

JAMES BARRIE SCUFFHAM

Mr Chancellor,

At cinquante-et-un rue de Montmorency, close to the Louvre, is the oldest house in the City of Paris. In the late 14th Century, it was inhabited by Nicolas Flamel, a successful French scrivener and manuscript-seller. In 1612, his book “Livre des figures hiéroglyphiques” was published in France, and later printed in London as “Exposition of the Hieroglyphicall Figures”. According to the introduction, Flamel had made it his life's work to understand the text of a mysterious 21-page book he had purchased, and in 1378, he travelled to Spain for assistance with the translation. On the way back, Flamel met a sage, who identified the tome as a copy of the “Book of Abraham the Jew”. With this knowledge, Flamel decoded enough of the book to reproduce the recipe for the Philosopher's Stone.

Mr Chancellor, as Chief Medical Officer, you undoubtedly know of the mystical power of the Philosopher’s stone. And I am in no doubt that that the Stone is something that you would like to have in Richmond House at The Department of Health. And why is that? Because your role is to improve the Health of the Nation, and the Philosopher’s Stone brings with it... the secret of eternal life.

Now, if the sitting Government were to harness the power of the Stone, then remarkable events might occur. It might even swing the outcome of the next General Election.

Fear not, Mr Chancellor, because I know where the Stone resides. It is kept in an unassuming house in Teesside, closely guarded under lock and key, by Professor Barrie Scuffham.

And why do I know this? Well, not only does the Philosopher's Stone provide the key to eternal life, but with it, the owner can perform Alchemy... Indeed, in 1382 Flamel and his wife used the stone to produce silver, and then gold....and the modern scientific term for alchemy is, of course, Hydrometallurgy.

Hydrometallurgy is defined as the field of extractive metallurgy involving the use of aqueous chemistry for the recovery of metals from ores, concentrates, and recycled or residual materials. And hydrometallurgy is one of Barrie Scuffham's particular areas of expertise.

Now, Mr Chancellor, although you may find it difficult to believe *everything* that I have just told you, there is one fact that I am absolutely certain about. If you ask his peers, they will universally agree that Professor Barrie Scuffham is a real wizard when it comes to the extraction of metals from ores.

Barrie's career spans six decades. He graduated in chemistry from King's College in Newcastle, and immediately began working in industry in the 1950s. For nearly 40 years he worked for the Davy Corporation and subsequently Davy McKee Research and Development. With Davy, he pioneered a long list of new methodologies enabling the efficient extraction of metals. Solvent extraction techniques are one of Barrie's

areas of expertise. Unlike Nicolas Flamel, Barrie was not directly interested in making silver and gold - rather he focused on copper, nickel, cobalt and uranium and other metals. These may not be precious metals, but there is no doubt that his innovations were a major commercial success, allowing several developing countries to exploit their natural resources. These included Zambia, Namibia, South Africa and Chile to name but a few.

Talking to colleagues, Barrie's key attribute is quite simple: an ability to spot what is, and what is not likely to work... and well in advance of others. This is possible because of a solid grounding in chemistry gained in Newcastle, accompanied by a huge breadth of industrial experience. But he is no mere theoretician – Barrie is a man who knows how to get things done.

Another major quality is his ability to work with people. Barrie is a genuine team-player, really he is the Alan Shearer of industrial chemistry. Remarkably he sees all of his major achievements as primarily a team effort. In this way he demonstrates a rare quality of team leadership. He is the person who sits quietly in a meeting, listening to, and assimilating the views of others, before tactfully delivering his opinion... which is usually decisive.

Barrie has received several awards for his work, including the Beilby Medal and Prize in 1990 from the Royal Society of Chemistry, the Society of Chemical Industries and the Institute

of Materials; and the Kirkpatrick Award for the best contribution to chemical engineering processing. But his true skill has been to combine world-class technical know-how with a solid sense of business and personnel management. He is able to trouble shoot the most complex situations, is an expert on intellectual property law, and can maximize output at minimal costs. Whilst Managing Director of Davy Research and Development, he found and delivered the Holy Grail, by ensuring profitability of a £5 million R&D division through technology payments and royalty revenue.

Given that his designs led to the development of over 75 industrial plants across the world, it is not surprising that he has travelled widely. In doing so, he has nurtured his fascination with mineralogy, collecting dramatic specimens of minerals from all the mine sites where he worked; he especially likes the vivid green lustre of malachite, the main ore of copper, on which he has worked so much. But it is not just the physical world that interests him. During his time in Southern Africa he fell in love with the Agapanthus flower, especially the natural blue variety. And also the Protea flower, which Mr Vice-Chancellor you will fondly recall as the national emblem of South Africa.

Although his work has largely been based in heavy industry, he has engaged with Academic Departments throughout his career - in Cambridge, with the development of the Melville

Laboratories, and in latter years at Durham and Newcastle, close to his native Teesside.

Over the last decade, Barrie has made a substantial contribution to the academic success of Newcastle University. He acted as mentor to the HERO Group which won the Queen's Anniversary Prize for the University in 2005. He was subsequently instrumental in helping establish the Sir Joseph Swan Institute here, providing crucial advice on safe working practices for our staff and students. He has set up new collaborations between Newcastle University and several major international corporations, leading, for instance, to postgraduate programmes delivered by our staff for chemical engineers in Russia. He has provided expert advice to engineering researchers on thorny issues of intellectual property rights, saving the University fortunes in the process. Barrie has also been a champion for our Institution through his prominent role as a Fellow of the Royal Academy of Engineering – a designation which is the highest honour in the engineering profession. Indeed, he successfully nominated two of our senior professors for Fellowship, something which brings esteem to the University as a whole.

Always prepared to give literally hours of his time at short notice, Barrie has been an exceptional role model, and a mentor to many, especially young members of staff who are unsure of how to proceed towards professional registration. I have spoken to a number of these individuals who speak of him with huge

admiration and warm affection. The demonstrable success of his many protégés is his lasting legacy to his alma mater.

So what of the Philosopher's stone, and where can it be found? Mr Chancellor, aficionados of Harry Potter will know that in recent years Nicolas Flamel's secret was guarded by a three-headed dog procured by Hagrid at Professor Dumbledore's command. But time has moved on, and the Stone is no longer at Hogwarts.

I suggest that on your next journey south, you take a detour in Teesside, because rumor has it that Barrie has recently acquired a three-headed dog guard dog, and I do not think it is guarding the malachite he picked up on his travels.

Mr Chancellor, in recognition of his contribution to metallurgy, the chemical industry, and especially to the students and staff of Newcastle University, I ask that you bestow upon him an Honorary Fellowship of Newcastle University.

Citation by Professor Patrick Chinnery