



ESF RESEARCH CONFERENCES

Rapporteur Report

Partnership:	FEBS Workshop
Conference Title:	Biological Surfaces and Interfaces
Dates:	30 June – 05 July 2013
Chair:	Prof. Ralf Richter, CIC biomaGUNE, ES
Rapporteur:	Dr. Jakob Schweizer, University of Oxford, UK

General Comments

Any general comments you might have concerning the conference, your role, the scientific area covered by this conference, etc.

The conference “Biological Surfaces and Interfaces” addressed questions in fundamental research as well as tasks in applied sciences, concerning the role and effect of surfaces and interfaces in biology and in the field of bio materials. The programme covered a broad range of the interpretation of the terms “surfaces” and “interfaces”, whereas among the different presentations, both could be found, talks following a general approach and others which addressed very specific issues and questions in biology, material sciences and methods.

As for my own role, I have to point out that it was the first time for me to attend a research conference in this passive role of a rapporteur. Having participated in a broad range of scientific conferences in the past ten years, I would therefore consider myself as an experienced conference participant, however as unexperienced in the sense of a rapporteur. Being new in this role, compromises both, advantages and disadvantages. One disadvantage is certainly that my ability in analysing and evaluating a scientific conference is not developed in a highly sophisticated manner. On the other hand, the unformed and natural view of a member of the science community participating in a conference without the obligation of a scientific contribution, opens the role of the rapporteur to a very pure view and insight.

I have to admit that while travelling to the conference I became severely ill which prohibited me to attend all lectures and events. Unfortunately, I missed the very first day of lectures as well as few others during the week as I was not always feeling well. I also absolutely regret that I was not able to participate in the excursion to the Dali museum which I think was a great idea for the diversification of the conference programme and at the same time a splendid occasion to get into contact with other researchers in a different environment.

Quality of Scientific Programme, Presentations and Discussion

Comments on the balance and scope of the scientific programme, the scientific quality of the presentations and discussions.

The scope of the conference covered a broad range of questions in fundamental research in biology and problems as well as applications in bio-related material sciences. I had the impression that guest speakers for key note lectures as well for short presentations were carefully selected in order to keep a balanced partition between fundamental research and applied science as well as between biology, biomaterials and methods. The same is true for posters. The overall topic of the conferences addressed the role of surfaces and interfaces in biology and biomaterials while the terms “surfaces” and “interfaces” were interpreted in a very broad manner. This might lead to the impression that the composition of talks could have been arbitrary, however, I think it nicely demonstrated how important surfaces and interfaces are for the understanding of life and the engineering of new bio- or bio-inspired materials.

A random survey among participants revealed that the high diversity of topics was seen as the most critical point of the conference. Some people were of the opinion that the conference topics were perhaps too diverse. However, since the same survey revealed that the overall opinion of the conference was extremely positive throughout all interviewed participants, the scepticism about the diversity is based on a high off-set of positive critics. I had asked the people to name the most positive and the most negative point. So, since the overall reception of the conference was overwhelming, the negative critics have to be seen in a relative manner.

I personally think that the broad scope of the conference is a unique-selling property of this scientific meeting. Often, general conferences are large, lacking the intimacy of a small meeting. On the contrary, small meetings are often highly specialised which makes it impossible to meet people from other research fields and thus to obtain maybe fresh impulses for the own research. The FEBS workshop on Biological Surfaces and Interfaces allows both, to receive new inspiration from other research fields and at the same time, to enjoy the personality and intimacy of a small meeting. On the other hand, the number of participants was sufficiently large enough that every participant had a dialogue partner of its own research field as well.

As far as I can judge it from my standing point of view, most of the talks throughout the entire conference were of extremely high scientific quality. Most guest speakers were also very skilled in presenting complex topics allowing an audience being unfamiliar with a specific subject to obtain a fundamental insight in on-going research from various research fields. I would like to name two presentations which impressed me in particular, both for different reasons.

- Jesus Perez Gil investigated the role of surfactant protein films in the human lung. It was a nice example for the importance of surfaces and interfaces in biology and thus gave insight into questions of fundamental research of the respiratory system. At the same time, the presentation was exploring the potential of artificial surfactant films for medical applications, therefore also covered the field of applied sciences and addressed also the role surfaces and interfaces in the field of material sciences.
- The talk by Mirjam Leunissen was a very fundamental and general introduction to entropy and was more of a text book lecture than a research presentation. Although being a physicist myself, I was absolutely not bored but also learned new things. In my opinion, this talk was an outstanding example of good didactics. I would certainly appreciate more of talks of this type.

The quality of posters was more heterogeneous which might be due to the very heterogeneous partition between experienced and young researchers. However, I appreciated the mixture of quality and the fact having poster sessions with very good and less professional contributions only enhances the diverse character of the meeting.

On one evening, a panel discussion was held about the future of the conference, especially about aims, target groups and title of the meeting. Four senior scientist participated in the panel, however, the entire conference was encouraged to participate. Although these issues are important to discuss, I personally think, that the idea of a discussion that aimed to integrate the entire conference was not very successful. First of all, the question of the title is a rather secondary one – it is the composition of guest speakers and the venue that attracts attendees – and in consequence, discussion never took off but remained very diffuse. One rather interesting question was, how general the conference should be in scientific terms. However, also in this case, the discussion was not very inspiring. This opinion is also shared by many other participants. Secondly, I also have to admit that the moderation of the discussion was not very well prepared and sometimes a little bit chaotic.

In general, I appreciate very much having structured discussions in larger groups at a conference. In fact, I think that scheduled and goal-oriented discussions should be held much more often at scientific conferences. Normally, scientific conference are characterized by power point and poster presentations. Talks are usually characterized by a flow of information in only one direction. At a standard science conference, the usual round of questions after a power point presentation is often limited in time and to two participants of the discussion. Poster discussions are often very specific and since only two or three people participate at once, they lack the dynamics and diversity of a discussion in a larger group. In contrast to a “standard” conference, there was enough time and space for discussions after the talks at the Biosurfaces and Interfaces conference, and the intensity of discussions after talks and posters was extraordinarily profound. However, I definitely would appreciate more topical discussions at scientific conferences which focus on specific scientific and technological questions (“What is the next important question to resolve in topic XY?”, “How can we measure this and that?”). I also believe that such discussions work better in smaller groups. One option for conferences like Biological Surfaces and Interfaces could be that people can decide to participate in several different open space or brainstorming groups, all running in parallel and each dealing with a different topic in a very intensive manner. The outcome of each discussion group could be then presented in a short summary at the end of the conference. I think that such a programmatic feature would enhance the dynamic character of a scientific conference dramatically.

Informal Networking and Exchange; Atmosphere

Was the schedule and the atmosphere conducive to an easy exchange of information? Was there time and space for an informal discussion? Were younger researchers integrated?

The conference was held in a hotel that was built into the rock landscape at the seaside of the city of Sant Feliu de Guixols. Due to the embedding of the hotel into this specific environment, the location had a very special and attractive character. In addition, the hotel also featured two swimming pools and had direct access to the Mediterranean Sea, which both enhanced the attractiveness of the conference location. This attractiveness certainly helped to keep conference participants on location and prevented that participants spreaded out over the city. Keeping people together also in their free time is a necessary prerequisite in order to provide the boundary conditions for intense networking. In the case of a less attractive conference venue in an attractive surrounding like for example a big city, it is much more likely that conference attendees spread and come less into contact. At the Biological Surfaces and Interfaces conference, people spent free time between the talks and evenings together at the pool or in the gardens of the hotel.

The schedule of the programme made an effective use of this potential possible. Talks started were held between 9 am and 12:30pm and from 4 pm to 9:30 pm. The free afternoon was too short for participants to “flee” – for example to the city centre of Sant Feliu de Guixols – but long enough to relax together with other participants in the hotel garden, at the pool or in the sea. In addition, all meals were consumed together in a highly communicative atmosphere. Poster sessions were held in the late evening, at a time when people are normally too tired to listen to talks but are still willing to participate in the more active communication of a poster discussion. During poster sessions drinks were provided through the hotel bar and financed by the conference sponsors which certainly helped people to get into contact.

Balance of Participants

Was there an appropriate balance between young and senior participants? Was a balance of national groups and researchers from different (sub)fields achieved?

The partition between young and senior participants was well balanced ranging from under graduate students to retired and esteemed professors. By this, younger participants could profit from the experience of senior scientists whereas these were certainly enlightened by the curiosity and energy of younger scientists.

I also would like to point out, that the number of participants was just perfect. 144 participants is sufficiently large so that at a conference of such broad interest still everyone can meet someone from the same field. The number of participants is also high enough to meet someone new every day but on the other hand not too large so that for example an anonymous atmosphere would evolve. I would recommend the conference organizers to maintain the number of participants as it is.

Outlook and Future Developments

Will new collaborations emerge from this conference? (How) could the conference outcomes be utilized further? Are there suitable (ESF) programmes or instruments to further the work of the conference?

Speaking for myself, I have to admit that I could not find a potential for a future collaboration for my own current work. However, for my previous projects, this conference would have been definitely helpful. As far as I noticed from other participants, the level of interaction was very high. I cannot name any specific potential collaborations between participants but overseeing the variety of presentations and posters, there was definitely overlap for several topics.

Follow-up

What immediate and long term follow-up would benefit collaborations and dialogues that may have begun at the conference?

I think that the conference and interactions between participants had a large impact on everyone. The sustainability of this impact could be certainly enhanced by after-conference measures such as maybe a summary report focusing on the scientific topics and discussions. This summary report or documentation could be written by a single or few persons or maybe collectively by the entire conference. I could, for example, imagine something like a “conference wiki” like Wikipedia, in which each article is dedicated to a talk/poster with a discussion page (like in Wikipedia) where people could continue discussion on the specific talk or topic.

Likewise, networking could be intensified and prolonged with help of social networking media like Facebook, LinkedIn etc. For example by a group in Facebook could be created, dedicated only to the conference. People could – voluntarily – subscribe to the group and by this contact other conference participants more easily. This could also help

the conference organizers to collect feedback from the participants and suggestions for future conferences. Such a conference group on Facebook or any other social media would be also helpful when someone wants to obtain information years after.

Organisation and Infrastructure

Were venue, catering and accommodation appropriate for this conference? Were participants satisfied with the on-site administration and support?

As discussed above, the venue was perfect due to its high attractiveness on one hand and its remoteness on the other hand. Catering and accommodation was of high quality and the only disadvantage was maybe the presence of mosquitos. A small and random survey revealed that every participant was highly satisfied with venue, catering and accommodation as well as the support by conference organizers and hotel management. I did not hear a single cause for complaints.

Summary & Overall Assessment

Was the conference successful; were its aims achieved?

I think that the main aims of this conference was to bring together people from various research topics within a broad range of life sciences and bio-related material sciences, to give an insight into different fields of research at a high level while broadening the scientific view of the single participants. This was definitely achieved. For a further assessment of the impact of the conference monitoring measures like the above mentioned wiki of social networking could help to evaluate the overall assessment.

Oxford, 22 July 2013



Jakob Schweizer

About ESF Research Conferences

The Scheme

This conference is part of the European Science Foundation's (ESF) Research Conferences Scheme. The Scheme aims to promote scientific excellence and frontier level research throughout Europe and the rest of the world. Conferences aim to provide leading scientists and other participants, including young researchers, with a platform to present their work, to discuss the most recent developments in their fields of research and to network.

Conference Format

The core activities should be based on lectures by invited speakers, who are leaders in their respective fields, followed by extensive discussion periods. An informal exchange of ideas, both inside and outside the lecture room, should be encouraged, and the number of sessions in the daily timetable should be limited in order to allow sufficient time for interaction between the participants. Time should be reserved for a 'Forward Look Plenary Discussion' about future developments in the field.

Participants can take all their meals together to encourage further contact and networking, which can be particularly beneficial to younger researchers who may be less outspoken in the formal lecture room setting. In order to gain optimum benefit from the conference, both the speakers and the participants are asked to stay for the whole duration.

Division of Tasks

The Conference Chair is responsible for ensuring the quality of the scientific programme through the selection and invitation of speakers, and through the selection of participants.

The ESF Conferences Unit is responsible for managing all the logistical aspects of the conference organisation, including the provision of an on-site secretariat.

Further information: www.esf.org/conferences