

[A new laboratory honours the memory of Prof. Peter King](#)

One of the great names in mineral processing was **Prof. Peter King**, who sadly passed away eleven years ago, only three years after being awarded the IMPC's Lifetime Achievement Award at the 2003 IMPC in Cape Town.



Peter and Ellen King at the 2003 IMPC in Cape Town

Peter was Professor of Metallurgical Engineering at the University of Utah for 17 years, and prior to that was Professor of Metallurgy at Wits University, South Africa. He made major contributions to flotation modelling and liberation analysis, was the editor of *International Journal of Mineral Processing*, and authored a number of state of the art books.

The School of Chemical and Metallurgical Engineering at the University of the Witwatersrand last month held a ceremony to mark the naming of the *Peter King Minerals Processing Laboratory* in recognition of Prof. King's contribution to the mathematical modelling of minerals processing. The ceremony was attended by industry, Peter's former students, and guests of honour, his wife, **Ellen** and son, **Andrew**.



Ellen and Andrew at the opening ceremony

Wits Professor **Sehlselo Ndlovu**, President of the Southern African Institute of Mining Metallurgy, said the laboratory would ensure the continuation of Prof. King's vision, who was passionate about capacity building and world-renowned for developing useful techniques to quantify mineral liberation.

Former students described Prof. King as a great teacher who instilled confidence and a desire for continual progress, especially among the average students.

Prof. Michael Moys spoke of his experience of Peter King:



Michael Moys

It has been a personally valuable experience for me to prepare this "view of Peter King by a past student". Peter had a determining effect on me for most of my adult life.

I first met Peter at a conference in Johannesburg in 1971. He delivered a paper dealing with Finite Dams. (It was above me; I remember very little but I remember wondering what an Infinite Dam was!). But I was impressed with his style and depth of presentation and enjoyed meeting

with him after the paper. We got round to possible postgrad studies... and the rest is history!

I went to do an MSc at the Department of Chemical Engineering at the University of Natal – later called the University of KwaZulu-Natal. Peter was my supervisor and I found myself a member of a large number of other students with the same fate. Peter was extremely busy and appointments were difficult to come by; but when I had them they were of great value. Peter was 100% with me for those interviews and these helped me though several hurdles over the next few years. In the end I had a PhD which I enjoyed and still value and which is still cited – with no small Gratitude to Peter at the end of it.

*The Department was dominated at that time by 2 giants of South Africa Chemical and Metallurgical Engineering: **Peter King** and **Ted Woodburn**. They supported and competed intensely. Allow me to reminisce briefly about Ted. Ted would arrive in the morning in his Mini Minor. Those of you who knew Ted – a very large man- can imagine Ted extricating himself from the Mini! Ted's other idiosyncrasy was his habit of Management by Walking Around (MWA) chewing his tie. Ted also had a remarkable laugh which defies description and echoed through the building every now and then. Peter kept his cool!*

In approximately 1974 Peter entrusted me with the delivery of a paper on his Magnum Opus (at that time) a paper on his simulator, FLOTE, of flotation plants of arbitrary complexity. This was at an AIME conference in Dallas, Texas. There were no questions after the delivery - I had obviously covered the topic in brilliant clarity! -but the main benefit of this trip for me was the purchase of a "Fly Anywhere" ticket which made possible visits to New Orleans, Washington, New York, Chicago and San Francisco. This was a wonderful experience for me made possible by Peter's generosity.

A short word about MODSIM is valuable here. He worked continuously since the production of FLOTE to bring into being the generalized mineral processing simulator MODSIM. This was continuously refined and used extensively for teaching at both postgrad and undergrad level. I used it for at least 25 years at Wits and it is still being used. Early in its development it became the reference simulator for Mineral Processing used by several of his competitors. MODSIM is still the best simulator of comminution in existence.

On the way to this conference I visited Peter and Ellen and their family at UMIST for a few days while Peter was there on Sabbatical, and was glad to deepen my friendship with the family, especially with their three children who entertained me enormously for a day or two while I recovered from a bout of flu.

In 2000 I attended the Rome IMPC. There I met Peter and Ellen and learnt about Peter's illness. He assured us that he had it under control. I was shocked and saddened but also buoyed up by his optimism and undiminished vitality and zest for life.

In 2002 Denise and I were back in Salt Lake City and spent a day with Peter and Ellen. We had a memorable lunch and long discussions into the

afternoon, some of it further discussions about MODSIM and its use in teaching. Denise and I were still suffering from jet lag and were tempted to excuse ourselves; Peter would have none of it. He and Ellen took us on a walk through a nearby botanical garden specializing on plants typical of the SLC environs. Peter was in good health and stretched us to the full. After a short rest (tolerated by Peter) we went out to a memorable dinner. Peter's vitality and enthusiasm were undimmed.

On 11th September 2006 we had the news that Peter had passed away. I was deeply saddened to hear of the death of a remarkable scholar and teacher who had a huge impact on my life. I have thought often of him as a colleague of tremendous energy, integrity and productivity, and as a friend who set a remarkable standard for his work and for his presence and friendship to those who were close to him.

*The last word was penned by **John Herbst**, erstwhile Head of the Metallurgical Engineering Department of the University of Utah:*

The World Lost an outstanding scholar and human being on September 11, 2006, when Peter King died at the age of 68.