

#### Международное Общество по маркшейдерскому делу

#### International Society for Mine Surveying

#### Internationale Gesellschaft für Markscheidewesen

#### Seat of the ISM:

Chair and Institute for Mine Surveying, Mining Subsidence Engineering and Geophysics in Mining Univ.-Prof. Dr.-Ing. Axel Preuße Wuellnerstr. 2 D-52062 Aachen

Fon: +49 - 2 41 - 80 95 68 7 Fax: +49 - 2 41 - 80 92 15 0

<u>preusse@ifm.rwth-aachen.de</u> <u>www.ism.rwth-aachen.de</u>

# 40<sup>th</sup> Presidium Meeting in Yekaterinburg, Russia 11. – 13. September 2012

# **County Reports**

#### Australia (Prof. Jarosz)

In Australia, there are two surveying organizations - the Surveying and Spatial Sciences Institute (200 employees), which holds annual conferences (the most recent one was in May, in Fremantle, Western Australia), and the Australian Mine Surveyors Association (over 300 members), which holds annual congresses (the most recent was in August in conjunction with the meeting of Commission 6). At present we are developing surveying standards and surveying certificates of the national level.

#### The USA (Prof. Hart)

In the U.S. there is a sponsoring organization for surveyors. Now it is being reorganized, and we hope that the number of surveyors will increase. It is called the National Surveyors Association. The national surveyoring certificate is also being developed.

#### **China** (Prof. Yu Changxing)

The coal industry statistics reports 6,251 accidents for the period of 10 years, from 2001 to 2010. As a result 18,846 people died. The mortality rate was 30-50 times higher than that of the USA. Particularly bad years were 2002 when 3,632 people were killed and 2003 when the number of those killed in accidents amounted to 3,954 people. For 7 years over 10,000 small mining companies poorly equipped and unsafe for miners were closed down. Now, the state is paying more attention to technology, new equipment and safety of miners. In 2011, 1,922 people were killed. Thus, the downward trend begins to take shape. At the South African Congress he proposed not to accept organizational help from the companies trying to benefit by the Mine Surveying Congresses. The President of the XIVth Congress, Mr. Cawood, said at the opening ceremony that 47% of the reports were from China. The Congress program changed twice, 6 speakers were left out, and 21 reports from China were simply lost because of the electronic procedure for reports submission.

#### **Sweden** (Mr. Nystrom)

National conferences are held annually. The most recent one was in May. Scandinavian surveyors meet once in 3 years. In 2011 their meeting was in Helsinki, in 2014 it is planned to be held in Sweden. Sweden has 30-40 surveyors and 15-20 surveyors are accredited. Now mining is on the rise; 2 mineral deposits are being put into operation; surveyors, miners and workers are badly needed.

#### The Czech Republic (Dr. Vrubel)

In the Czech Republic, there is only one professional surveying organization – the Czech Association of Surveyors and Geologists with the optional membership of 156 specialists. The Czech Republic holds annual Surveyors Congresses. Now it is preparing a regional meeting of surveyors within the framework of the 19th Czech Mining Congress (participating countries - the Czech Republic, Poland and Slovakia). In May-July it held the 18th Annual Exhibition of Minerals and Mining. The Czech mining industry is declining. In 2011, bituminous coal output amounted to 11.3 million tons, and brown coal mining reduced from 47.7 million tons to 46.9 million tons See the website. The number of graduates from the University of Ostrava, holders of a Master's degree, included 65 geodesists and 2 mine surveyors. Since 2013-14, bachelors will also be trained in Most (the center of brown coal mining).

## **Kazakhstan** (Prof. Nizametdinov)

Last year the Surveyors Association was established in Kazakhstan. This year, a seminar on Geoinformatics has been held there. From 18 to 19 September Almaty will host a seminar on geodesy and mine surveying. Kazakhstan wants to organize advanced training of mine surveyors. It has created a data base of surveying services of the country's companies. Karaganda University trains 500 students specializing in mine surveying and geodesy as well as 35 students doing a master's degree. It has made an agreement with Kazakhmys Corporation to provide 20 holders of a Master's degree for this company every year. Russia (Prof. Popov). In Russia there are 4-4.5 thousand surveyors. The rapid development of metropolitan cities causes the problems connected with protection of buildings from undermining. Now surveyors have to replace geodesists in underground urban construction since in Russia only surveyors are allowed to service the underground space. Therefore, the number of mine surveyors should increase. At present 300-350 surveyors graduate from the universities every year, and this number is insufficient. Surveyors are trained at 15 higher educational establishments. For 20 years Russia has been trying to adopt the Bologna Process model, but since 2011 Russian mining universities have been training only mining engineers. The second issue is retraining and advanced training of mine surveyors. Each university retrains specialists in its own region. Today, the main task is the monitoring of the educational environment.

#### The Ukraine (Prof. Mirny)

Donbas annually produces about 40 million tons of coal. Currently about 100 mines and several open-casts are in operation. The average depth of mining is approximately 700 m, some mines have the depth of 1600 m. Four universities and 3 technical colleges train surveyors. Annually the total number of graduates includes 80 engineers, 40 masters and 50 bachelors. The Mine Surveying Department of Donetsk NTU was founded in 1943, and the first graduates received their diplomas in 1948. An anniversary reunion of 650 university graduates is expected to take place next year. We have published Mining Ecyclopedic Dictionary in 3 volumes and Concise Mining Encyclopedia in 3 volumes in the Ukrainian language.

## South Africa (Mr. Livingstone-Blevins)

In South Africa miners are on strike now, so I do not have official statistics on the mining industry. On October 24, South African Institute of Surveyors will hold a regular meeting and a conference on the state of surveying in the historical aspect. We also have a shortage of surveyors.

#### **Germany** (Prof. Preusse)

In Germany bituminous coal mining will come to an end in 2018, now coal mining amounts to 15 million tons per year, only four mines are in operation. Brown coal mining accounts for 1.8 million tons per year (the third place in the world). In ore mining the first place is taken by copper mining. New sources of energy (methane, etc.) are being developed. See reports on the website. Today the German Mine Surveyor Association has 480 members. It tries to attract more young professionals not only surveyors. The University of Aachen follows the Bologna principles; Freiberg continues to train mining engineers. In Aachen graduates receive a diploma and a certificate in mine surveying. Both Universities admit 80 people, and only 10-20 people graduate from them every year.

**<u>Hungary</u>** (written report provided by Dr. Havasi and read by Prof Preusse)

- see the website.