

A view of NCUK university towns (Sheffield)

When writing about Sheffield it is difficult for an engineer to know where to start. It has always been renowned for steel. The Bessemer process was pioneered there. Stainless steel was invented there. It also saw the invention of Sheffield Plate and Britannia metal and had its own assay office. As early as 1600 it was a major centre for cutlery and even today most dining tables in Britain or Ireland will have knives, forks and spoons made in Sheffield.

It hosts two NCUK partners. University College Sheffield grew out of a merger in 1897 of the Sheffield School of Medicine (founded 1828), Firth College (established 1879) and the Sheffield Technical School. The plan was to establish a mega-university comprising a federation of the University Colleges at Manchester, Liverpool and Leeds. Such bold schemes do not always work, and in 1905 the University of Sheffield was granted its Royal Charter. It can lay claim to five Nobel laureates. Howard Florey (of penicillin fame) held the chair of Pathology from 1931 - 35. It is interesting that the families of two others were refugees from Nazi Europe. Hans Adolf Krebs (of the Krebs cycle) was professor of biochemistry from 1945 - 54. Harry Kroto, the discoverer of C₆₀, otherwise known as Buckminsterfullerene (or 'Bucky Balls'), graduated with a first class honours degree in chemistry in 1960. Sheffield University hosts the UK Government's National Centre for III-V Semiconductor Technologies. This type of semiconductor is the basis of almost all light-emitting diodes (LEDs) as well as the very high frequency electronics in satellite TV receivers. Work in this area is delivering new materials which will be of great importance in the future

In many ways history has repeated itself with the other NCUK partner in Sheffield. The School of Design (founded in 1843) merged with the College of Technology in 1969 to form Sheffield Polytechnic. Just like the University in 1905, it was granted full university status in 1992 with the name Sheffield Hallam University (SHU). Its City Campus is exactly that, being located in the heart of the City next to the rail station which provides rapid connection of all parts of Britain. For four years this author had the pleasure of acting as External Examiner on the Electronic Engineering courses at SHU and was extremely impressed with the quality of the teaching staff. One of the notable staff at Sheffield Hallam is Media Studies lecturer, Marina Lewycka whose book *A Short History of Tractors in Ukrainian* has won numerous prizes and has already been translated into twenty-nine languages. Another notable member of staff is Professor I.M. Dharmadasa who comes from the Kurunagala District of Sri Lanka. His research group have produced some of the most efficient photovoltaic solar cells in the world. His blog-page (<http://apsl.org.uk/dharme/default.aspx>) makes fascinating reading.

For those who want to escape city life there is wonderful walking in the mountains outside Sheffield and Hope Valley boasts a rare gemstone, *Blue John* which is not found in Sri Lanka.