



## **Guillermo Turner Saad**

**Executive Consultant  
Competent Person AusIMM**

### **Resume**

In 1971 and at the age of 14 years old, Guillermo started his involvement in the Mexican mining industry in the vanished Consejo de Recursos Naturales No Renovables (Non Renewable Minerals Resources Council), Consejo de Recursos Minerales (Minerals Resources Council) and now known as Servicio Geológico Mexicano (Mexican Geological Services). His role in the following 7 years consisted in assisting senior and junior exploration geologists in those remote sensing, geophysical, geochemical, geological and structural geology exploration projects related to precious and base metals deposits.

From 1978 to 1980, he joined Servicios Industriales Peñoles as junior exploration and mineral resources geologist. He was involved in geophysical, geochemical, geological and structural geology exploration projects, and also in the geostatistical mineral resources estimation of base metals deposits.

Based on his knowledge and skills in several computer-programming languages at that time, Control Data de México hired Guillermo in 1980 as system analyst of geological and mining systems. About 2 years later, he was also responsible in marketing and applying those systems for geostatistical mineral resources estimation of metals and non-metals deposits.

From 1982 to 1984, he continued increasing and applying his computer knowledge and skills in developing oil, precious and base metals geophysical and geochemical exploration projects as manager in both Gymsa Estudios de Planeación Regional.

In the following 2 years, Guillermo was working at La Caridad Mine of Mexicana de Cobre as project system and process engineering leader. His responsibility consisted in developing and implementing geological and mining systems across the value chain of the base metal mining operation. In addition, in developing and implementing control systems to optimise throughput, liberation, grain size, media and energy consumptions of ball mill grinding circuit.

In 1986, the Consorcio Minero Benito Juárez Peña Colorada hired him as leader of the mine information technology department. His responsibility consisted again in developing and implementing integrated geological and mining system of the iron mining operation. The system was applied for the geostatistical mineral resources estimation, ore reserves estimation and open pit mine planning processes.

Guillermo was working as geological and mining systems consultant in Las Encinas, Minera del Norte, Carbón y Minerales Coahuila, Fluorita de México, Baramín, and Carbonífera San Patricio from 1989 to 1994. During that time, he was also applying geological and mining systems for geostatistical mineral resources estimation, ore reserves estimation, open pit and underground mine planning of iron, coal, fluorite and barite deposits.

Later on, he came back to work with Mexicana de Cobre in 1994 and during 3 years was leader of the statistical and process department. The objectives of the department consisted in applying the geological and mining systems for geostatistical mineral resources, ore reserves estimation, open pit mine planning, surveying and grade control of the base metal deposit. In addition, in applying a dispatch system for optimising the short term open pit mine production. He was also involved in a special project that consisted in linking those mineralogical and textural characteristics of the ore with their metallurgical performance for the short term

production planning of copper and molybdenum concentrates, now known as mine to mill.

From 1997 to 2007, Guillermo was working as a technical system manager in Servicios Industriales Peñoles. His responsibility consisted in implementing geological and mining systems in 8 precious and base metals underground mining operations. The systems were implemented for underground mining surveying control, geostatistical mineral resources estimation, floating stope optimising ore reserves estimation and underground mine planning processes. He continued in researching those geological and metallurgical relationships of the ore and their impact in the economic value of mining operations.

SGS Minerals Services hired Guillermo in 2007 to create and manage the Geometallurgy Group formed by geologists and metallurgists. He developed a customised version of a Geometallurgy Framework, which had been applied in exploration projects and mining operations worldwide during the following years and up to date. In 2008, he also started with his role as Global Vice President of Metallurgy and Mineralogy in defining business and technological strategies of 9 metallurgical laboratories and 5 mineralogical facilities located in several countries.

Guillermo was working with CAE Mining since late 2010 and until early 2014 and his main responsibility consisted in continuing in the research, development, implementation and training in the geometallurgical integrated and optimum methodology in exploration projects and mining operations worldwide.

Currently, Guillermo is working in México specifically as executive consultant for several mining companies in applying his knowledge and experience.