



CALENDER OF FORTHCOMING EVENTS 2009

October 14th Tribology, Polymers and Powders, The Institute of Physics, London

October 15th Analysis of Inhaled products, Royal Society of Pharmaceutical of Great Britain, London

December 16th Powder Flow 2009, Joint FSTG / Dechema Event, Burlington House, London

December 16th FSTG Annual AGM, Burlington House, London

CALENDER OF FORTHCOMING EVENTS 2010

March 17th Characterisation of March 17th sub-micron and nano sized materials, Royal Society of Pharmaceutical of Great Britain, London

June 7-10, Formula VI, Aula Magna—Stockholm, University, Sweden

The FSTG sponsored a session entitled "Formulating for the Green Renewable Age" at the 42nd IUPAC "Chemistry Solutions" conference in Glasgow in August, this event was attended by 2000 members.



Our first IChemE collaborative formulation event called "Novel approaches to formulations — from concept to product" was held on the 17th of September. This inaugural event was attended by 65 delegates with over two thirds from industry. Prof Ian Norton of the School of Chemical Engineering at the University of Birmingham opened the conference with a fascinating insight into how his group is developing low fat foods to tackle the world's growing obesity problems. Prof Norton made a particularly memorable statement in that for the first time in history the life expectancy of our children is less than that of their parents !

Another highlight was Prof Hugh Stitt from Johnson Matthey who continued the Formulated Products theme and demonstrated how the microstructure of catalysts is crucial to their performance. The lunches and coffee breaks allowed ample opportunity for people from different industrial sectors such as food, fast moving consumer goods, pharmaceuticals, agrochemicals and aerospace to network and find potential solutions to their formulation problems. We plan to hold another conference with the IChemE and would welcome suggestions for talks.



We would also like mention that we are developing a joint event with Dechema at Burlington House on December 16th, more details later. We are also planning to develop a "Formulation Car Boot" event with CIKTN, more details to follow soon. To view further details on any of our events see the column on the left hand side of the newsletter. Alternatively, links to more detailed information can be found on the conferences page of the FSTG website:

<http://www.formulation.org.uk>

FSTG AGM

December 16th, Burlington House,
London

We look forward to seeing you at the annual FSTG AGM on December 16th at Burlington House, London.

For further information
visit: [http://
www.formulation.org.uk](http://www.formulation.org.uk)

Thought for the Month:

However beautiful the strategy, you should occasionally look at the results. *Winston Churchill*

Become a Member:

<http://www.formulation.org.uk>

Member Focus

FSTG Student Bursary Scheme

We want YOU to tell us about yourselves in this section– if you'd like to take part and you have anything particularly exciting to tell us contact me, Lyn Daintree on our website

www.formulation.org.uk/contacts.html

Organization:

Job title:

FSTG member for:

Research interests:

The **Gordon J. Tiddy bursary** is an award made for the purpose of assisting in travel to conferences in the UK and overseas. Bursaries are provided solely to offset the costs of travel and accommodation and are normally limited to a maximum of £500. The bursary scheme does not cover meetings organized wholly by the FSTG within the UK, for which alternative grant or discount schemes may be organized by the meeting committee as it sees appropriate.

Applicant Eligibility: Applications may be made by any FSTG member, and will be considered on the basis of merit and need. Applicants must be members of at least six months standing and must not have already received an FSTG travel bursary in the previous 2 years.

Application Process: Applications must be made online using the form on the FSTG website (www.formulation.org.uk) and will be considered by the review panel (the officers of the FSTG) on an *ad hoc* basis; there are no fixed application deadlines. Applicants' attention is drawn to the requirements detailed in the notes on the website by which applications are bound.

Some conditions may be waived at the discretion of the review panel, and applicants are always encouraged to contact the current secretary or chairman of the FSTG for advice. All awards are made at the discretion of the review panel whose decisions are final and binding.

What is Green Chemistry?

If you look on Wikipedia then Green Chemistry is defined as "a chemical philosophy encouraging the design of products and processes that reduce or eliminate the use and generation of hazardous substances". It also lists what it calls the twelve principles of green chemistry.

These are 1. Prevention of waste, 2. Less hazardous chemical syntheses, 3. Use renewable feedstock, 4. Use catalysts, 5. Avoid chemical derivatives: 6. Maximize atom economy: 7. Use safer solvents and reaction conditions: 8. Increase energy efficiency: 9. Design chemicals and products to degrade after use: 10 Analyze in real time to prevent pollution: 11. Minimize the potential for accidents: 12. Design safer chemicals and product

If you look at the list, these are the parameters that any industrial/formulation chemist would consider when developing any new product from laboratory scale through to product launch. Many of aspects of green chemistry such as prevention of waste, catalyst usage and atom economy are key in minimising production costs. I therefore hope that most chemicals are already practicing some aspect of "Green Chemistry"

However, if you ask a consumer what they believe "green chemistry" is, it would probably involve something "natural", non-toxic and kind to the environment. One area in particular where this image has been exemplified is in cosmetics. A number of companies have pushed Green Products as those made purely from natural products. However, the toxicity/ecological profile of many natural products and fragrances have never been tested. The effect on the environment of harvesting these materials is also not considered by consumers. None of which match the criteria above for being "Green". This is not to say that some producers are producing sustainable products.

So what is "Green Chemistry"? I like the ethos that Green Chemistry is minimisation, be it energy, chemicals or waste, which in the long term must be a benefit to us all?

December 16th Powder Flow 2009

Practice, Theory, Visualisation and Meaning

A one day seminar organised by the formulation group of the RSC on powder flow will be held at Burlington House, London on December 16th. The seminar will journey through the latest, most up-to-date knowledge and practice on powder flow measurement as a way to understand powder interactions and structuring.

Leading scientists will present their work on the measurement and understanding of powder flow, with a focus on powder rheology as a tool to elucidate particulate interactions in phenomenon such as fluidisation, aerosolisation and handling of solid particulate matter. In addition, theoretical understanding of powder flow, and their visualisation with the latest laser technology will be presented.

The conference will cover 3 themes: practice of powder flow measurement, visualisation of powder, theory and its physical meaning to understand particulate systems.

It will be especially relevant for those industrial and academic scientists active in the fields of solid state colloid science, physical chemistry, chemical engineering and formulation science and technology. For more details, please see our website <http://www.formulation.org.uk>.



Disclaimer: The views presented in this newsletter do not represent those of the collective memberships of either the RSC or FSTG or individual members. Unless otherwise stated, the views solely represent those of the authors.