Guest Editorial

I was delighted when the *Gold Bulletin* editorial board invited me to pen a brief editorial for this issue. After a few minutes of head-scratching, I thought where better to start than at the beginning? For me, the beginning of my time with the World Gold Council was unusual to say the least. Rather than the standard Monday morning office inductions and introductions, I found myself sat in Heathrow airport early one Saturday morning waiting for a flight to Germany. The reason – my arrival at the WGC coincided with GOLD2009 in Heidelberg, an event which was to provide me with the perfect introduction to the science and technology of gold.

Almost a year has hurried past since that (slightly nervous) wait in Terminal 5, so I felt using this opportunity to make a few observations was apt. One thing that was immediately obvious to me was what a strong community of researchers this unique metal has brought together. GOLD2009 saw 360

delegates representing over 40 different countries in attendance, which in itself is notable especially when considering the precarious economic climate. The research on offer in Germany was of the highest standard, and certainly got me thinking ‘gold’.

However, it was when I returned to my office and started some in depth literature work that the sheer scale of the field started to hit me. ‘Where do I start?’ is the phrase that springs to mind of those first couple of months! Gold really is everywhere at the moment – open any catalysis/nanotechnology/materials journal and I guarantee you will find an article based on the yellow metal. I have included a striking visual illustration of this below – the huge growth in gold nanotechnology related papers and patents speaks for itself.

This explosion of interest, particularly in the field of nanotechnology, encouraged us to pull together

Figure 1

Number of published papers and patents including the words ‘gold’ and ‘nanoparticles’

a 'white-paper' style article¹ detailing some of the uses of gold nanoparticles in collaboration with Tim Harper over at Cientifica. This took a considerable amount of time, but was a great opportunity for me to immerse myself in the field. The diversity of the potential applications for gold nanoparticles is staggering, and our aim was to highlight some of the key areas. The piece got some good coverage in the wider literature, including as the basis for a *Nature Nanotechnology* editorial².

I have also spent a little bit of time on the road, attending meetings in the USA and Japan amongst others. I was in San Francisco in April for the American Chemical Society meeting, and was delighted to get a lot of unsolicited positive feedback on *Gold Bulletin*. I feel *Gold Bulletin* is a key resource for the community, and must continue to publish high quality, cutting edge research. As each and every person who downloads *Gold Bulletin* has an interest in the metal there should be no better place to publish gold-based research – and this is precisely what we at the WGC are aiming for. I personally hope to see increasing numbers of application-focused papers exploiting recent advances in nanotechnology, and will be working with our networks and collaborators to achieve just that.

References

- 1 'Gold for Good – Gold and nanotechnology in the age of innovation' World Gold Council
- 2 'Glittering prizes' – *Nature Nanotechnology*, March 2010, Volume 5 No 3 pp167

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Editors note: In the paper '**Investigation of the active site and the mode of Au/TiO₂ catalyst deactivation using diffuse reflectance Infrared fourier transform spectroscopy (DRIFTS)**' M.C. Raphulu, J. McPherson, E. van der Lingen, J.A. Anderson, M.S. Scurrrell originally published in *Gold Bull.*, 2009, **43**, (1) there was unfortunately a number of figures omitted by mistake. A corrected version has now been republished to the *Gold Bulletin* website.