David Watts BSc. MSc. PhD. DSc. (1931-2015)

David Charles Watts was born in Enfield, North London on August 5th 1931 to a poor working-class family. David's father, Charles, was an engineer on a ship and his mother, Daisy, made clothes for people in the local community. Charles was at sea most of the time, and very rarely came home. Charles died of Tuberculosis when David was 15.

From an early age, David contributed to the income of the household, doing a paper round, collecting recyclable cardboard and transporting wheelbarrows of coke from the gas works four blocks away. When he was old enough, he joined Boy Scouts and discovered a love of nature, wildlife and the outdoors. He learned photography, including Developing and Processing, and soon discovered that developing film by hand produced much better results than the mass-processing machines of the time. Recognising a commercial opportunity, he began developing photographs for the local community using equipment he made himself, and had soon build up a thriving business out of the families' garden shed.

Around that time, the education system was reformed making it possible for students from working-class families to go to university. Determined to build a better life for himself, David studied very hard at school. After graduating with excellent grades, he was able to get a place at King's College London (a top British university) where he did a BSc in Botany.

David began participating in biology field trips organised by King's College. On one trip he met Rosemary Randall, a fellow King's student studying Biology, and the two fell in love. Rosemary shared David's passion for nature and photography, and the couple went on countless rambling and camping expeditions throughout the United Kingdom. They were married in 1957.

After graduating from King's, and serving two years compulsory military service, David transferred to University College London (UCL) where he did a masters in Chemistry, followed by a PhD in Biochemistry. His PhD research on the Creatine Kinase enzyme was published in Nature magazine. UCL hired him as a Lecturer in Biochemistry, and he began doing post-doctoral research, becoming an expert in muscle enzymology in animals and sea creatures. In 1966 he transferred to the medical school at Guy's Hospital London where Rosemary already had a job in the Paediatric Research Unit. He joined the faculty as a Reader in Biochemistry.

At Guy's, David taught Biochemistry to student doctors and dentists and continued to do research. He focussed on the role of enzymes in disease processes, and especially on the prenatal diagnosis of diseases such as Duchenne Muscular Dystrophy. This research earned him a DSc. David was an active member of the Biochemical Society and served on the Editorial Board of the Society's *Biochemical Journal*. In 1977 David became Managing Editor of the journal *Biochemical Society Transactions* magazine (an unpaid, but time-consuming role).

In 1984, working with Rosemary, he developed a significantly more accurate test for Muscular Dystrophy in unborn babies. Though the disease was fortunately rare, the new test was able to prevent the termination of a number of healthy babies around the world who would previously have been diagnosed as dystrophic. The parents of one baby wrote to say they had named their child "David". (The test has since been superseded by DNA-based screening.)

By the time he retired from Guy's in 1996, David had published a prodigious amount of research, including over 30 papers in the Biochemical Society's main journal, the "Biochemical Journal", and several others in "Nature", and elsewhere.

David's love of glass in all its forms started in 1964, shortly before he moved to Guy's Hospital. He and Rosemary had just bought a "fixer upper" holiday cottage in the south of England, and he was driving his beloved old Morris Traveller (which he like to say had given lifts to three different Nobel prize winners) to the coast to buy gravel for drains he was constructing. His route took him through Beaminster, passing an antique shop which had in its window a solitary opaque twist stem glass, standing on a highly polished table. He stopped to investigate and, under its eighteenth century charm, and the old world salesmanship of the dealer Montague Rumsey, he not only purchased the glass but became hooked on the mysteries and pleasures of the glass world. It was an interest which was to continue unabated for the rest of his life.

Almost at the same time, Elville's *English Table Glass* was published with information on measuring glass density as a method of characterisation and it became apparent that the equipment available to him for biochemical analysis might also be applied to solving problems with glass, particularly the then prevailing – and now disproved – idea that less lead was put into glass after the imposition of the 1745 glass duty.

Technical aspects of glass and glassmaking had always been uppermost in David's interests. He firmly believed that without this knowledge, much of the pleasure of old glass is lost. He also considered it essential to put together at least a small collection of old glass to foster the understanding that comes with ownership.

Like most British collectors, David began with 18th century drinking glasses, but he soon became interested in cut glass, particularly goblets, thought at that time to have been made only from about 1775 but now known to date from the first quarter of that century. As his hobby progressed, he became fascinated in the manufacturing processes, and technology involved in early English glass making.

Working at Guy's Hospital, David became particularly interested in the local glass industry of Southwark (Guy's in in the London borough of Southwark), which he studied extensively, drawing on the nearby Southwark Local Studies Library. He later expanded this interest to cover all of London, studying industries as diverse as porthole, bottle and radio tube manufacture.

David joined the Glass Circle¹ in 1973, and a few years later become a member of their committee. In 1976, based on a decade of editorial experience with *Biochemical Society Transactions* magazine, he founded the Circle's quarterly publication '*Glass Circle News*', which he edited until 2009. He also wrote over 50 articles for G.C. News, as well as eight major pieces for the Circle's intermittently published *Glass Circle Journal*, and was a frequent lecturer at Glass Circle meetings. Shortly before he retired from the committee in 2008, he was made an Honorary Vice President of the Glass Circle for his outstanding contribution.

In 1987, David and Rosemary organised the Glass Circle's 50th Anniversary exhibition "Strange and Rare"², which exhibited items from the private collections of Circle members. In addition to a number of rare and beautiful pieces, there were some exotic items including a box of Prince Rupert's Drops³, a Babylonian tablet inscribed with a glass recipe in cuneiform, and a glass canon which had actually been fired. The exhibition was originally staged at Broadfield House Glass Museum in Kingswinford (near Stourbridge), then moved to the Pilkington Glass Museum in St. Helens (now called "World of Glass").

David also had many glass connections outside the Glass Circle. He was an early member of the Glass Association⁴ (UK), and helped to found the Contemporary Glass Society⁵, serving for a while as its Honorary Treasurer. He was also fascinated with American glass, and became a member of the National American Glass Club, and was elected a Fellow of the Corning Museum of Glass. He was invited to present lectures on areas of glass interest to the Glass Association, the Guild of Glass Engravers and the National American Glass Club. He made numerous visits to Corning, and became a regular at NAGC meetings. In 200?, he toured sites of glass interest across the US with friends from the NAGC.

David was widely known for researching and writing on glass. He authored chapters on glass history in several books and wrote two scholarly books: 'A History of Glassmaking in London' and 'Glass Recipes of the Renaissance'. Towards the end of his life, David worked hard to complete the second edition of his book 'A History of Glassmaking in London', making sure that everything he knew on this area of special interest was set down in writing. Double the size of the first edition, this second edition was published in 2014 to critical acclaim.

David's life was one of achievement. A passionate academic, a restless creator, a mentor, caring husband and a father who was always there for his son. Many colleagues and former students (some of whom are now professors) have fond memories of David's time at Guys. They describe his "open door" policy where he always made time to help and mentor. They also remember him as an "old school" scientist who brewed coffee in his office over a Bunsen burner, and who made his own painkillers out of chemicals from the store cupboard. In the glass world, we'll especially remember his scientific mind bringing arguments to bear on minutiae of detail, his thoughts not always agreed with, but respected. His presence will be missed.

David web site on London glass-making is at <u>www.glassmaking-in-london.co.uk</u>. It is being maintained by his son.

Ben Watts, with the Glass Association UK

PICTURE CAPTION

David Watts at the Art-workers' Guild London, presented with a vase, made by Peter Layton, a gift from the GC on the occasion of his retirement as editor of the Glass Circle News.. The picture is dated 29/10/2008, courtesy of Ben Watts.

² http://www.glasscircle.org/Publications/Catalogues.html

¹ http://www.glasscircle.org/

³ https://en.wikipedia.org/wiki/Prince_Rupert%27s_Drop https://www.youtube.com/watch?v=xe-f4gokRBs

⁴ http://www.glassassociation.org.uk/

⁵ http://www.cgs.org.uk/