



First International **iiw** Congress in **C**entral and **E**ast **E**uropean **R**egion

PROGRESSIVE STRUCTURAL MATERIALS AND THEIR JOINING TECHNOLOGIES

organized under the patronage of Dušan Čaplovič,
Deputy Prime Minister of the Government of the Slovak Republic

on the occasion of **60th** Anniversary
of the Výskumný ústav zvaračský – Priemyselný inštitút SR
(Welding Research Institute – Industrial Institute of SR), Bratislava

14 – 16 October 2009
High Tatras, Stará Lesná, Slovakia

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Welcome to First International IIW Congress in Central and East European Region.

It is a great pleasure to welcome you on behalf of Výskumný ústav zvaračský – Priemyselný inštitút SR (Welding Research Institute – Industrial Institute of SR), on the First International IIW Congress organized in Slovakia.

Welding Research Institute was founded in 1949 as the state organization on the initiative of Dr. h. c., Prof. Ing. Jozef Čabelka, Ing. ESSA, DrSc., the nestor of welding in former Czechoslovakia. Since then based on its activity it has built recognition and acknowledgement for results in the field of research, development and implementation of welding technology into industry both in its homeland and world-wide. Its recognition was supported by its activity in IIW and EWF international organisations where it represented Czechoslovak and from the year 1993 Slovak welding community. Since the year 2003 after privatisation by the association Industrial Institute of the Slovak Republic it bears the name Výskumný ústav zvaračský – Priemyselný inštitút SR and it pursues the development of technical activities in the field of welding.

The objective of this congress represents a respectable celebration of the 60th Anniversary of the Institute's foundation which is intended for propagation of the present state-of-the-art of welding world-wide. The event means a stimulus for co-operation among welding communities in the region. This meeting represents an occasion for exchange of experience, acquisition of new knowledge and it creates space for search of partners into co-operation in looking for new solutions in development and application of technologies for joining of materials.

Simultaneously with the congress also the national conference 'Standardisation, Testing and Certification' will be held on 15 and 16 October 2009.

On behalf of the Welding Research Institute – Industrial Institute of SR, I wish to all authors, participants and delegates a highly successful meeting and enjoyable stay at the High Tatras.



Peter Klamo

Director General

Welding Research Institute – Industrial Institute of SR

Topics:

1. Modern structural materials and their joining technologies
2. Welding and joining processes
3. Quality requirements for modern production
4. Design, safety and reliability of welded structures
5. Mechanisation and automatization of welding

Hosting Institute:

Welding Research Institute – Industrial Institute of SR, Bratislava, SLOVAKIA

Venue:

Congress Center ACADEMIA, Stará Lesná
SK-059 60 Tatranská Lomnica, Slovakia

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Held:

14 October (from 10.00 a.m.) –
16 October (to 2.00 p.m.) 2009,
High Tatras, Stará Lesná, Slovakia

Important dates:

Abstract submission: extended to 30 April 2009
Acceptance notification: 15 May 2009
Final program: 1 July 2009
Full paper due: 30 July 2009

Congress fee:

350.- EUR (before 15 September 2009)
400.- EUR (after 15 September 2009)
75.- EUR (accompanying person)
(fee covers participation on plenary and technical
sessions, proceedings, lunches, coffee/tea,
evening events)

Language:

English, Slovak/Czech
(with simultaneous interpretation)

Climate in the High Tatras:

Temperatures range from 5 to 18 °C
in October – mountain climate

Currency in Slovakia: EUR

Time: +1 GMT

Other important links:

Maps of Slovakia: www.supernavigator.sk
Railway: www.zssk.sk/en
Bus: www.slovaklines.sk
Local info: www.tatry.sk/en
Airports: www.bts.aero (Bratislava),
www.prg.aero (Praha),
www.viennaairport.com (Vienna),
www.airportkosice.sk (Košice)

Transport:**> by plane:**

- fly to Prague (then take the plane or IC/EC train to Poprad),
- fly to Vienna or Bratislava (then take the plane or IC/EC train or bus to Poprad)
- fly to Košice (then take IC/EC train or bus to Poprad)

> by train: by train to Bratislava then change to Poprad

> by car: through any border crossing to Slovakia (favourably from Bratislava on motorway) direction Poprad, then through Tatranská Lomnica into Stará Lesná.

> from Poprad (from the airport or railway

station) the organisers assure transportation of participants by car to Stará Lesná. The persons interested in this transportation are kindly asked

to announce their arrival to Poprad in advance by e-mail (jevinovak@vuz.sk) or after arrival to Poprad by phone (+421/(0)915/751 758)

> local transport

Access to the High Tatras is by the electric railway (TEZ) which runs from Poprad across the length of the High Tatras, passing the mouths of almost every valley on the south side of the mountains

Conference chairman:

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Social programme

- All-day trip** ➤ Spišský hrad castle, Levoča, Kežmarok (by bus)
- Half-day trip** ➤ Štrbské pleso lake, Hrebienok (by bus and by cable car)
- Half-day trip** ➤ Demänovská jaskyňa cave (by bus)
- Half-day trip** ➤ Skalnaté pleso lake, Lomnický štít peak (by cable car)

Welcome to Slovakia

Slovakia is a beautiful country in the centre of Europe. The territory of Slovakia is a part of the Pannonian Basin and the Alpine-Himalayan system – the West Carpathians. That is why also the climate in Slovakia ranges between continental and oceanic. Slovakia as an independent country was established after splitting of Czechoslovakia on 1 January 1993. However, the history of Slovakia reaches back to the Palaeolithic era from which are the oldest finds discovered on its territory. Since that time many nations went through it, it was assimilated by many principedoms and monarchs and it did not escape even two most disastrous world wars.

At present, Slovakia is an independent, democratic state, full of cultural values such as e.g. Spišský hrad castle, Oravský hrad castle, Bojnický hrad castle, Betliar, Saint Elisabeth Cathedral in Košice, Vlkolínec, Čičmany and natural beauties such as the High Tatras, the Low Tatras, Slovak Paradise, Muránska moorland, Dobšinská jaskyňa cave and many others.

Since the year 2004 Slovakia is a member of the European Union and it achieves a remarkable economic growth. Since 1 January 2009 Slovakia has become the 16th member of the European Monetary Union. The capital city is Bratislava through which flows the largest European river – the Danube.

In this era also science, education and new technologies develop rapidly. This was also the reason why doc. PhDr. Dušan Čaplovič, DrSc., the scientist of the Slovak Academy of Sciences and recently also the Deputy Prime Minister of the Government of the Slovak Republic for Knowledge-Based Society, European Affairs, Human Rights and Minorities took the patronage of the congress.

Sight-Seeing

➤ High Tatras (Vysoké Tatry)

The northern border of Slovakia with Poland is delimited by grand mountains of the High Tatras. In 1949 this territory was declared as the first Slovak National Park (TANAP). The highest peak is Gerlachovský štít peak which rises up to 2,654 m above sea level. The deep, originally glacial valleys and limpid mountain lakes contribute to scenic character of the Tatras. The High Tatras are a significant tourist destination because they offer something to its visitors in every season.

➤ Stará Lesná

The village Stará Lesná is located below the lower border of the High Tatras in Popradská kotlina basin. Since its foundation in the year 1294 up to the present times it has undergone several changes. From the originally agricultural village it has gradually become a sought-after tourist destination and a starting point for many trips into the surroundings. This is a famous place for organising congresses and conferences. The place has a lot of suitable hotels for that purpose.

➤ Štrbské pleso lake

Štrbské pleso is the second largest lake in the Slovak part of the Tatras, it is the most popular and frequented mountain lake. It is a sought-after destination for tourists, artists and scientists. More than one third of the year its surface remains frozen and even in summer its water does not warm up more considerably. Similarly as other lakes in the High Tatras this one is also of glacial origin.

➤ Lomnický štít peak

Lomnický štít peak (2,632 m) is the most famous and most popular peak in the High Tatras. You can reach its top by ascent with the assistance of a tourist guide or by a cable car which brings you up from Tatranská Lomnica in several minutes. On the top of the peak you can enjoy not only a marvellous and majestic panorama of the Tatras, but in good weather also the beauties of Slovakia and Poland. The peak is also the seat of astronomic and meteorological workplace and television relay station.



Štrbské pleso lake



Levoča



► Levoča

Levoča is a beautiful town since 1950 declared as city conservation reservation. The first written mention of Levoča originates from the year 1249 and only some years later it has become a free royal town. Up today surrounded by a wall its rarity is the largest medieval square of rectangular shape – the largest in Europe. It is a town full of historical monuments – Levočská Town Hall, Cage of Shame, Evangelical Church, town theatre and the most beautiful district house in former Hungary. The most famous of them, however, is Saint Jacob Cathedral which houses one of the largest altars in Europe from the workshop of Master Pavol from Levoča from the 16th century (it measures 18.62 m in height).

► Kežmarok

Below the foot of the High Tatras lies another town rich in culture and tourist treasures. The historical core of Kežmarok is declared as a city conservation reservation since the year 1950. Here you can namely see a unique square solution – fork-shaped with a town hall in the centre and ended by the Mestský hrad castle. The national cultural monuments include also a wooden Evangelical articular church from the year 1717, Evangelical lyceum from the year 1775 with one of the biggest historical school libraries in Europe and the Late Gothic Saint Cross Basilica which was awarded the title of Basilica Minor by the Pope.

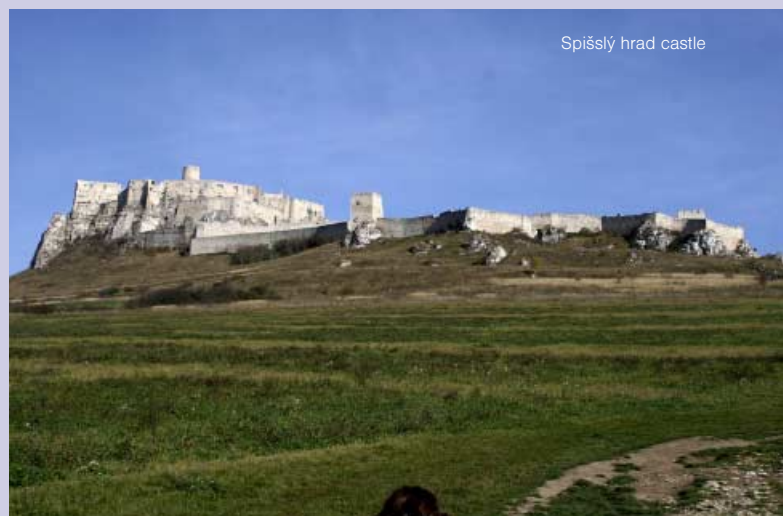
► Spišský hrad castle

With its area of more than 41 thousand m² the national cultural monument – Spišský hrad castle belongs to the most extensive castle complexes in Europe and unanimously it preserves its priority in Central Europe. Since 1993 it is included into the list of UNESCO World's Cultural Heritage. Its construction started already in the 12th century and since then it has undergone the ownership of several royal families, squires, military dignitaries. The medieval importance of the castle proves the fact that nobody succeeded to seize it. In the 18th century the castle was occupied only by the military garrison which left it after fire in the year 1780. At present, it is open up and it is popular not only for the wide public but through its unique character it attracts geologists and also many movie makers.

► Demänovská jaskyňa slobody cave and Demänovská ľadová jaskyňa ice cave

Demänovská jaskyňa slobody cave is the most beautiful cave of extensive system of Demänovské jaskyne caves on the Northern side of the Low Tatras. It was formed in grey-blue (Guttenstein) limestone of the Middle Triassic on six floors. Here you can find yellow, rose, red, purple, in fact, even also grey, dark green up to black colouring of dripstones. The cave pea-ball shaped pearls represent this cave rarity. The still living dripstones and their high glitter contribute to the unique character of this natural phenomenon. The cave comprises together with the adjacent deserted cave the total length of 8,900 m.

The longest parts of subterranean system of Demänovské jaskyne caves are represented by another rarity namely Demänovská ľadová jaskyňa ice cave. Its total length represents 1.7 km out of which 540 m are open to the public. It belongs to the first known caves world-wide. It was already mentioned in the rescript from the year 1299. It consists of grey-blue limestone of the Middle Triassic in four running floors under each other, the last floor is glaciated. It is a splendid natural phenomenon which attracts many domestic and foreign tourists every year.



Spišský hrad castle