

Conference organizing committee

Havelský Václav	- Conference president, Technical University, Bratislava
Blaha Marián	- Specialist in the area of compressor research, development
Kočíš Luboslav	- Embraco Slovakia, Spišská Nová Ves
Pastor Ludomil	- National Committee for cooperation with IIR
Maťašovský Miroslav	- Danfoss Compressors Slovakia, Zlaté Moravce
Tomlein Peter	- Association for Refrigeration and Air Conditioning Technology

Scientific Committee

Billiard Francois	- International Institute of Refrigeration, Paris
Butrymowicz Dariusz	- Polish Academy of Sciences, Gdansk
Deschamps Cesar	- TU Santa Catarina Florianópolis
Groll A. Eckhard	- School of Mechanical Engineering, Purdue
Halozan Hermann	- Graz University of Technology
Havelský Václav	- Slovak Technical University, Bratislava
Kaiser Harald	- Bock, Frickenhausen
Lavrenchenko G. K.	- Institut o Energy Conversion System, Odessa
Nielsen Ole Kaarup	- Danfoss Compressors, Zlaté Moravce
Ota Josef	- Czech Technical University Prague
Pařízek Jiří	- Czech Committee for Cooperation with IIR, Prague
Pfeil Volkmar	- Bitzer, Sindelfingen
Soltes Jozef	- Munich Technical University
Usov B.A.	- Inertek, Moscow
Voznyi Valery	- Vesta, Kiev
Wurm Jaroslav	- IGT, Chicago (<i>pensioner</i>)
Zgliczynski Marek	- Embraco Europe, Riva Presso Chieri

Conference secretariat

Slovak Association for Refrigeration and Air conditioning Technology, Rovinka

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Conference program

Conference at the Congress Centre of Slovak National Parliament, September 29.9 – 1.10. 2004 will be divided into three days:

29.9. - 08.00 Visit of compressors production in Spišská Nová Ves and Zlaté Moravce

29.9. - 15.00 Opening and plenary lectures at the Congress Center in Papiernička

29.9. - 19.30 Night Visit of castle Red Stone and welcoming glass of wine, meeting with melodies

30.9. - 07.00 Breakfast (*swimming pool, sauna and fitness will be opened*)

30.9. - 08.20 Compressors and refrigeration technologies. Sessions of B and E committees

30.9. - 12.00 Lunch and departure at 13.00 o'clock to the castle Smolenice

30.9. - 15.00 Inspections and diagnostic of cooling circuits

30.9. - 18.00 Wine tasting, social gathering at the castle with typical castle program and food

1.10. - 07.00 Breakfast (*swimming pool, sauna and fitness will be opened*)

1.10. - 08.20 Compressors, Coolants and Oils

1.10. - 10.00 Closing of the conference

1.10. - 10.30 Relax – swimming, sauna, bowling, squash

1.10. - 12.00 Lunch, back to home

Registration

Started September 29 at 08.00 o'clock at the receptions Embraco Slovakia in Spišská Nová Ves and Danfoss Compressors in Zlaté Moravce. Registration in Papiernička will start at 12.00 o'clock.

Addresses and contacts – in case of your visit please make an announcement

Embraco Slovakia, Luboslav Kočíš, Odorínska cesta 2, Spišská Nová Ves, 00421 53 4172148

Danfoss Compressors, Miroslav Maťašovský, Továrenská 49, Zlaté Moravce, 00421 37 6406100

Email addresses: luboslav.kocis@embraco.sk and m.matasovsky@danfoss-compressors.sk

Program of the IIR/IIF Conference

COMPRESSORS 2004

*Congress Center of Slovak National Parliament Častá Papiernička
September 29 – October 1*

WENSDAY, September 29

12.30		Registration and coffee
	Cinema Hall	PLENARY LECTURES – Session Chair Hermann Halozan
15.00	Vaclav Havel'sky	Welcoming address
15.20	Billiard François	Refrigerating Equipment, Energy Efficiency and Refrigerants: Trends on a Per-Sector Basis
15.40	Groll Eckhard	Current Status of Carbon Dioxide Compressors
16.00	Zgliczynski Marek, Paolo Valero	Hydrocarbons Compressors for Light Commercial Refrigeration
16.20	Nielsen Ole Kaarup	Development of Hermetic Compressors for the Refrigerant Propane
16.40	Kaiser Harald	A brief view of regulations related to the use of refrigerants in Europe - with a special focus on CO ₂ application in the future
17.00	Wurm Jerry	Review of Refrigeration Compressors Developments Trends
17.20	Janda František, Blaha Marián, Blaha Peter	Global Development Trends in Compressors for Air Conditioning Systems
18.00		<i>Dinner</i>
18.50		<i>Transport by bus (3 km)</i>
19.30		<i>Sightseeing tour - Castle Red Stone</i>
20.45		<i>Welcoming glass of wine at the Castle – meeting with melodies</i>
22.00		<i>Transport by bus (3 km)</i>

THURSDAY Morning, September 30

7.00	Swimming, Sauna	
7.00	Breakfast	
	Cinema Hall	COMPRESSORS I. – Session Chair François Billiard
08.20	Khaustau V.A., Razhkou U., Morozov A., Zanko	Optimum Choice of Reciprocating Compressors For Domestic Refrigerants
08.40	Prodan M. Marius	Performance Prediction of a Hermetic Reciprocating Compressor
09.00	Khmel'njuk Michael, Lavrentchenko Georgy, Vozny Valery	Generalized Model Volumetric and Electric Performances of Hermetic Compressors
09.20	Souto L. E. M., Deschamps C. J.	Experimental Investigation of Flow through Compressor Valves
09.40	Scherba Victor	Definition of the Optimum Law of Change of Volume of a Cavity Of the Cylinder in a Cycle of the Piston Compressor
10.00		<i>Coffee in vestibule</i>
	Cinema Hall	COMPRESSORS II. - Session Chair Cesar Deschamps
10.20	Oldrich Jiří	Variable Composition Gas Centrifugal Compressor - antisurge Protection
10.40	Parodi Maria Laura	Variable External Controlled Compressor in New Cars A/C Systems
11.00	Genger Dieter	Energy Optimized Compressors and Systems in commercial Refrigeration
11.20	Khmel'njuk Michael, Vozny Valery, Mazur V.	Characterization of a Reciprocated Compressor Working with Azeotropic blends
11.40	Butrymowicz Dariusz	Application of Two-phase Ejector as Booster Compressor in Refrigeration Systems
12.00		<i>Lunch</i>
13.00		<i>Transport to the Castle Smolenice</i>

THURSDAY Morning, September 30

7.00	Swimming, Sauna	
7.00	Breakfast	
	Congress Hall	REFRIGERATION TECHNOLOGIES – Session Chair Václav Havelský
08.20	Halozan Hermann	AC Systems in Large Commercial Buildings
08.40	Maykot, Reinaldo, Weber, Gustavo C., Maciel, Ricardo A.	Using the TEWI methodology to evaluate alternative Refrigeration technologies
09.00	Zhelezny V.P, Vozny V.F., Stepanova V.P., Suhodloskaya A.B.	The Problems and Prospects of Development of the TEWI - Analysis
09.20	Ruciński Adam	Thermoacoustics in Cooling Technology
09.40	Dubay Stanislav, Havelský Václav	Heat Pump Design With Thermal Accumulation in the Refrigeration Circuit
10.00	Aleshin Yu.P., Belozarov G.A., Mednikova N.M., Pytchenko V.P.	Technical and Economical Comparison of Systems with Pump-Circulation Supply of Ammonia or Coolant Refrigerated in Modern Efficient Chillers in Refrigerating
10.20	Rusowicz Artur	The Coatings on Parts of Pumps and Compressors
10.40	Wójtowicz Konrad	Analysis of the Coolant Circuits for a Gas Compressor
11.00	Krajčí Igor	Indirect adiabatic cooling with air washer and sprayed heat exchanger
11.00		<i>Coffee in vestibule</i>
11.00	Billiard François	Business meeting of IIR/IIF Section B
11.40		<i>Lunch</i>
13.00		Transport to the Castle Smolenice

THURSDAY Afternoon, September 30 – Castle Smolenice

	Congress Hall	INSPECTIONS AND DIAGNOSTIC – Session Chair Dušan Petráš
14.40	Petráš Dušan	REHVA and their activities in the field of energy efficiency in compliance with the Directive 2002/91/EC on the Energy Performance of Buildings
15.00	Fahlén Per	Methods for Commissioning and Performance Checking of Heat Pumps and Refrigeration Equipment
15.20	Berglöf Klas	Experience and Potential of Performance and Functionality Inspections on Refrigeration and Air-Conditioning systems
15.40	Braun J.E.	Development and evaluation of a method for automated fault detection and diagnostics
16.00	Navarro-Esbrí J., Cabello R., Torrella E., Llopis R.	Using Infrared Thermography to Estimate Isentropic Efficiency in a Reciprocating Compressor
16.20	Ota Josef, Hásek Jan	Laboratory experience with diagnosing of the experimental compressor unit
16.40		<i>Coffee in vestibule</i>
17.00	Lomiak M., Bohdal T.	Energetic Investigations of Compressors refrigerating aggregate
17.20	Hoogkamer J.H.	Dutch System of Inspections and Diagnostic
17.40	Tomlein Peter	Inspection System on Cooling Circuits in Slovakia
18.00		<i>Wine tasting</i>
19.30		<i>Social and cultural program ended with a firework</i>
22.00		<i>Transport to Papiernička</i>

FRIDAY Morning, October 1

7.00	Swimming, Sauna
7.00	Breakfast

	Cinema Hall	COMPRESSORS III. – Session Chair Groll Eckhard
08.20	Suess Juergen, Tiedemann Thomas	Considerations on Transcritical CO ₂ Systems with Low Capacity
08.40	Nickl J., Will G., Kraus E., Quack H.	Expander/Compressor for CO ₂ Refrigeration Cycles
09.00	Pfeil Volkmar	Low Temperature Application Compressors & Refrigerants
09.20	Neukirch Peter	Tendency in the scroll development
09.40	Čejka Zdeněk	Improvement of economy of scrolls

FRIDAY Morning, October 1

7.00	Swimming	
7.00	Breakfast	
	Congress Hall	REFRIGERANTS AND OILS – Session Chair Dariusz Butrymowicz
08.20	Skripov Pavel V., Starostin Alexandr A., Volosnikov Dmitriy V., Zhelezny, Vitaliy P.	Pulse Method and Device for Fast and Precise Comparison of Oil Properties
08.40	Hwang Yoon Jei, Cho Eun Jun, Ryu Yoon Ho, Chung Baik Young	The Experimental Study on Oil Characteristics in the Variable Capacity Tandem Compressor at Residential Air Conditioning System
09.00	Youbi-Idrissi M., Bonjour J., Terrier M. F., Meunier F.	Differential Solubility of R-134a, R-125 and R-32 in a Polyol-ester oil: Experimentation and Modeling
09.20	Zhelezny V.P., Zhelezny P.V., Skripov P.V., Vozny V.F., Procenko D.A., Ancherbak S.N.	Influence of Admixtures of the Compressor Oil to the Enthalpy of Working Fluid in Evaporator
09.40	Barabanov V.P., Beregovič I.M., Petrov, A., Slipkin, B.C., Usov B.A., Celikov B.H.	Non ODS Refrigerants in Cooling Equipments used in Russia

FRIDAY Morning, October 1

10.00	Cinema Hall Havelský Václav	Closing of the conference – scientific, organizing committee and participants
10.30		<i>Coffee in vestibule</i>
10.30	Relax	Swimming, sauna, bowling
12.00		<i>Lunch</i>
14.00		<i>Back to home</i>

PLEASE PAY ATTENTION

**Time limit for paper and discussion is 15 +5 minutes*

*** Don't forget swimming dress and shoes with white sole for bowling.*

**** After sightseeing tour on Castle Red Stone there will be welcoming glass of wine, and meeting with known melodies*

***** After sightseeing tour on Castle Smolenice there will be wine tasting and typical castle program and food*

****** After the closing of the conference, there will be time for relax and discussions before the lunch and your departure home*

Looking forward to meeting you in Papiernička, Castle Red Stone and Castle Smolenice