The Eighth International Symposium on Cultural Heritage in Geosciences, Mining, and Metallurgy

Fathi Habashi
The Eighth International Symposium on Cultural Heritage in Geosciences, Mining and Metallurgy

Conference report, Schwaz, Tyrol, October 3 - 7, 2005

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Schwaz, Tyrolean for Schwarz, i.e., Black, is an old silver town because of the black ore that became known as "schwarzite". It was at the 300 years old Benedictine Stift Flecht in Schwaz that the Seventh International Symposium on Cultural Heritage in Geosciences, Mining and Metallurgy was held in October 2005.

Schwaz is about 20 kilometers east of Innsbruck where Maximilian I (1459-1519), Emperor of the Holy Roman Empire founded the Mint in Hall nearby Schwaz. It was there that the large silver coin the "Gulden" was first minted in 1486 to replace the gold coin that became well known all over the world for over two centuries. Hall, as the name indicates, was also an old salt mining town that was founded to exploit the deposit discovered in 1230 in the mountains and continued production till 1667. Schwaz was the second largest town in Austria after Vienna during the Middle Ages because of its rich silver mines. In 1556 the Schwazer Bergbuch was available as a hand-written manuscript with a number of colored drawings; it was published for the first time in 1888.

To the conference inety nine participants came from 21 countries as follows:

Albania - 1, India - 1, Portugal - 1, Austria - 42, Israel - 1, Romania - 1, Canada - 2, Italy - 5, Russia - 6, Czech Republic - 2, Mexico - 1, Serbia - 1, Egypt - 1, Netherlands - 1, Slovakia - 4, Germany - 20, Norway - 2, Slovenia - 2, Hungary - 1, Poland - 1, USA - 3

Papers presented at the symposium were in German, in English, and one in Russian. The topics varied from biographies of famous or unknown geologists to the traditions of mining students at the first schools of mines; from archeological excavations in remote regions in Canada to the history of cartography. The wide variation in topics gives this symposium its special cultural characteristics.

Preservation of the heritage of mining and metallurgy

The presenters of the papers also varied from young university students to long time retired professors and professionals in the mining industry; and from active librarians and museum curators to consulting engineers. Although the group appears to be quite heterogeneous, yet they are all devoted to one goal - the preservation of the heritage of the geosciences, mining, and metallurgy. The colorful book of abstracts in 200 pages that was available at the conference attests to the seriousness of the participants towards their goal. It was edited by Tillfried Cernajsek, Christoph Hauser, and Wolfgang Vetter, all are geologists from the Austrian Geological Surveys in Vienna. A proceedings volume is planned in the near future.

The conference was organized by Dr. Christoph Hauser who recently retired, and was assisted by a number of co-workers. The programme included visits to the silver mine in Schwaz, the Mint in Hall, the Museum of the Alpine Verein in Innsbruck, a reception by the Mayor of Schwaz, a visit to Swarowski Crystal World, and a visit to the Benedictine Stift Flecht Museum. Incidentally the Swarowski family resided in Schwaz in the late 1800's when Daniel Swarowski of Austria began a career in stone cutting and crystal manufacture. Inspired by Thomas Edison after a trip to a World's Fair, he patented a machine to cut jewelry stones to perfection and expanded the use of this technology to include cutting crystal chandelier pieces. He perfected the purity of leaded glass crystal to a state of flawless brilliance and became world famous for his art work.

The idea of symposia on cultural heritage originated in the early 1990s by Dr. Peter Schmidt (1939-1999) then director of the library of the Mining Academy in Freiberg, when he sent a call for papers for a conference to be devoted to the Cultural Heritage in Geosciences, Mining, and Metallurgy and to be held in his home town. The response was favorable and the conference took place September 20 - 23, 1993. The proceedings of this conference were edited by T. Cernajsek, L. Jontes, and P. Schmidt and published in 1996 by the Geological Survey of Austria in 391 pages as volume 35 of Berichte der Geologischen Bundesanstalt in Vienna. The volume was composed of 61 papers of which 11 are in English and the rest in German, and 28 abstracts of which 2 are in English and the rest in German. The titles of papers and abstracts are given in German and in English.

The "Iron library" and the "Salinenbibliothek"

This collection of papers forms an important document in the history of geology, mining, and metallurgy. There is a wealth of information in
this volume, much of it would be very hard to locate in any technical or historical book. It is interesting, for example, to learn that in Schaffhausen, Switzerland there is one of the most important libraries on the history of iron. This "Iron Library" was established on December 31, 1948 by the Georg Fischer Foundation founded by the Iron and Steel Company that bought a near-by monastery. It was discovered that the monastery whose history goes back to 1253 had an exceptionally good library on technology. It is also interesting to learn that a large library devoted to salt-mining—the so-called "Salinenbibliothek"—is in the House of Bavarian History in Munich, Germany. The idea of organizing such a conference was certainly a wonderful idea as attested by the more conferences that followed. The following symposia, (Table 1), took place in other historic cities, either because they were the seats of first Schools of Mines, being a historic mining district, or the seats of important museums. The second conference was held on September 18-20, 1995 in Leoben, Austria the seat of the School of Mines founded by Emperor Ferdinand. The proceedings were edited by T. Cernajsek and L. Jontes and published in 277 pages as volume 41 of Berichte der Geologischen Bundesanstalt. It was composed of 32 papers of which 9 are in English and the rest in German.

"Bergknappenlied"—the song for miners

The titles of papers and abstracts are given in English, German, and Russian. The topics vary from mining art, old mining books, mining songs, to prisoners of war working in Soviet mines, etc., all well documented by references and 225 illustrations many of them in color. It is interesting, for example, to know that the Austrian composer Franz Schubert (1797-1828) composed in 1815 a song for miners (Bergknappenlied), and the less known Austrian composer Ignaz Umlauf (1756-1796) before

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<tr>
<th>Year</th>
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<tr>
<td>1993</td>
<td>Freiberg, Germany</td>
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<td>1995</td>
<td>Leoben, Austria</td>
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<td>1997</td>
<td>Saint Petersburg, Russia</td>
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<td>1998</td>
<td>Banská Štiavnica (formerly Schenunitz), Slovakia</td>
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<td>2000</td>
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<td>2002</td>
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<td>2003</td>
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<td>2005</td>
<td>Schwaz, Tyrol, Austria</td>
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<td>2007</td>
<td>Quebec City, Canada (planned)</td>
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<td>2009</td>
<td>Freiberg, Germany (planned)</td>
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Table 1: Cultural Heritage Symposia

him in 1778 also in Vienna wrote an operetta on the same subject entitled "Die Bergknappen". The proceedings volume has clearly demonstrated that "Archives" are not a place to store unneeded papers but are a first class cultural source which conserves and retrieves human endeavor.

The Third Symposium was held on June 23-27, 1997 in Saint Petersburg, Russia the seat of the School of Mines founded by Catherine the Great. The proceedings were edited by T. Cernajsek and C. Hauser and published as volume 52 of Berichte der Geologischen Bundesanstalt. This volume is composed of 8 papers and 7 extended abstracts, all in German except one in English. The topics included biographies of some geologists and mining engineers, mining traditions in Central Europe, a review of the palaeontological collection in The Netherlands, and Alexander von Humboldt's travels in Russia.

The Fourth Symposium was held on September 7-11, 1998 in Banska Štiavnica (the former Schenunitz of the Austrian Empire and seat of a School of Mines founded by Empress Maria Theresa. The proceedings volume contains 47 papers and 22 abstracts. The major part of the papers is in German and Slovak while most of the abstracts are in English. The title of each paper and abstract is, however, always given in three languages: Slovak, German, and English. The proceedings contains valuable information mainly regarding teaching of the geosciences, mining, and metallurgy in the first schools of mines.

The Four Elements and the phlogiston

The Fifth Symposium was held on July 24-28, 2000 at Colorado School of Mines in Golden. The proceedings in 106 pages were edited by J. Lerud, M. Stark, and C. Van Tassel, and published by the Arthur Lake Library at the School. It was dedicated to the memory of Russell L. Wood (1927-2001) a devoted alumnus of Colorado School of Mines who served at the school's Board of Trustees from 1981 to 1997, director of the Colorado Mining Association, founder of the National Mining Hall of Fame and Museum in Leadville, Colorado, and a sponsor to the Cultural Heritage Symposium. The symposium volume contains 21 papers on a variety of historical topics related to geology, mining, and metallurgy. For example, comments on the Library of the Geological Survey of Austria, the historical libraries of Science in the Province of Quebec, the Quebec Seminaire Library, biographical dictionary of women in the geological sciences, etc. Another series of papers are devoted to mining songs, immigrants and the mining industry in Colorado, the discovery of silver in Nevada, funeral customs and symbolism of miner's tombs, manuscripts by mining academy students as a source of the history of mining.
and metallurgy, the Four Elements and the phlogiston, etc.

The Sixth Symposium was held on June 17-21, 2002 in Idrija in the Slovene Republic. Idrija is a famous mining town where mercury was produced for five hundred years. The mines have been recently closed and one of them is kept as a museum. The symposium was organized by Tatjana Dizdarevic of the Idrija Mercury Mine and her committee, and was devoted mainly to mercury mining, the health of miners, the Idria School of Mines which was founded by Empress Maria Theresa and operated for six years from 1763 to 1769, the amalgamation process in history, as well as other general topics. A book of abstracts in English and German in 160 pages was made available to participants. The proceedings volume contains 27 papers in English and 7 in German - a total of 34. The history of Idria and its mercury mine is thoroughly discussed as well as the amalgamation process, medicine and mining, and geological collections in museums. Papers by Russian authors were dedicated to famous Russian mine owners (the Damidovs) and mine administrators and statesmen, e.g., Vasily Nikitich Tatischev, and others.

Extinguishing a fire by flooding of Idria mercury mine

The Seventh Symposium took place in Leiden in the Netherlands May 18-23, 2003 at the invitation of the director of the Natural History Museum there Cor F. Winkler Prins. The proceedings volume is especially well edited, printed on high quality paper, and includes some colored Figures. It contains 32 papers and one abstract. Five of the papers are in German and the rest in English. A large number of the papers are devoted to geological museum collections and their history. In addition, there are some papers on unusual topics such as the cobalt blue factory in Saxony, the diatom collection in The Netherlands, the fire in the Idria mercury mine that was extinguished only by flooding the mine and the pollution problems that arose when draining the water out of the mine as well releasing the smoke containing poisonous mercury vapor. In addition, when the flooding water reached the center of the fire, a strong explosion took place demolishing the above-ground facilities.

The Ninth Symposium is scheduled on September 3-7, 2007 in Quebec City, Canada. Quebec City was founded by Samuel de Champlain in 1608 and will be celebrating its 400th anniversary in 2008. The City is also the list of UNESCO World Heritage. It was conquered by the British in 1759 ending French control of Canada according to the Paris Treaty of 1763. The Tenth Symposium is planned to take place back in Freiberg in 2009 where the idea of cultural heritage originated.

These symposia form important documents in the history of geology, mining, and metallurgy. They contain a wealth of information; much of it would be very hard to locate in any technical or historical book. The idea of organizing such conferences was certainly a wonderful idea. The proceedings volumes have clearly demonstrated that "Archives" are not a place to store unneeded papers but are a first class cultural source which conserves and retrieves human endeavor.

References

- Kasianová, E. and Síkurová, E., editors, 1999, Cultural Heritage in Mining.

Dr. Peter Schmidt (1939-1999), director of the library of the Mining Academy in Freiberg, Germany (Courtesy Dr. Angela Kiessling, Freiberg)


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