

AMORPH 2014 Conference Summary

AMORPH 2014 brought together 66 academic and industrial scientists who are active in, and share a common interest in, the amorphous state. The symposium addressed both fundamental issues and practical applications of amorphous materials, principally in the food, pharmaceutical and biotechnology fields. Although subtitled "The Felix Franks Symposium: A Celebration", in honour of his extraordinarily long and distinguished career and his countless critical contributions to the subject area, including a number of seminal ones, the conference was not primarily a retrospective look at the development of our understanding of amorphous states in food and pharmaceutical sciences. Rather, it was intended to reflect state-of-the-art science and technology, and to look forward to future developments.

AMORPH 2014 (held July 14-16 at Girton College) was the fourth in the series of Amorph Conferences held at the University of Cambridge in the U.K. The original Amorph Discussion Symposium, principally conceived and organized by Felix Franks, under the management of his BioUpdate Foundation, was held at Girton College in April of 1995. The second and third, follow-up Amorph conferences, also convened and principally organized by Felix and sponsored by the BioUpdate Foundation, were held in May of 2001 and July of 2006. The proceedings of the first two Amorph conferences were published by the Royal Society of Chemistry in 2002, in a (purple!) book entitled 'Amorphous Food and Pharmaceutical Systems', edited by Harry Levine.

AMORPH 2014 was organized by a core Committee comprised of Tony Auffret (BioUpdate Foundation), Evgenyi Shalaev (Allergan/University of Minnesota), Christopher Roberts (University of Delaware), and Louise Slade and Harry Levine (Food Polymer Science Consultancy), with significant administrative assistance from Andre Schram (BioUpdate Foundation). The Organizing Committee was also grateful to each and every session co-chair who reviewed abstracts, suggested participants, and shaped the conference into what it became.

The program of AMORPH 2014 comprised five half-day sessions, each of which was led by two or three co-chairs and included a Keynote oral presentation by a recognized expert in the field, followed by five to eight contributed talks by participants, invited by the session co-chairs. The five sessions were as follows:

- (1) Fundamentals (A): Water, aqueous solutions, and glasses: Carbohydrates and proteins in aqueous solutions and glasses. Keynote speaker: Thomas Loerting, University of Innsbruck, Austria.
- (2) Practical applications/aspects (A): Amorphous states in food systems. Keynote speaker: Yrjo Roos, University College Cork, Ireland.
- (3) Fundamentals (B): Water, aqueous solutions, and glasses: Supercooled aqueous systems and aqueous glasses. Plenary Keynote speaker: Austen Angell, Arizona State University, USA.
- (4) Practical applications (B): Amorphous states in pharmaceutical systems. Keynote speaker: Lian Yu, University of Wisconsin-Madison, USA.
- (5) Practical applications (C): Amorphous states in biopharmaceutical and biological systems. Keynote speaker: Mike Pikal, University of Connecticut, USA.

The program also included an evening Poster Session with 16 poster presentations, which was generously sponsored by the Royal Society of Chemistry. The written abstracts submitted for each oral or poster presentation were compiled into a single uniform electronic document and provided in

advance via email to each registered participant. The proceedings of AMORPH 2014 will not otherwise be published in any form.

One of the most special highlights of AMORPH 2014 was an after-dinner talk by Felix Franks, the Guest of Honour, during which he shared with the rest of the participants a brief "version of his career, those (mainly deceased) who influenced the direction of that career, some words about those present with whom he worked at various stages, the Exuberera years", and other remembrances that were surely of great interest to all the other conference participants.

The enthusiasm shown by all who shaped this conference was a testimony to the help and support which Felix Franks has so characteristically shown to so many people during his lifetime. Felix has been a friend, a colleague, a teacher, a role model and an inspiration. This was our "Thank You" to him.

All post-conference feedback to the Organizing Committee, from many of the participants, indicated unanimous enjoyment of the unique experience of AMORPH 2014!