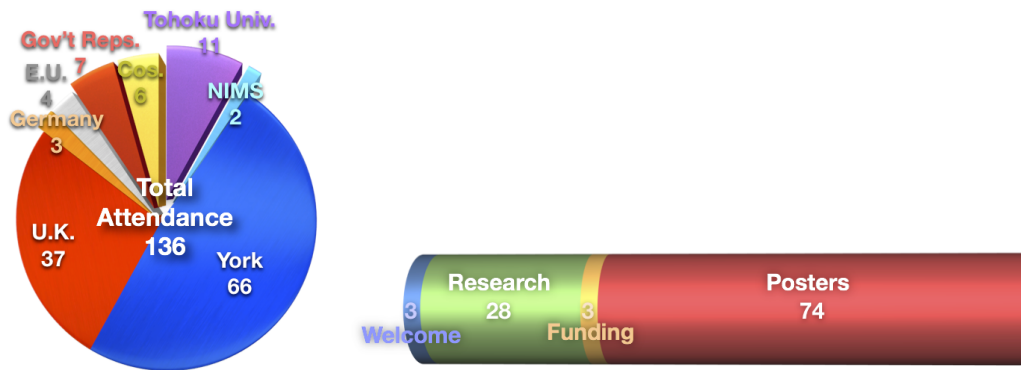
The first day of the symposium had a number of special features as well as 11 invited talks in that a poster session was held in the afternoon where no less than 74 posters were presented by students from many universities and by those academics who did not have invited talks but wished to present their work. Video presentations were also made by JEOL UK Ltd and by the York JEOL Nanocentre which is a cooperative venture between JEOL UK Ltd and the University.



The close of the first day of the symposium saw Professor Hideo Ohno of Tohoku University present the annual Cantor Nanoscience Lecture entitled “Spintronics Meets Semiconductor Integrated Circuits” followed by a wine reception hosted by the University and a formal dinner for all invited speakers and distinguished guests, again supported by the University of York.



The normal sessions of the symposium were attended by 136 people which is a remarkably large group for a meeting here in the UK. A normal Institute of Physics meeting for example would be attended by between 30 and 60 participants.



The attendance for the Cantor Nanoscience Lecture approached 180 as it is a public lecture.

On the Tuesday and Wednesday a further 12 invited talks were given. However on Tuesday a special session was held on the funding mechanisms and collaborative possibilities between the UK and Japan. Presentations were made by Mr Tomo Saito from JSPS, Mr Atsushi Arakawa from JST and Dr Nicolas Guernion from EPSRC, the UK science foundation.

The symposium ended at lunchtime on Wednesday the 29th June and at its conclusion visitors were taken on a conducted tour of the York JEOL Nanocentre and the PRESTO laboratories and laboratories of the Magnetic Materials Research Group within the Department of Physics at the University.



Feedback

Having organised many previous workshops and been involved in the organisation of major conferences the feedback from the participants regarding the symposium was of an extremely gratifying nature. The participants all commented on the amazing quality of the speakers in the programme and the general organisation of the event. Much credit for the latter must go to Mrs Susan Remmer, Professor O'Grady's secretary who undertook the admin duties.

The funding from JSPS in particular enabled us to provide many facilities such as the bus to move participants from the hotel and to the department and to have such a strong programme of Japanese speakers. In fact the support from JSPS was the catalyst which turned what otherwise would have been a small workshop for 20 or 30 people into the biggest magnetism meeting held in the UK for at least the last five years. The organisers gratefully acknowledge this support together with the support from EPSRC and JST which initiated the event.

Future possibilities

It has been broadly agreed following this success that another symposium should be held either in Tohoku University or at the NIMS Institute in Tsukuba. There is a requirement for us in the EPSRC/JST funding to hold such a symposium. However a decision has been made that the next symposium should also be a joint symposium for the two grants and that we will seek further support from JSPS to try and ensure that a critical mass of British scientists are able to attend.

It has also been proposed that we seek to hold more joint symposia with individuals funded through the DAAD programme in Germany. In this way major events can be held by spreading the costs among a number of sources but resulting with a pool of resources which enables a quality event to be organised which is much better than the sum of the parts which contribute to it.

Once again we are very happy to acknowledge the contribution of the sponsoring bodies JSPS, JST and EPSRC and trust that future events of this scale and success can be arranged in the future.



Atsufumi Hirohata
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Kevin O'Grady