

Marie Skłodowska-Curie Innovative Training Network
“Nanoscale solid-state spin systems in emerging quantum technologies”
Spin-Nano Kick-Off and S3NANO Wrap-Up Meeting
29.01.2016
Walter Schottky Institut, Munich/Germany (Venue: room ZNN 001)

PRESENT

- Alexander Tartakovskii - a.tartakovskii@sheffield.ac.uk (Project Co-ordinator)
- Sandrine C Soubes - s.soubes@sheffield.ac.uk (Research Development Manager)
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1	<p>WELCOME/INTRODUCTION</p> <p>F. Reinhard and A Tartakovskii welcomed everyone to the meeting and outlined the agenda.</p>
2	<p>PROJECT PRESENTATIONS</p> <p>There was a 15-minute presentation for each Work Package.</p> <p>WP3 - Exploration of the spin-valley coupling in transition metal dichalcogenides B. Urbaszek (Toulouse), A. Kormanyos (Konstanz), A. Tartakovskii (Sheffield), A. Imamoglu ETH</p> <p>WP2 - Development of applications of spin impurities in diamond for quantum computation, quantum networks and nano-magnetometry</p>

R. Hanson (Delft), B. Pingault (Cambridge), F. Reinhard (TUM)

WP1 - Realization of spin qubits with all-electrical control in materials with spin-less matrices

F. Kuemmeth (Copenhagen), K. Ensslin (ETH), L. Vandersypen (Delft), D. Loss (Basel).

WP4 - Development of microcavity and dielectric antenna technology for efficient photon extraction in applications utilizing spin nano-systems

R. Warburton (Basel), C. Clark (Helia) K. Karrai (attocube)

Materials: Si-Ge, graphene/BN, colour centres in diamond, TMDCs

Techniques: optics and transport

3 PRESENTATION ON GENDER EQUALITY

Dr Sandrine Soubes gave a 30 minutes' presentation on gender equality.

4 DISCUSSION ON THE ORGANISATION/MANAGEMENT OF SPIN-NANO.

A Tartakovskii outlined the organisation and management of the network.

Network Events

1	Kick-off meeting Gender issues workshop	29 Jan 2016	1 0.5	Technical University of Munich
2	Quantum information in condensed matter physics Quantum computing workshop-1	3 - 8 Jul 2016	3 1	University of Copenhagen
3	Project meeting with industry-1 Think Ahead workshop-1	tbc	2 2	Technical University of Delft
4	Mid-term review meeting Think Ahead workshop-2	tbc	1 2	University of Sheffield
5	Nano-spin school-2 Quantum computing workshop-2	tbc	3 1	National Centre of Scientific Research
6	Project meeting with industry-2 Think Ahead workshop-3	tbc	2 2	University of Cambridge
7	International conference " <i>Spin-based quantum information processing</i> "	tbc	4	University of Basel

Staff based in Sheffield

- Dr Sandrine Soubes - Researcher Development Manager (or Training Manager in CA) - s.soubes@sheffield.ac.uk
- Sally Greenhough - Network Administrator - s.greenhough@sheffield.ac.uk

Recruitment

Timescale

ESRs - only 11 months left!

- Any chance for collaboration on this within Spin-NANO?

Rules and obligations

- All fellows to be employed by institutions
- Advertise at EURAXESS job vacancy portal (done for all 15 posts)

Apply mobility rules

Training Programme: initial steps

Importance of training in complementary skills:

- value for recruited researchers
- strong leverage in future grant applications if network-wide training is accomplished at an excellent level

Initial steps by January 2017:

- Training Needs Analysis (TNA) for each ESR
- Career Development Plan (CDP) for each ESR

Role of Researcher Development Manager

- June 2016: Spin-NANO TNA template to be designed following consultation with Researcher Development Units at Beneficiaries
- Aug/Sep 2016: Sandrine to record a video on how to approach TNA
- 2016: Sandrine will provide advice on how to approach TNA and CDP
- January 2017: first round of TNAs and CDPs to be submitted to Sandrine. This is to be repeated once a year (3 times in total)

IMPORTANT: Results of this process will be used to develop network-wide training that will be certified according to ECTS (European Credit Transfer System)

REQUIRED FROM GROUP LEADERS:

- (1) help Sandrine to establish contacts within your Universities;
- (2) encourage ESRs to engage in the process

Network meetings in the next 18 months

ESRs must attend all network meetings

- First meeting – a summer school in Copenhagen in Monday 4 July - Friday 8 July 2016
- Second meeting – ‘meeting with industry’ to be organised by Delft in month 17. Will also combine Workshop 1 on complementary skills training.

Longer term tasks

Outreach

- Allow ESRs to take part in local events, participation will be reported in the network periodic reports
- Next year could decide on a network-specific outreach material (perhaps a video, or set of videos) – need to happen

Secondments

- ESRs will have to do secondments, see proposed programme in the text of the proposal

5	WRAP UP OF S3NANO There was a discussion regarding the predecessor network – S3NANO.
6	There was the opportunity for a Lab Tour following the meeting.