Newsletter 56, April 2014

International Association of Colloid and Interface Scientists

In this newsletter you will find the following topics:

From your Newsletter Editor

This time, the newsletter contains a variety of contributions but also some important announcements regarding upcoming events.
Around this time, you should also find a request for paying the member fee in your mail box if you did not already pay in one or another way. From 2015 on, the fee will be collected together with the registration fee for IACIS2015 as you can read in the previous newsletter.
We hope you enjoy reading this contribution.

IACIS2015 Conference in Mainz

Rheingoldhalle, Mainz

The preparations for IACIS2015 in Mainz are progressing well. The contract with the venue, the Rheingoldhallen, is signed. The Rheingoldhalle is directly situated at the bank of the river Rhine, 10 min walking distance from the center of Mainz and its cathedral. The conference dinner on Wednesday May 27, 2015, will take place in the so called Kurfürstliches Schloss Mainz, which used to belong to the archbishop, also elector of the emperor. We hope to organize a visit of the cathedral including a choir concert before the dinner. We further negotiate to include a five days ticket for public transportation in the conference fee.
Two sessions, one on wetting and one on responsive systems, will be organized by the German Colloid Society.
For more information, please consult the Hans-Jürgen Butt.

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Announcement on IACIS2018 and IACIS2021

The Standing Committee is pleased to announce that the IACIS Council has decided on the locations of the 16th and the 17th IACIS Conferences. IACIS2018 (16th) will be held in Delft, the Netherlands and IACIS 2021 (17th) in Brisbane, Australia. This time, IACIS received two proposals for the venue and organization of the 16th IACIS Conference in 2018; a proposal from Ger Koper (Delft University of Technology) and Mieke Kleijn (Wageningen University) for Delft, and one from Ian Gentle (University of Queensland, Brisbane) and Greg Warr (University of Sydney) for Brisbane. Because the proposers for IACIS in Delft are members of the Standing Committee, all responses from the council members were handled by myself together with Dennis Prieve and Reinhard Miller. In initial responses from the council members, many have indicated that two proposals are outstanding, and suggested that two proposals should be considered for 2018 and 2021 with clear favor of Delft in 2018. Based on these responses, we have proposed the IACIS Council to hold IACIS2018 in Delft and IACIS2021 in Brisbane, and all of the council members voted "Yes" to this proposal. The Standing Committee would like to express its gratitude for receiving such excellent proposals and the efforts by the proposers, and to the council members for their constant support and collaboration for IACIS activities.

Kazue Kurihara, IACIS President.

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Brothers and Sisters

The Asian Society for Colloid and Surface Science, ASCASS, was established in Kolkata in 2004. The Society aims to promote the exchange of scientific knowledge by and between scientists and professionals from different countries in Asia, encouraging a profitable regional cooperation. Today the ASCASS counts members from many different countries, and coordinates 8 regional societies: China, India, Japan, Korea, Pakistan, Russia, Taiwan and Thailand. Since 2005, the Society organized five International Conferences (ACCIS), which saw the participation of more than 800 academic and professional experts in the fields of Colloid and Nano Science.

For more information, please consult the ASCASS website.

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First Australian Colloid and Interface Society Newsletter out!

The Newsletter team consisting of Chiara Neto, Catherine Whitby, and Ian Gentle has produced the first issue of ACIS News! Apart from society news, it contains announcements, and a report on the latest student conference Melbourne.

For more information, please consult the ACIS website.

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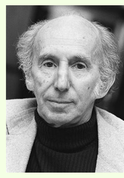
The Vroman effect



Leo Vroman (1915-2014)

On the 22nd of February, Leo Vroman, a prolific poet mainly in Dutch and an illustrator, passed away at the age of 98 in Fort Worth (USA). In 1946, he published his first poems in the Netherlands, and since then has won almost every Dutch literary poetry prize possible. On poetryinternationalwerb.net we find about him: *Leo Vroman is the "grand old man" of Dutch poetry. He began writing poems well before World War Two and is still regarded as one of the most lively poets writing in Dutch. This liveliness has much to do with the form and tone of his work, at once loosely conversational and full of ingenious rhymes and playful neologisms.*

So, a poet died ... and a dutch one at that! Why should we care?

It is indeed not because of his poetry that Leo Vroman is remembered here. He was a scientist, a hematologist to be more precise, that discovered the now called Vroman effect which is exhibited by blood serum protein adsorption. The effect is, that proteins with the highest mobility, and not necessarily with the highest affinity, arrive first to the surface and adsorb. The slower proteins arrive later and replace the first-comers when they have a higher surface affinity. This does require some mobility of the already adsorbed proteins. The classical example is when fibrinogen displaces earlier adsorbed proteins on a biopolymer surface to be subsequently replaced by high molecular mass kininogen.
The topic has been studied for over 50 years by now and in 1992 a *Festschrift* appeared in honour of Vroman's 75th birthday that was fully devoted to this. As of today scientists are investigating the effect. On the one hand, one tries to find a rationale for the behaviour and on the other hand there is the desire to obtain better control for biomaterial design and maintenance. What is maybe the most striking phenomenon is that protein adsorption is at least partially reversible; for synthetic polymers this is at times hard to achieve. But then, protein replacement is also far from trivial involving "tricks" like head on adsorption of the second to the first, turning around of the complex, and subsequent detachment of the first from the second that is now adsorbed at its bottom. It will be some time from now before such a trick will be performed by a synthetic molecule.
Leo Vroman himself called himself unbelievably lucky to observe the phenomenon and to do further research on it. His driving force was the development of blood-compatible materials, a topic that he followed until late in life. Even in 2009 he contributed a review where he enthusiastically reports on the development of live blood vessels. Indeed, he significantly contributed to his field but the effect is surely of interest to Colloid and Interface Scientists as well.

Ger Koper, NL editor.

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Vacancies

Communicated by Shlomo Magdassi, The Hebrew University of Jerusalem:

A *post doctorate position* is available withing an EU Marie Curie project CoWet. The project is aimed at studying wetting and spreading of conductive inks on various substrates. For more details on the program follow the above link.

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