

builders Ferdinand Fellner and Hermann Helmer built the National Theatre in Cluj. The same architects built the National Theatre in Zagreb in 1895, as well as theatres in many other cities of the Habsburg Monarchy. In 1872, the University of Cluj was established, lectures thereby being given solely in Hungarian. In 1920, it became a Romanian university, today named the *Univesitatea Babes-Bolyai* after

the renowned Hungarian and the renowned Romanian scientist.


The Spring Meeting precedent to the sixteenth Danubia-Adria Symposium took place in Cluj-Napoca in May 1999.

The sixteenth Danubia-Adria Symposium took place in Unvers T Hotel in Cluj-Napoca between September 29 and October 2, 1999.



Members of the Scientific Committee after the Spring Meeting

First Announcement and Call for Papers



**16th SYMPOSIUM
"DANUBIA-ADRIA"**

**ON EXPERIMENTAL METHODS
IN SOLID MECHANICS**

September 29 – October 2, 1999
Cluj-Napoca - Romania

Organized by:
Romanian Association for Stress Analysis (ARTENS)
Technical University of Cluj-Napoca

Co-organized by:
Austrian Society of Experimental Strain Analysis (ASESA)
Croatian Society of Mechanics (HDM)
Czech Society of Mechanics (CSM)
Hungarian Scientific Society of Mechanical Engineering (GTE)
Italian Association for Stress Analysis (AIAS)
Committee of Mechanics of Polish Academy of Sciences (KMPAM)
Slovak Society of Mechanics (SSM)

IMEKO – Technical Committee 15

Organizing Committee

| | | |
|-----------------|---------------------------|-------------------------------|
| Austria: | J. Affenzeller R. Bec | (Graz) (Vienna) |
| Croatia: | I. Alfirević S. Jecić | (Zagreb) (Zagreb) |
| Czech Republic: | S. Holy J. Višner | (Prague) (Plzeň) |
| Hungary: | L. Borbás F. Thamm | (Budapest) (Budapest) |
| Italy: | A. Freddi F. Di Marino | (Bologna) (Trieste) |
| Romania | N. Iliescu I. Păstăv | (Bucharest) (Cluj- Napoca) |
| Slovakia: | J. Brilla M. Držák | (Bratislava) (Bratislava) |


Scope

The purpose of the International Symposium is to provide a forum for engineers, scientists and industrial experts of the Danubia-Adriatic region and of the neighboring countries to present and discuss the current status and the impact of modern technology and development in the field of experimental methods in solid mechanics.

The conference will be concerned with recent research and development in the field of experimental and hybrid methods in solid mechanics. Primary attention will be given to industrial application of new methods and techniques, including service life estimation of structures and machine parts.

Presentation

The official language of the Conference is English.



16th SYMPOSIUM "DANUBIA-ADRIA"

ON
EXPERIMENTAL METHODS IN SOLID MECHANICS

EXTENDED SUMMARIES

September 29 – October 2 1999
Cluj-Napoca, ROMANIA

The First Announcement and Symposium Proceedings



Univers T Hotel



R. Beer and I. Alfrević



The second meeting of the Scientific Committee



Opening of the Symposium

In Cluj-Napoca National Theatre, the Symposium participants saw the *Masked Ball (Un ballo in maschera)*, the opera by Giuseppe Verdi.



OPERA ROMÂNĂ CLUJ-NAPOCA
 * 80 DE ANI DE LA ÎNFIINȚARE *
 DESCHIDEREA OFICIALĂ
 A STAGIUNII LIRICE 1999-2000

GIUSEPPE VERDI
 BAL MASCAT

| | |
|---|--|
| PETRE SBĂRCEA RODICA POPESCU MOISA VALERIU TEODorescu ADRIAN MUREȘAN TIBERIU POPA | - Dirijor - Regizor - Scenografia și costumele - Coregrafia - Maestru de cor |
|---|--|

Distribuția:

| | |
|---|---|
| VIOREL SĂPLĂCAN - DEBUT - FÜLÖP MARTIN VERONICA UNGUREANU ANA OROS DOINA NECULCE SÂMPETREAN RADU CUCEU MARIUS CHIOREANU TITUS PAULIUC PETRE GHILEA IOAN DAVID | - Riccardo, Guvernatorul Bostonului - Renato, secretarul Contelui - Amelia, soția lui Renato - Ulrica, ghicitoare - Oscar, paj - Silvano, marinăr - Samuel } opozanții Contelui - Tom - Un judecător - Un servitor al Ameliei |
|---|---|

1 OCTOMBRIE 1999

OPERA ROMÂNĂ CLUJ-NAPOCA

STAGIUNEA 1998-1999
 Director general: PETRE SBĂRCEA

GIUSEPPE VERDI
BAL MASCAT
 UN BALLO IN MASCHERA

Dramă muzicală în trei acte (cinci tablouri).
 Libretul de Antonio Somma, după drama "Gustav III" de Eugène S...

PREMIERA MONDIALĂ:
 17 FEBRUARIE 1859 LA ROMA, TEATRUL "APOLLO"

PREMIERA LA OPERA ROMÂNĂ CLUJ-NAPOCA:
 8 DECEMBRIE 1926

In Cluj-Napoca National Theatre, the Symposium participants saw the *Masked Ball (Un ballo in maschera)*, the opera by Giuseppe Verdi.



The Scientific Committee after the Symposium

| Country | Number of papers |
|--------------------|-------------------------|
| Austria | 7 |
| Croatia | 4 |
| the Czech Republic | 5 |
| Hungary | 3 |
| Italy | 6 |
| Poland | 4 |
| Romania | 27 |
| Slovakia | 6 |
| Germany | 2 |
| Russia | 1 |
| Ukraine | 1 |
| UK | 1 |
| Total | 67 |

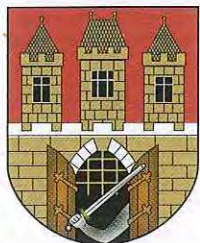


The Scientific Committee and some other Symposium participants in front of Univers T Hotel

Sixty seven papers were submitted by 142 authors from 13 countries. One co-author came from Japan.

THE SEVENTEENTH DANUBIA-ADRIA SYMPOSIUM

Prague, the Czech Republic, 2000



Prague (Czech: Praha; German and Croatian: Prag) is the capital and the largest city of the Czech Republic, with a population of 1,300,000. It is one of the oldest and most beautiful cities in Central Europe. Medieval Prague grew as an agglomeration of towns and smaller settlements of craftsmen, merchants and farmers occupying the territory from the Prague Castle in the north to the Vyšehrad Fort in the south. The Prague Castle (Pražský Hrad) was founded in 873, while the Episcopacy of Prague was established in 973. In 1198, Otakar I proclaimed the Kingdom of Bohemia, later acknowledged also by the Emperor Frederick II in 1212. The King of Bohemia was exempted from all obligations to the Holy Roman Empire, except for the participation in the imperial councils.

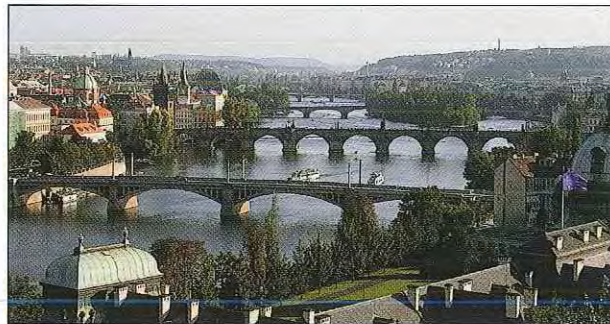


St. Vitus Cathedral



Hradčany

The Old Town (*Staré Město*) was founded in 1230, although the King Otakar II founded the Lesser Town (*Malá Strana*) as early as in 1257. Hradčany dates back to 1320 and was built around the Prague Castle. The peak of Prague's prosperity was seen under the rule of the Holy Roman Emperor Charles IV. At that time Bohemia was the most powerful state of the Holy Roman Empire. Charles IV made Prague its royal seat.



Vltava running through Prague



Charles Bridge

He also founded the New Town (*Nové Město*) in 1348, and the oldest University in Central Europe – *Charles University*. In 1355, Prague became the capital of the Holy Roman Empire. Since 1526, Prague had been under the Habsburg rule. The Emperor Rudolf II (1552-1612) returned the court to Prague. Owing to him, some of the most prominent philosophers, scientists, artists and architects, Tycho Brahe and Johannes Kepler being among them, had been brought to Prague. In 1784, the Emperor Joseph II united four independent urban areas

of Prague – the Old Town, the New Town, Malá Strana and Hradčany. The National Theatre was opened in 1883. After the World War I, Prague became the capital of the Czechoslovak Republic.



Spring Meeting in Prague, April 2000

Scientific Committee

First Announcement



17th DANUBIA-ADRIA SYMPOSIUM
on experimental methods in solid mechanics
OCTOBER 11-14, 2000
Praha (Prague)
 Czech Republic

Organized by:
 Czech Society of Mechanics (CSM)
 Czech Technical University in Prague (CVUT)
 Czech Association of Mechanical Engineers (ASf)

Co-organized by:
 Austrian Society of Experimental Strain Analysis (ASESA)
 Croatian Society of Mechanics (HDM)
 Hungarian Scientific Society of Mechanical Engineering (GTE)
 Italian Association for Stress Analysis (AIAS)
 Committee of Mechanics of Polish Academy of Sciences (KMPAM)
 Romanian Association for Stress Analysis (ARTENS)
 Slovak Society of Mechanics (SSM)

Scientific Board

| | | |
|----------------|----------------|---------------|
| Austria | J. Affenzeller | (Graz) |
| | R. Beer | (Vienna) |
| Croatia | J. Alfirević | (Zagreb) |
| | S. Jecić | (Zagreb) |
| Czech Republic | S. Holý | (Prague) |
| | J. Visner | (Prague) |
| Hungary | L. Borbás | (Budapest) |
| | F. Thamm | (Budapest) |
| Italy | A. Freddi | (Bologna) |
| | F. Di Marino | (Trieste) |
| Poland | R. Bedzinski | (Wrocław) |
| | J. Słupnicki | (Warsaw) |
| Romania | N. Hiescu | (Bucarest) |
| | I. Pastrav | (Cluj-Napoca) |
| Slovakia | J. Brilla | (Bratislava) |
| | J. Benčat | (Žilina) |

Scope of the DAS'2000

The 17th Danubia-Adria Symposium on Experimental Methods in Solid Mechanics (DAS'2000) represents a continuation to the series of fruitful meetings at the previous D-A Symposia. The purpose is to provide a forum for engineers, researchers, university teachers and students, scientists and industrial experts to present and discuss the current status and impact of modern technology and development in the field of experimental methods in solid mechanics.

The topic of the DAS'2000 will be particularly concerned in recent research and development of experimental and hybrid methods for quality enhancing of structures, as integrity, service life and technical safety.


An integral part of the Symposium will be the exhibition of measuring instrumentation used in experimental stress and strain analysis as well as in mechanics generally.

The Symposium is supposed to include a special workshop on „Experiment in Solid Mechanics in the Next Millennium“ that will take one day more. Announcement for this workshop will be sent in the second announcement for DAS'2000.

Conference Venue


The 17th Danubia-Adria Symposium will take place in Prague, the capital of the Czech Republic, centre of culture, education and research, and the European town of the year 2000. In 1993 the Czech Society for Mechanics and the Czech Technical University in Prague were organizers and hosts of the annual 10th DAS in Mělník, but now the conference session is situated to the University Campus and the participants will be accommodated in the University Hotel Krystal.

Participants and accompanying persons will have an opportunity to take part not only in the official programme during the Symposium, but before and/or after the technical part to make their acquaintance with history, culture and landscape of our country.



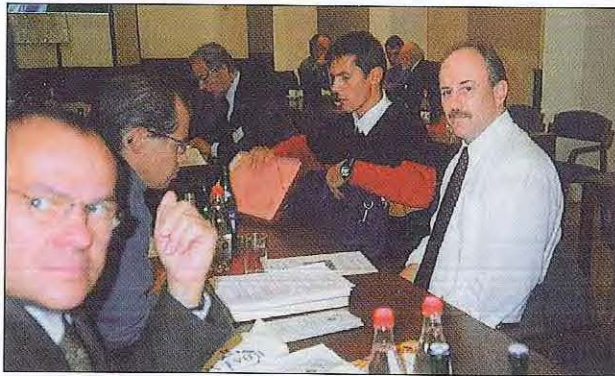
17th DANUBIA-ADRIA SYMPOSIUM
 ON
 EXPERIMENTAL METHODS IN SOLID MECHANICS

EXTENDED SUMMARISERS



October 11–14, 2000
 Praha (Prague) – Czech Republic

The First Announcement and Symposium Proceedings



Poster Session



| Country | Number of papers |
|--------------------|------------------|
| Austria | 7 |
| Croatia | 11 |
| the Czech Republic | 23 |
| Hungary | 3 |
| Italy | 12 |
| Poland | 15 |
| Romania | 24 |
| Slovakia | 5 |
| Estonia | 1 |
| Germany | 7 |
| UK | 1 |
| Total | 109 |



Two hundred and twenty five authors from 12 countries submitted a total of 109 papers. The authors came from 11 countries listed in the above table, while one of the co-authors came from Slovenia.

THE EIGHTEENTH DANUBIA-ADRIA SYMPOSIUM

Steyr, Austria, 2001

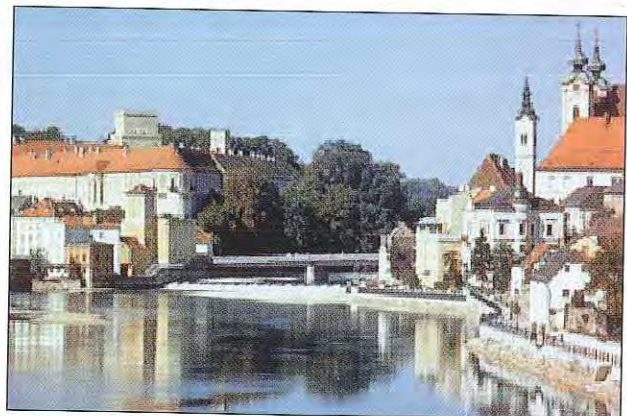


Steyr is an ancient and lovely town in the Upper Austria, with a population of about 40,000. It is located about 140km west of Vienna and about 20km southeast of Linz. Two rivers, Steyr and Enns, flow through the town and meet in the vicinity of its centre near the Lamberg Castle and St. Michael's Church. The

the Mathematical Tower (Matematische Turm). This fully free standing, nine-storey building, was erected between 1749 and 1758. It is 50m high and represents one of the first examples of modern high-rise architecture. In medieval times Steyr was the centre of Austria's iron industry. As of today, Steyr hosts many companies producing motor vehicles, firearms and tractors.



Steyr Panorama, the confluence of Steyr and Enns Rivers



Steyr

Lamberg Castle dates back to 980, but the most of it was reconstructed between 1727 and 1731 in the Baroque style. In the vicinity of Steyr, remarkable monasteries (Kremsmünster and St. Florian) can be found. Kremsmünster was founded in 777. The symbol of the Monastery is the baroque observatory called

The Spring Meeting precedent to the 18th Danubia-Adria Symposium took place in Vienna at the *Institut für Festigkeitslehre, Abteilung für Experimentelle Festigkeitslehre* (the Institute of Strength of Materials, the Laboratory of Experimental Strength of Materials.)



Scientific Committee at Vienna Spring Meeting held in 2011

The 18th Danubia-Adria Symposium took place in Steyr, a picturesque town situated in the

Upper Austria, between September 26 and September 29, 2001.

First Announcement

18th DANUBIA-ADRIA Symposium on Experimental Methods in Solid Mechanics

September 26-29, 2001 Steyr, Austria

<http://das.tuwien.ac.at>

Organized by:
Austrian Society of Experimental Strain Analysis (ASESA)
Österreichischer Ingenieur- und Architektenverein (ÖIAV)

Co-organized by:
Croatian Society of Mechanics (HDM)
Czech Society of Mechanics (CSM)
Hungarian Scientific Society of Mechanical Engineering (STE)
Italian Association for Stress Analysis (AIAS)
Committee of Mechanics of Polish Academy of Sciences (KMPAM)
Romanian Association for Stress Analysis (ARTENS)
Slovak Society of Mechanics (SSM)

Scientific Board

| | | | |
|-----------------|------------------------|--------------------------|-----------------------------|
| Austria: | J. Affenzeller (Graz) | R. Beer (Vienna) | J. Eberhardsteiner (Vienna) |
| Croatia: | I. Alfrevič (Zagreb) | S. Jecić (Zagreb) | D. Semenski (Zagreb) |
| Czech Republic: | S. Holý (Prague) | J. Višner (Prague) | |
| Hungary: | L. Borbás (Budapest) | F. Thamm (Budapest) | |
| Italy: | A. Freddi (Bologna) | F. Di Marino (Trieste) | |
| Poland: | R. Bedziński (Wrocław) | J. Stupnicki (Warsaw) | |
| Romania: | N. Iliescu (Bucarest) | I. Pastrav (Cluj-Napoca) | |
| Slovakia: | O. Bokúvka (Žilina) | J. Benčat (Žilina) | |

Scope of DAS 2001

The 18th Danubia-Adria Symposium on Experimental Methods in Solid Mechanics (DAS 2001) represents a continuation to the series of fruitful meetings at the previous D-A Symposia. The purpose is to provide a forum for engineers, researchers, university teachers and students, scientists and industrial experts to present and discuss the current status and impact of modern technology and development in the field of experimental methods in solid mechanics.

The topic of the DAS 2001 will be particularly concerned to recent research and development of experimental and hybrid methods for quality enhancing of structures, service life and technical safety.

An integral part of the Symposium will be the exhibition of measuring instrumentation used in experimental strain and stress analysis as well as in mechanics generally.

Conference Venue

The 18th Danubia-Adria Symposium will take place in Steyr (Upper-Austria) which is a centre of ancient and modern industry and culture, education and research. There are remarkable monasteries (Krämsmünster and St. Florian, with the famous "BRUCKNER-Organ") located in the

18th Danubia-Adria Symposium on Experimental Methods in Solid Mechanics

EXTENDED SUMMARIES

Steyr, Austria
September 26-29, 2001

The First Announcement and Symposium Proceedings



Opening of the 18th Danubia-Adria Symposium



Scientific Committee at Vienna Spring Meeting held in 2011



I. Alfirević in front of the building bearing the Coats of Arms of Croatia, Dalmatia and Dubrovnik on its front



Symposium dinner

| Country | Number of papers |
|--------------------|-------------------------|
| Austria | 14 |
| Croatia | 11 |
| the Czech Republic | 21 |
| Hungary | 2 |
| Italy | 9 |
| Poland | 10 |
| Romania | 12 |
| Slovakia | 3 |
| Estonia | 1 |
| Denmark | 1 |
| Germany | 6 |
| Japan | 1 |
| Slovenia | 1 |
| UK | 1 |
| Total | 93 |

THE NINETEENTH DANUBIA - ADRIA SYMPOSIUM

Polanica Zdrój, Poland, 2002



Polanica-Zdrój (German: Altheide-Bad; Czech: Starý Bor) is a spa in the Kłodzko Valley situated in the Lower Silesia, about 90km southwest of Wrocław, near the Polish-Czech border. Its population approximates to 7,000. Polanica-Zdrój was first mentioned in 1347 under the name Heyde. At that time, it was a part of the Kingdom of Bohemia which belonged to the Holy Roman Empire. During the Thirty Year's War, the town was destroyed by the Swedish troops in 1645. It became a part of the Brandenburg-Prussia in 1742, while

in 1871 it turned into a part of the German Empire. After the World War II, Polanica-Zdrój was returned to Poland. Water springs in Polanica-Zdrój became famous already in the 16th century. From 1595 on, the town had been owned by the Jesuits. They built their residence there and started to utilize the springs for medical purposes. After the destruction by the Swedish troops, the place did not recover until the 19th century. Joseph Gromis, a rich merchant from Kłodzko, purchased it in 1828, developed water springs-based infrastructure, and built a wellness room and a wooden bathhouse. Polanica-Zdrój became popular as a health resort already in 1870.



is a well-known health resort picturesquely located in the Kłodzko valley at the altitude of 410 m. It is situated in the valley of the Bystrzyca Dusznicka river at the foot of gentle slopes of the Table Mountains (Góry Stołowe) and the Bystrzyckie Mountains, which are covered with coniferous forests.

Those huge areas of woodland influence the annual temperature course creating in Polanica a mild, submontane climate with moderate intensity of stimuli.

The main factors determining the health-restorative character of the town are four rich calcium bicarbonate mineral springs. The unique proportions of calcium to magnesium and sodium to potassium are rarely found in other mineral waters.



Polanica-Zdrój




The Spring Meeting of the Scientific Committee was held in Warsaw in May 2002.

The nineteenth Danubia-Adria Symposium took place in Polanica-Zdrój between September 25 and September 28, 2002.

| Country | Number of papers accepted | | |
|----------------------|---------------------------|------|--------|
| | total | oral | poster |
| AU (Austria) | 7 | 2 | 5 |
| CR (Croatia) | 8 | 2 | 6 |
| CZ (Czech Republic) | 19 | 2 | 17 |
| GE (Germany) | 4 | 3 | 1 |
| HU (Hungary) | 3 | 1 | 2 |
| IT (Italy) | 7 | 1 | 6 |
| JA (Japan) | 1 | 1 | 0 |
| PL (Poland) | 33 | 3 | 30 |
| RO (Romania) | 8 | 1 | 7 |
| RU (Russia) | 4 | 1 | 3 |
| SK (Slovak Republic) | 8 | 2 | 6 |
| UA (Ukraine) | 1 | 0 | 1 |

Statistics of the papers presented at the Symposium

Announcement



IDA NUBIA

D 19th DANUBIA-ADRIA
R Symposium
I on Experimental Methods
A in Solid Mechanics

September 25-28, 2002
Polanica Zdrój, Poland

Organized by:
Committee for Mechanics of the
Polish Academy of Sciences (KMPAN)
Institute of Aeronautics and Applied Mechanics of the
Warsaw University of Technology (ITLIMS)


Co-organized by:
Austrian Society of Experimental Strain Analysis (ASESA)
Croatian Society of Mechanics (HDM)
Czech Society of Mechanics (CSM)
Hungarian Scientific Society of Mechanical Engineering (GTE)
Italian Association for Stress Analysis (AIAS)
Romanian Association for Stress Analysis (ARTENS)
Slovak Society of Mechanics (SSM)

International Scientific Board:

| | | |
|-----------------|--------------------|---------------|
| Austria: | J. Affenzeller | (Graz) |
| | R. Beer | (Vienna) |
| | J. Eberhardsteiner | (Vienna) |
| Croatia: | I. Alfrević | (Zagreb) |
| | S. Jecić | (Zagreb) |
| | D. Semenski | (Zagreb) |
| Czech Republic: | S. Holý | (Prague) |
| | J. Visner | (Prague) |
| Hungary: | L. Borhás | (Budapest) |
| | F. Thamm | (Budapest) |
| Italy: | A. Freddi | (Bologna) |
| | F. Di Marino | (Trieste) |
| Poland: | R. Będziński | (Wrocław) |
| | J. Stupnicki | (Warsaw) |
| Romania: | N. Iliescu | (Bucarest) |
| | I. Pastrav | (Cluj-Napoca) |
| Slovakia: | O. Bokúvka | (Žilina) |
| | J. Benčat | (Žilina) |

National Committee:
J. Stupnicki – Chairman
R. Będziński – Co-chairman
L. Dietrich – Co-chairman

Scope of DAS 2001:
The 19th Danubia-Adria Symposium on Experimental Methods in Solid Mechanics represents a continuation to the series of meetings at the previous DAS Symposia. The purpose of this meeting is to bring together engineers, researchers, industrial experts as well as students and undergraduates to present and discuss their achievements and developments in the field of experimental methods in solid mechanics. A presentation of instruments and experimental methods is being planned during the Symposium. Exhibition space will be available and it is anticipated that the Symposium will attract researchers and exhibitors from industry to present their instruments and measuring techniques applied in experimental methods in solid mechanics and related topics. Further information can be obtained from the Secretariat of the Symposium.



IDA NUBIA

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19th DANUBIA-ADRIA
SYMPOSIUM
ON EXPERIMENTAL METHODS
IN SOLID MECHANICS

Abstracts

Polanica Zdrój, POLAND
September 25-28, 2002

The First Announcement and the Symposium Proceedings

| Country | Number of papers | Statistics of the papers published in the Proceedings |
|--------------------|------------------|--|
| Austria | 7 | Two hundred and forty one authors and co-authors from 12 countries submitted 108 papers published in the Symposium Proceedings. However, only 103 papers were presented at the Symposium, out of which 19 in oral and 84 in poster form. |
| Croatia | 8 | |
| the Czech Republic | 21 | |
| Germany | 3 | |
| Hungary | 4 | |
| Italy | 8 | |
| Poland | 36 | |
| Romania | 9 | |
| Slovakia | 6 | |
| Japan | 1 | |
| Russia | 3 | |
| Ukraine | 2 | |
| Total | 108 | |

THE TWENTIETH DANUBIA-ADRIA SYMPOSIUM

Győr, Hungary, 2003



Győr (German: Raab; Czech and Slovak: Rab) is the capital of Győr-Moson-Sopron County and the most important city of the northwest Hungary.

It is located halfway between Budapest and Vienna, and has a population of about 130,000. The first large settlement established in the Győr area was the Celtic Arabona. Romans conquered this part of Pannonia around 10 AD, but due to the constant attacks of the tribes living east, they chose to abandon it in the 4th century. Around

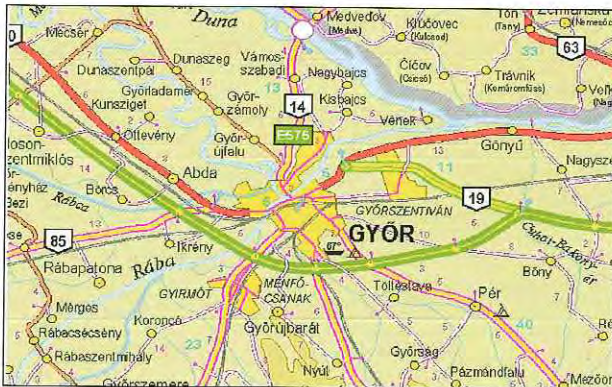
500 AD, the area was settled by Slavs and later on in 547 by Lombards. Between 568 and 800, this territory was ruled by Avars. Between 880 and 894 it was a part of the Great Moravia. Hungarians occupied the town around 900 and fortified it. After the Battle of Mohács that took place in 1526, Győr was ruled by Austrians and Turks, turn and turn about. After the battle of Vienna in 1683, Turks abandoned Győr forever. In 1743, Maria Theresa promoted Győr to a free royal town. The ancient core of the city is the Káptalan Hill situated at the confluence of three rivers, Danube, Rába and Rábca.



Győr Panorama



The Spring Meeting precedent to the 20th Danubia-Adria Symposium took place in Révész Hotel in Győr.



Révész Hotel in Győr



City Hall



The second meeting of the Scientific Committee

First Announcement

20th DANUBIA-ADRIA Symposium
on Experimental Methods in Solid Mechanics

September 24-27, 2003
Győr, Hungary

[http:// www.gte.mtesz.hu/das](http://www.gte.mtesz.hu/das)

Organized by:
Hungarian Scientific Society of Mechanical Engineering (STE)
Széchenyi István University, Győr (SZE)

Co-organized by:
Austrian Society of Experimental Strain Analysis (ASESA)
Croatian Society of Mechanics (HDM)
Czech Society of Mechanics (CSM)
Italian Association for Stress Analysis (AIAS)
Committee for Mechanics the Polish Academy of Sciences (KMPAM)
Roumanian Association for Stress Analysis (ARTENS)
Slovak Society of Mechanics (SSM)

Scientific Board

| | | |
|-----------------|------------------------|-----------------------------|
| Austria: | J. Affenzeller (Graz) | J. Eberhardsteiner (Vienna) |
| Croatia: | I. Alfrević (Zagreb) | S. Jocić (Zagreb) |
| | D. Semenski (Zagreb) | |
| Czech Republic: | S. Holý (Prague) | J. Visner (Pilsen) |
| | F. Plánička (Pilsen) | |
| Hungary: | L. Borbás (Budapest) | F. Thamm (Budapest) |
| Italy: | A. Fredi (Bologna) | G. Nicoletto (Parma) |
| Poland: | R. Bedziński (Wrocław) | J. Stupnicki (Warsaw) |
| Romania: | N. Iliescu (Bucarest) | I. Pastrav (Cluj-Napoca) |
| Slovakia: | O. Bokúvka (Žilina) | J. Benčat (Žilina) |
| | V. Gíba (Bratislava) | |

Honorary Members of International Scientific Board:
HR Prof. Dr. Rudolf Beer (Vienna)
Prof. Dr. István Huszár (Gödöllő)

Scope of DAS 2003

The 20th Danubia-Adria Symposium on Experimental Methods in Solid Mechanics (DAS 2003) represents a continuation to the series of fruitful meetings at the previous D-A Symposia. The purpose is to provide a forum for engineers, researchers, university teachers and students, scientists and industrial experts to present and discuss the current status and impact of modern technology and development in the field of experimental methods in solid mechanics.

The topic of the DAS 2003 will be particularly concerned to recent research and development of experimental and hybrid methods for quality enhancing of structures, service life and technical safety.

An integral part of the Symposium will be the exhibition of measuring instrumentation used in experimental strain and stress analysis as well as in mechanics generally.

Conference Venue

The 20th Danubia-Adria Symposium will take place in Győr (Western part of Hungary) which is a centre of ancient and modern industry and culture, education and research. There are remarkable abbey, founded in 996 (Pannonhalma) located in the vicinity of Győr. So participants and commensals persons will have

20th DANUBIA-ADRIA SYMPOSIUM
on Experimental Methods in Solid Mechanics

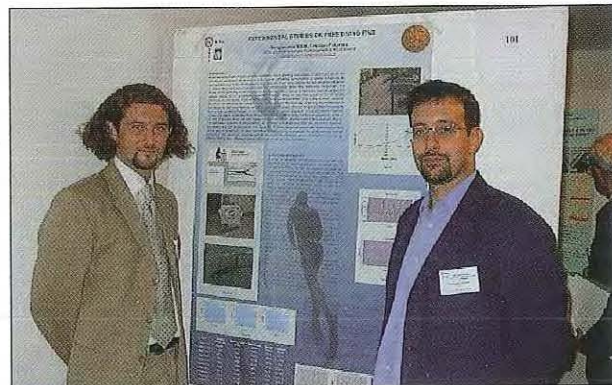
Abstracts

September 24-27, 2003
Győr, Hungary

The First Announcement and the Symposium Proceedings



Opening of the Symposium



Poster session



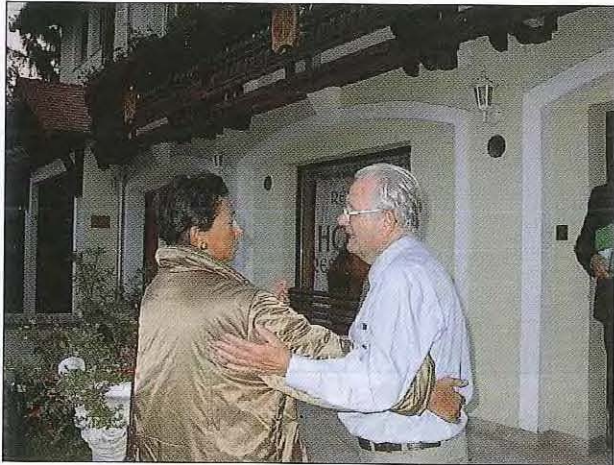
Concert given in the Old Church in Győr

The 20th Danubia-Adria Symposium took place in Révész Hotel in Győr between September 24 and September 27, 2003. The Opening Ceremony was held at the Szechny University. During the Symposium, a Technical Visit to the

Raba Museum was organized. The participants also attended a concert given in the Old Church in Győr. The Symposium dinner was served at the Révész Hotel.



Symposium dinner



Madame Curioni and R. Beer



Madame Borbas and A. Freddi

| Country | Number of papers |
|--------------------|-------------------------|
| Austria | 15 |
| Croatia | 4 |
| the Czech Republic | 31 |
| Hungary | 22 |
| Italy | 5 |
| Poland | 15 |
| Romania | 8 |
| Slovakia | 6 |
| Estonia | 2 |
| Germany | 6 |
| Japan | 1 |
| USA | 1 |
| Total | 116 |



Symposium participants

Two hundred and forty four authors from 12 countries submitted a total of 116 papers.

THE TWENTY FIRST DANUBIA - ADRIA SYMPOSIUM

Brijuni, Croatia, 2004



The Brijuni Islands or Brijuni (Italian: Brioni) are a group of 2 larger and 12 smaller islands off the southwest coast of Istria, from which they are separated by the narrow Fažana Strait. The largest island, Veliki Brijuni, occupies the area of 5.6 km² and lies only 2km off the coast. The second largest island, Mali Brijun, occupies the area of 1,072 km². The total square surface occupied by these 14 islands equals to 7.36 km². Brijuni have been inhabited since the prehistoric times. In the mid-second millennium BC, they were inhabited by the Illyrian tribe Histri. The Istrian Peninsula was conquered by the Romans in 177 BC. After that, the history of Brijuni has followed that of Pula. In 1815, the Islands became a part of the Austrian Empire. Since the Islands made a control point to the entrance to the Austrian naval base in Pula, a strong fortress Fort Tegetthoff was erected on Veliki Brijun, but the Austro-Hungarian Navy subsequently abandoned the fortress. After seeing the Islands in their fascinating beauty, Paul Kupelwieser (1843-1919), a Viennese industrial magnate, bought

the whole archipelago and transformed it into an exclusive summer resort.

After being returned to Yugoslavia, the Islands became the residence of the Yugoslav President Tito. Almost 100 presidents, kings and other heads of states were entertained there by Tito. Many movie stars and other celebrities were also Tito's guests there, including Gina Lollobrigida, Carlo Ponti, Richard Burton and Elisabeth Taylor. On Veli Brijun Island two hotels can be found: the Neptun Hotel, in which the 21st Danubia-Adria Symposium took place, and the Karmen Hotel. Veli Brijun is covered in Mediterranean vegetation and has a zoo, a pheasant farm and a safari park populated with diverse animal species from all over the world, so that herds of wild deer and peacocks can be seen roaming around.

The Spring Meeting precedent to the 21st Danubia-Adria Symposium was held at the Coning Hotel in Trakošćan. The participants of the meeting visited the Neo-Gothic Trakošćan Castle and Sveti Križ Začretje Castle. Trakošćan Castle dates back to the 13th century. Between 1840 and 1862 the Castle was reconstructed in Neo-Gothic style. On the occasion, a concert



Map of the Brijuni Islands



Sweeping view of the Brijuni Islands

and a reception were given for the Scientific Committee members and their accompanying persons in the Sveti Križ Začretje Castle. The reception was given by the family that owns

the Castle; in this respect, the cooperativeness of Mrs Mirna Flögel Mršič deserves a special mention.



Participants of the Spring Meeting in front of the Coning Hotel in Trakošćan, May 2004



Trakošćan Castle



Sv. Križ Začretje Castle

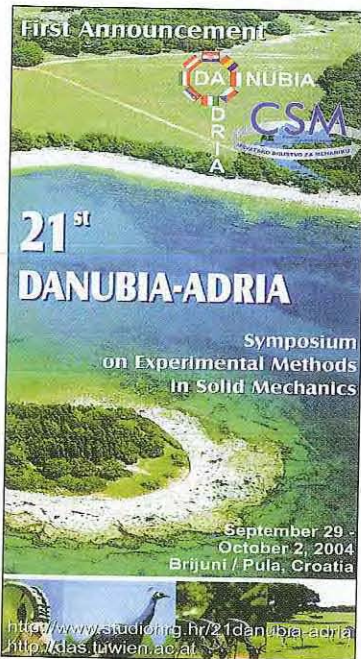
The 21st Danubia-Adria Symposium took place in the Neptun Hotel situated on the Veli Brijun Island between September 29 and October 2, 2004. During the 21st Danubia-Adria Symposium, the following was organized:

- Technical Visit to Plomin Thermal Power Plant;

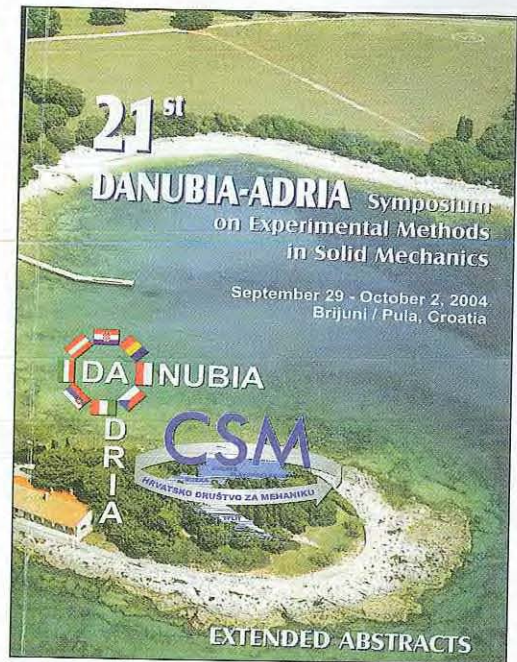
- Visit to the Archaeological Museum in Pula;
- A tour through the Istria inland, including a visit to a vine cellar.



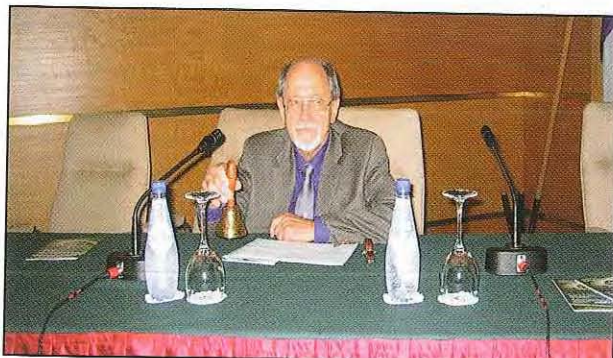
Neptun Hotel



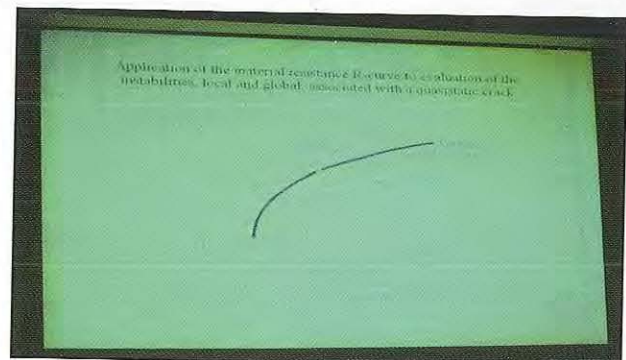
| | |
|--|-----------------------------|
| Organized by: | |
| Croatian Society of Mechanics (HDM) | |
| Co-organized by: | |
| Austrian Society of Experimental Strain Analysis (ASESA) | |
| Czech Society of Mechanics (CSM) | |
| Hungarian Scientific Society of Mechanical Engineering (GTE) | |
| Italian Association for Stress Analysis (AIAS) | |
| Committee for Mechanics of the Polish Academy of Sciences (KMPAA) | |
| Romanian Association for Stress Analysis (ARTENS) | |
| Slovak Society of Mechanics (SSM) | |
| Scientific Board | |
| Austria: | J. Eberhardsteiner (Vienna) |
| | W. Eichlseder (Leoben) |
| Croatia: | I. Alfirević (Zagreb) |
| | S. Jecić (Zagreb) |
| | D. Semenski (Zagreb) |
| Czech Rep.: | S. Holý (Prague) |
| | F. Plánička (Pilsen) |
| Hungary: | L. Borbás (Budapest) |
| | F. Thamm (Budapest) |
| Italy: | A. Freddi (Parma) |
| | G. Nicoletto (Bologna) |
| Poland: | R. Bedziński (Warsaw) |
| | J. Slupnicki (Warsaw) |
| Romania: | N. Iliescu (Bucharest) |
| Slovakia: | I. Pastrva (Zilina) |
| | O. Bokúvka (Zilina) |
| | J. Benát (Zilina) |
| Honorary Members of International Scientific Board: | |
| HR Prof. Dr. Rudolf Beer (Vienna) | |
| Prof. Dr. István Huszár (Gödöllő) | |
| Local Organizing Committee | |
| Ivo Alfirević | |
| Jasminka Biondić (secretary) | |
| Nenad Drvar | |
| Mirko Husejak | |
| Sjlepan Jecić (president) | |
| Janoš Kodvanj | |
| Damir Semenski | |
| Scope of DAS 2004 | |
| The 21st Danubia-Adria Symposium on Experimental Methods in Solid Mechanics (DAS 2004) represents a continuation to the series of fruitful meetings at the previous D-A Symposia. The purpose is to provide a forum for engineers, researchers, university teachers and students, scientists and industrial experts to present and discuss the current status and impact of modern technology and development in the field of experimental methods in solid mechanics. | |



The First Announcement and the Symposium Proceedings



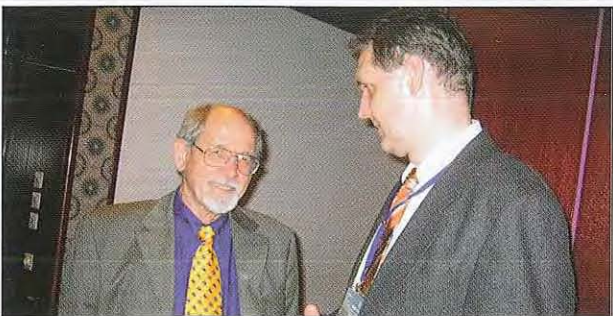
Elmar Ficker, the Chairman



Presentation of a paper



Opening of the 21st Danubia-Adria Symposium, Brijuni, 2004



Symposium dinner



The second meeting of the Organizing Committee



Coffee break



Scientific Committee of the Danubia-Adria Symposium



Brijuni National Park and the car owned by Josip Broz Tito

| Country | Number of papers |
|----------------|------------------|
| Austria | 13 |
| Croatia | 16 |
| Czech Republic | 34 |
| Hungary | 10 |
| Italy | 8 |
| Poland | 21 |
| Romania | 10 |
| Slovakia | 6 |
| Slovenia | 3 |
| Denmark | 1 |
| Germany | 11 |
| Japan | 1 |
| USA | 1 |
| Total | 135 |

Three hundred and six authors and co-authors from 13 countries submitted a total of 135 papers. Eighty contributions were presented during the poster sessions B, D, and G, while fifty five presentations were delivered during the oral sessions A, C, E, F, H, I, J, and K.

