

# An Experience in Mining Engineering

## Choosing Mining as a Career

I was first attracted to the subject of geology at high school. My geography teacher was an ex-petroleum geologist who pointed to the slump in the oil industry at the time. He suggested that mining offered more flexibility and diverse career opportunities. I had always been attracted to a career with travel after growing up in Singapore.

I came from an area of Britain with a strong tradition of metal mining (Devon and Cornwall in the Southwest of England). So I did my homework and visited the Camborne School of Mines in Cornwall amongst the mining schools of the UK. This included a visit underground into its own mine and I immediately fell in love with the underground environment and romance of nineteenth century mining history. I was hooked by the type of work and the prospects for travel to exotic locations like Africa, Australia and Canada.

The integration of many technical and soft skills with a great deal of practical application really attracted me. No two working days were alike. My choice was reaffirmed by the work periods spent subsequently whilst a student: working in a Limestone Quarry in Devon, an underground Tin/Copper mine in Cornwall, an underground Iron Ore mine in Swedish Lappland and an underground Tin/Wolfram mine in Portugal. I was ready to emigrate!



**Malcolm Scoble**

**Camborne School of Mines**

**1963**

## **Developing a Speciality within Mining?**

My journey through mining has taken me through many areas of speciality. At first I worked in Manitoba for the Hudson Bay Mining and Smelting Co. Ltd., in underground hardrock mining, mainly in mine planning. After two years I was recruited into a multidisciplinary team that was to study the feasibility of implementing a mainframe computer.

Yes, computers in mining were just reaching the industry in the late sixties. So I was trained by IBM as a systems analyst and got to work by seeing how the company could best use applied computer systems. So I saw all of the aspects of the company, from exploration through mining to processing and smelting/refining (including accounting, payroll, inventory and other business systems). I probably would have stayed there for some time, growing the computer department, but my father died back in England and I returned to my homeland. I took the opportunity to go back to school. I stayed in England and took a Master's degree in mining geology at Leicester University, going back to my fascination with Mother Nature.

One of my professors at Leicester was actually based in the Mining Engineering Department at nearby Nottingham University. He attracted me to go there and take a PhD. I had never ever contemplated taking a PhD before then! Well I started a PhD but within a year I had been recruited to replace one of the mining professors. Suddenly I had become an academic! I also fell in love and married Penny, my wife from Nottingham. We then had three children and without too much premeditation we put down roots. It was always our intention, however, to emigrate to Canada.

I finally persuaded the family to give Canada a chance and we moved to Montreal. I spent fourteen very happy years at McGill University helping to develop its Mining Engineering program. Over that period of time I moved from a rock mechanics and mining methods speciality into mining automation. I have tended to branch into the key needs of industry at the time in my research and associated mining school initiatives.

Coming to UBC at the close of the century presented the need to look at mining as the integration of traditional mining and mineral processing with environmental science and more recently with social science. I have been trying to help to resolve what sustainable mining means. We need a new generation of technologies and practice that will not only provide competitive leadership but also be less intrusive, leaving a legacy after mine closure that is environmentally acceptable with associated communities that are healthy and resilient.

More recently I have begun to realize that mining has a genuine opportunity to partner and support its communities in far more tangible ways in addition to benefiting national and provincial economies. This is clearly evident in the manner in which mining is now evolving in Canada's North. We are learning how the next generation of "mining engineer" will fit into this new paradigm.

So you can see that I have wandered all over the map. I am not a specialist. I had originally been led to believe that a mining engineer was a "Jack of all trades and master of none", perhaps that is true. Certainly I have enjoyed a roving journey through my career that has been most varied and fulfilling.

## **The Attraction of UBC?**

What can I say about UBC? It's a superb University in a fantastic location. I was fortunate to find a Faculty and Department that wanted to look to the future and address collaboratively some very challenging issues for industry and society. The University is deeply committed to a Mining Engineering Department and recognizes our important role. It agrees with us that small is in fact beautiful!

  
– Malcolm Scoble  
Department Head  
UBC Mining Engineering

