



SLTC Conference 2010



Mr Johannes Borge, Presenter of SLTC Atkin Memorial Lecture 2010, with Mrs Christine Ohren-Bird, President SLTC.

The 113th annual conference of the UK's Society of Leather Technologists and Chemists was held on 25th September near Sheffield. Six papers were presented in total, including the Atkin Memorial Lecture, presented by Johannes Borge, of Borge Lean Consulting. The subject was entitled "Tanning the Toyota way", and described the way that, starting with Ford, the automotive sector changed the way that goods were manufactured. After the war crisis in Japan Toyota studied the techniques applied to automotive manufacture within Ford USA, and then applied and developed these techniques to suit a wider variety and relatively smaller lots which suited their needs at that time. These techniques form the base for Lean manufacture, and are often described using different names such as 20 Keys, TQM, Kaizen and JIT, but also include a philosophy of profound respect for people. The concept recognises that the people doing the work are the only ones who truly add value, with everybody else taking a role within the support system: applications involve all aspects of manufacture including the setting and maintenance of standards. The presentation then described how the concept has been applied within the tanning industry, but also that the principles and advantages can be achieved within all industries. The advantages to a manufacturer are considerable, and it was considered that a lean future will have greater significant impact than standardisation alone.

Dr Clark Maxwell, British School of Leather Technology, described how the nanostructure of collagen fibrils could now be examined in detail by subjecting samples to X-rays typically of 0.05 – 0.25 nm wavelength, then measuring the degree of scatter that results due to the internal structure under examination. This enables the measurement of distances between collagen molecules and their orientation, with applications in the determination of fibre swelling as collagen is changed by salting, soaking and liming, and changes between structured and amorphous protein ratios.

A paper on "Acid decay in leather" was presented by Karen Vidler, with particular regard to post 17th century leather bound books. Generally known as "Red Rot", considerable decay occurred due to pollution from gas lighting and heating in Victorian libraries and can eventually lead to physical breakdown of the leather and as well as any embossing and decorations. These problems have now been exchanged for damage caused by components in automotive exhaust fumes. Effects can be minimised by storing books in a controlled environment, but also by correct stacking to minimise stress and distortion of the bindings. Work continues to find the optimum tanning combinations, but combinations containing myrabs, sumac and tara have been found to provide good protection.

The paper "Leather Industry Information – its vulnerabilities" by Karl Flowers provided an overview of how we can collate information, and the advantages and disadvantages of how this is taking place at the present time. Issues concerning the verification of information were raised, the growing expectation for free and readily available information, counterbalanced by doubts as free information is often perceived as untrustworthy. In particular, for the leather sector, it was seen that a surprisingly small amount of information has been produced, and that information in the form of books has not generally been kept in good order. Much information has been lost, damaged or destroyed.

Issues concerning the value of colour were presented by Tracey Cochrane, of the Society of Dyers & Colourists, and how this could be used to advantage, with examples as applied by SDC in promoting their global activities. The final paper was presented by John Hubbard of SATRA who described how national and international standards are both set and reset by different organisations. Also, how the different committees involved interact to avoid duplication, and provide international access to European Standards. 🌐



John Hubbard, SATRA, presenting the paper "Leather Committees and Standards".



Dr Clark Maxwell, presenting the paper "Nanostructures – impact of processing within a fibril".