

UK SAMPE News

The Newsletter of the SAMPE UK & Ireland Chapter

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McCarthy's Lore

Chairman Roy McCarthy writes:

"As we enter my umpteenth year as Chairman of the UK Club and UK & Ireland Chapter I look back with interest at the changes that have taken place over the period. Clearly the markets for M&P, particularly composites, have moved forward very successfully. However the nature of business has changed and sadly, with a few sterling exceptions, we no longer enjoy the same level of commitment and support from industry that we once did. Nevertheless I am gratified that, despite the continued erosion of the manufacturing base here and intense cost competition from elsewhere, UK industry still leads the way in many areas of technology and manufacture. I am also encouraged that we still have one of the most enthusiastic and active SAMPE chapters in Europe and I pay tribute to the hard work of the Chapter Committee for keeping us at the forefront.

"2002 was very successful for us and, as you will see from these pages, we have another great year in prospect. With your support it will be even better than last year! Cheers."

Roy McCarthy

Marine Technology Conference Takes Shape

Arrangements are well in hand for the SAMPE UK & Ireland Chapter Conference on Marine Composites Technology, in collaboration with Plymouth APMC, to be held at Plymouth University on 11 & 12 September 2003. Conference co-ordinator, APMC's John Summerscales, has come up with a great outline for the programme, which has already generated substantial interest from a variety of specialists in a variety of topic areas including design, manufacture, performance, NDT, environmental implications & legislation, and applications. The event is being staged at the Sherwell Conference Centre, Plymouth – a special purpose auditorium and media centre

with accommodation facilities nearby. John Summerscales reports on the recent Conference Technical Committee meeting: "The programme is taking shape very well. We have invited a number of specialist speakers, all experts in their respective areas, and we had a good response to the call for papers. But we always need more input and I should still like to hear from anyone interested in presenting a paper." Details of the Conference are on the APMC web site at <http://www.tech.plym.ac.uk/sme/acmc/sampeconference.htm> and information is also available from John Summerscales at APMC, Plymouth on 01752 232651.

Research Students Excel at London Seminar



Agnes Ragondet



Shumit Das

Following their excellent presentations at the UK & Ireland Student Seminar held at the IoM in London in November last year, Agnes Ragondet and Shumit Das will carry the Chapter's hopes for further success at the SAMPE International Students' Conference in Paris, April 2003. *Agnes Ragondet* (27), studying for a PhD at Nottingham, presented a paper entitled "*Design and Manufacture of an innovative lightweight composite semi-trailer*". Agnes, from Dole, France, previously studied at ESIGEC in Chambéry and has also had industrial experience at Aston Martin Lagonda involved in the development of RTM components for the Vanquish programme. *Shumit Das* (23) is a post graduate Aeronautics

student at Imperial College, London. His paper dealt with "*The interlaminar response of Z-fibre reinforced composites*". Shumit from Epsom College, Surrey has a MEng, also from Imperial. Previously sponsored by GKN, Shumit has industrial experience at the Group Technology Centre in Wolverhampton and GKN Aerospace, Cowes.

Student Co-ordinator Geoff Gould is delighted with their success: "We have two excellent representatives in Agnes Ragondet and Shumit Das. With previous International Student Conference winners in 1999 (Ben Souter, Nottingham) and 2002 (Judith Roether, Imperial) the Chapter has an outstanding track record to maintain and the competition gets tougher all the time, but I am confident that they will do very well. As always, selecting just two from seven very good presentations was difficult and I would like to express my thanks and appreciation to the other students who entered – and their respective supervisors. The event was organised in conjunction with the IoM³ and I am very grateful to the IoM for their excellent facilities and to Andrew Foreman for all his help and cooperation."

*Joint Meeting with
NUCC at Cranfield*

The Chapter's collaboration with Nottingham University Composites Club (NUCC) continues and the latest in a long line of highly successful joint events took place at Cranfield on 11 December last year. The meeting with the theme 'Automated Manufacturing' attracted over 50 attendees, who were enthralled by five high quality presentations:

Liquid Moulding of Thermoplastics, Composites, Conchur O'Bradaigh (*National Univ. of Ireland, Galway*); Rapid tools by spray forming, Patrick Grant (*Oxford University*); Application of Resin Infusion Techniques to Lightweight Automotive Components, Andrew Mills (*Cranfield CLC*) Challenges for the application of Composites in Sports Cars, Martin O'Connor (*AE Technologies*); Quickstep - High Speed Advanced Composites Processing, Bob Griffiths, (*ERG Ltd*). Chapter chairman Roy McCarthy was pleased with the day: "The two organisations work well together and our joint events are a great place to exchange news and views.

Members' Corner

◆ Several SAMPE members were amongst an audience of more than 100 who attended the **free seminar** organised by **Faraday Advance** in conjunction with DTI on 6 February, also at Cranfield, reporting on a UK Technology Mission to Germany & Switzerland – *Trends in Hybrid Metallic, Polymer and Composite Structures*. Interestingly the Mission concluded that whilst German car makers are perhaps ahead in terms of commitment to composites/hybrids in volume production, the UK definitely leads in terms of M&P technology.

◆ **Christian Marston** of Sumitomo Corp, London reports that the company is still keen to appoint a sales specialist for their carbon fibre products in the UK and other markets. Anyone interested should contact Christian at christian.marston@sumitomocorp.co.jp

*'Winds of Change' on the
Island*



"Good job we didn't have sprouts for lunch, otherwise that blade behind us would have been off like a rocket."

More than twenty chapter members made the trip across to the Isle of Wight on 9 October 2002 for a combined visit to NEG Micon and SP Systems, two exciting companies, both leaders in their respective fields. NEG Micon (formerly Aerolaminates) are the UK's largest manufacturer of wind turbine blades and one of the leading players in Europe. Ian Chatting, NEG Micon's Head of New Product Development gave a superb review of how the wind energy business is growing and the tremendous potential for the use of carbon fibre in future large blades (up to 52 metres and beyond!). NEG Micon have increased their production five fold in just over a year and Ian says there is much more to come, all of which had the carbon fibre suppliers in raptures. A tour of the production facilities followed and we saw how traditional GRP boat building skills are being combined with newer techniques such as resin infusion to generate some extremely impressive structures.

Then on to SP Systems, just across the road, which is now part of the Swiss Gurit Materials Systems Group. SP

Systems manufactures a range of advanced pre-preg systems and adhesives and over the past several years has transformed from a small niche producer to a major specialist materials manufacturer, focussing particularly in the automotive, marine and wind energy markets. After a tour of the superb new offices and development labs we were given an impressive practical demonstration of SP's SPRINT system. SPRINT allows high quality parts to be made "out-of-autoclave" and is now finding applications in a number of marine and automotive programmes.

News & Events

The SAMPE International Conference takes place 1-3 April 2003 as usual alongside JEC and again will be at the Paris expo site at Porte de Versailles. This year it's the German Chapter's turn to organise the technical side of the Conference. Technical Committee chairman Klaus Drechsler reports good progress towards another excellent high quality event with a record 70 papers running in parallel sessions over the three days. Details are available via e-mail request to sampe@stesalit.com and the web site at www.sampe-europe.org.

AGM and Industry Visits. The Chapter AGM is scheduled for **April/May 2003** at a venue, to be confirmed, in the North of England. Look out for details via e-mail and on the web site.

Dates for Your Diary, 2003

February 6	Seminar – Trends in Hybrid, Polymer and Composite Automotive Structures	Cranfield
April 1-3	24 th International SAMPE Europe Conference and Forums	Paris, expo
April/May	AGM and Industry Visit	To be finalised
May 11-15	SAMPE 2003 Conference & Exhibition	Long Beach, USA
Sept 11-12	Marine Technology Conference	Plymouth