**Chairman’s Report**  
Richard Harding

I hope you enjoy the latest SID UK & Ireland Chapter Newsletter. It is almost six months since the AGM meeting where I was elected your Chairman and a good time to reflect on our activities.

I remember the previous Chairman’s report written by Grant Bourhill, with a strong emphasis on the rich use of displays in our daily life. Looking around, I see this trend is still very much continuing and further improvements are continually being sought. As such, the SID community should be well placed for many years to come.

Turning specifically to the UK & Ireland Chapter, we have spent some time looking at what we offer and made some changes – key parts of which are summarised below. We also considered how to increase our profile further. In part, this concentrates on actively informing and involving students, and targeting ‘new’ industrial sectors – related to displays, but traditionally under-represented at SID meetings. Free membership is now being offered to full-time students (more details at http://www.sid.org/chapters/uki.html).

I also consider it an important part of the Chapter to provide a forum for young researchers, and the Sharp-SID Award 2007 (http://www.sid.org/chapters/uki/award.html) was also presented at this meeting to Dr Carl Brown (Nottingham Trent University), acknowledging his work on ‘Organic Electronics’. For this event we specifically targeted student participation. The seminar had a mixture of keynote invited speakers and student oral contributions along with a poster session – the best poster being awarded a prize of £500 thanks to Merck.

Altogether this was a great success, the meeting was relaxed and informative, the students made a significant contribution and the event was well attended. Following this success we plan to run this event again.

The latest meeting ‘Successful Displays by Design’ was held at Bletchley on 17th October and was held jointly meeting with UKDL. In addition to an interesting line-up of speakers, detailing the latest efforts to improve display usability, the Ben Sturgeon Award 2007 was also presented at this meeting to Dr Carl Brown (Nottingham Trent University), acknowledging his work on alignment of liquid-crystal materials.

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More recently (17-18th Sept) we held a trial two-day meeting on ‘Organic Electronics’. For this event we specifically targeted student participation. The seminar had a mixture of keynote invited speakers and student oral contributions along with a poster session – the best poster being awarded a prize of £500 thanks to Merck.

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I hope you could attend at least some of our meetings and enjoyed what we had to offer. As always more meetings will be planned and new topics are continually being sought. Please feel free to send me any suggestions you have.

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**Call for nominations for Ben Sturgeon Award 2008**  
by 31 January 2008 (www.sid.org/chapters/uki.html)
The afternoon session was opened by Peter Raynes, University of Oxford. In his paper, 'Liquid Crystal TVs – from dream to reality', he gave a historical review of the major technical problems faced by the liquid-crystal display industry. He discussed the subsequent solutions that enabled the high-quality LC TV to become a standard consumer product. From the mid-late 1990s, development of cyanophenyls (room temperature LC material) and the 90 twisted nematic mode enabled high-information content displays. In addition, new optical-configuration schemes enabled good viewing angles and electrical over-driving schemes have largely solved the problem of response speed.

The bright future of PDP, was discussed by Harm Tolner, South University of Technology, Germany, who pointed out the battle between LC and PDP at length in terms of performance metrics, marketing strategies, consumer price and production cost. In terms of performance metrics, it was cited that although LCD may look better in the showroom, PDP looks better at home owing to a darker black level and less motion blur. It was also cited that LCDs have fewer burn-in issues than a conventional CRT and power consumption per square metre is only 20% more than LCDs. It was argued that production costs for PDPs would fall at a faster rate than for LCDs owing to the cost of the raw manufacturing materials.

The next talk on ‘Multi-user 3D displays’ was given by Ian Sexton, De Montfort University, in place of Phil Surman. The talk gave an interesting overview of multi-user 3D projection systems – able to give freedom of movement without any headgear – through different projects. The first of these systems, based on a LCD with behind arrays of ‘clever’ optics steering the light to viewers’ eyes, used LED arrays and suffered from dimness, crosstalk and colour variation. The system evolved to RGB laser combined with a holographic projector (MUTED project) and a future project plans to suppress the LCD by using MEMS scanning system instead (HELIUM 3D project).

The Big Displays conference was held in London on the 22nd and 23rd of March. It was well attended by delegates from a variety of different industries, particularly those interested in the commercial aspects of display networks. It gave an interesting perspective for me, coming from research on displays, on the commercial drivers for large-area displays. The first day was more focussed on the technology of large-area displays and the future markets for such displays. The second day was more of a reality check, with speakers describing their experiences of using, installing and selling 3D displays on a real estate of, for example, advertising on large displays.

From the first day it was clear that the much greater than expected growth of flat panel displays, both in the numbers and size of displays, was making it possible to consider very seriously the prospect of replacing billboards by digital displays. There are many different areas, with different requirements for large area displays and many of these were described. Clearly the technology chosen depends on the specific requirements – resolution, brightness and size – however, not more important, was the overall system requirement, which are much more complex than simply providing a display. As an example, for advertising it is important that the business model is well thought out. It is not enough to simply install a digital display; the impact of a digital display is greater, but who owns the site where the board is positioned, who will sell the advertising, how the content is controlled as well as the obvious maintenance and security issues are all important. Planning issues are generally important, as well as restrictions on the content. Advertising images must not be used near roads, but as was suggested, public information can be displayed, e.g. weather warnings etc. which adds to the value of installing the display to local authorities. The installation of digital displays can also add to the value of a retail site, since the advertising space can be sold, e.g. to cinema advertising etc. which adds to the value of the display to local authorities. The installation of digital displays can also add to the value of a retail site, since the advertising space can be sold.