



IIR/IF  
International  
Institute of  
Refrigeration

# COMPRESSORS 2009

Joint conference of IIR Commissions  
B2 and B1 with E1 and E2



Papiernička - Smolenice - Slovak Republic

Call for papers

www.isternet.sk/szchkt/

## Organized by

International Institute of Refrigeration  
Slovak Association for Refrigeration and Air-conditioning  
Technology  
Slovak National Committee for Cooperation with IIR  
Slovak Technical University, Bratislava  
Embraco Slovakia, s.r.o. Spišská Nová Ves  
Danfoss Compressors, s.r.o. Zlaté Moravce

## Under the auspices of

Ministry of Environment, Bratislava, Slovakia

## Papiernička

Congress  
centre  
of Slovak  
National  
Parliament

30.9.- 2.10.  
2009

Grand tour  
Slovakia

Embraco  
Slovakia

Danfoss  
Compressors  
29.-30.9.2009

## Main sponsors

Embraco Slovakia  
Danfoss Slovakia  
Bock GmbH

## Conference organizing committee

Václav Havelský - Conference president, Technical University, Bratislava  
Ján Kakalejčík - Embraco Slovakia, Spišská Nová Ves  
Luboslav Kočíš - Embraco Slovakia, Spišská Nová Ves  
Tomáš Brath - Danfoss Compressors, s.r.o. Zlaté Moravce  
Peter Tomlein - Association for Cooling and Air Conditioning Technology, Rovinka

## Scientific Committee

Didier Coulomb - International Institute of Refrigeration, Paris  
Klas Berglöf - ClimaCheck, Nacka-Stockholm  
James E. Braun - University, Purdue  
Dariusz Butrymowicz - Polish Academy of Sciences, Gdansk  
Cesar Deschamps - TU Santa Catarina Florianópolis  
Per Fahlen - Chalmers University of Technology, Gothenburg  
Eckhard A. Groll - School of Mechanical Engineering, Purdue  
Hans Quack - University, Dresden  
Hermann Halozan - Graz University of Technology  
Václav Havelský - Slovak Technical University, Bratislava  
Heinz Jürgensen - Danfoss Compressors, Zlaté Moravce  
Harald Kaiser - Bock, Frickenhausen  
Petter Neksa - Sintef Energy Research, Trondheim  
Josef Ota - Czech Technical University Prague  
Jiří Pařízek - Czech Committee for Cooperation with IIR, Prague  
Volkmar Pfeil - Bitzer, Sindelfingen  
Veniamin A. Usov - Inertek, Moscow  
Valery Voznyi - Vesta, Kiev  
Marek Zgliczynski - Embraco Europe  
Vitaly Zhelezny - State Academy of Refrigeration, Odessa

## Also cooperating in the conference

Ministry of the Environment SR, Slovak Trade and Industry Chamber

## Conference secretariat

Slovak Association for Refrigeration and Air conditioning Technology, Rovinka  
Peter Tomlein, 900 41 Rovinka  
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## Conference program

Conference at the Congress Centre of Slovak National Parliament, September 30.9 – 2.10. 2009 will be divided into three days:

VISIT	CONFERENCE
29.9. - 16.00	Registration hotel Metropol Spišská Nová Ves
29.9. - 17.00	Visit of Embraco compressors production, cocktail
30.9. - 06.30	Grand (bus) tour Slovakia - from Spišská Nová Ves to Zlaté Moravce
30.9. - 11.00	Visit of Danfoss compressors production, cocktail
30.9. - 13.00	Buses to Papiernička and Smolenice - accommodation
30.9. - 12.00	Registration in Papiernička
30.9. - 16.00	Conference opening, plenary session in Papiernička
30.9. - 20.00	Welcoming glass of wine, meeting with melodies in the castle Red Stone
1.10. - 07.00	Breakfast (swimming pool, sauna and fitness will be opened)
1.10. - 08.20	Plenary session and dividing in to technical sessions
1.10. - 12.00	Lunch and sessions of B and E committees, departure to castle Smolenice
1.10. - 15.00	Compressors, refrigeration technologies, inspections and diagnostic
1.10. - 18.00	Garden party, wine tasting, social gathering, typical medieval castle program
2.10. - 07.00	Breakfast (swimming pool, sauna and fitness will be opened)
2.10. - 08.20	Technical sessions - Compressors, Coolants and Oils
2.10. - 13.00	Closing of the conference
2.10. - 11.30	Relax – swimming, sauna, bowling, squash, lunch, back to home

## COMPRESSORS' 2009

In the recent years development has sped up and construction, materials and technology have improved in the manufacture of low output compressors. The catalyst of the explosion in new manufacturing of construction and technology is the dynamic development process of coolants and oils. A large space has been given for discussions among specialists from research, development and manufacture in the areas of alternative coolants, their blends, the closely watched usage of pure hydrocarbons, particularly for domestic refrigeration, further changing of thinking as regards the evaluation of compressors on the principle of the TEWI factor. The nowadays efforts are focused on electrical energy consumption and applications of natural coolants. Our international conference aims to be a meeting place for the knowledge of specialists from the west and east with the goal of looking at the future through the choppy sea of information and new results in science, research and production.

## Compressors production in Slovakia

Calex a.s. has been manufacturing their own low-velocity hermetic compressors since 1954. In 1968 a new generation of bi-polar compressors developed at the Calex plant were produced, placing the company among the first European firms in such manufacture. The end of the 1970s saw an attempt to develop a home variation of shaft compressors. In the year 1992 a compressor licence was purchased from Samsung Electronics, which allowed production of five types of compressors with a cooling performance from 70 up to 162 W.

The Embraco Slovakia started from 1998 in Spišská Nová Ves a new production of higher performance compressor lines for white technology and commercial cooling. Nearly 4 million pieces are produced annually.

Since the year 2002 the factory Calex was bought by Danfoss Compressors, and new era of compressors production has started in Zlaté Moravce.

## BACK TO 6. International Conference COMPRESSORS' 2006



This event held in the Congress Center Papiernička, Castle Red Stone and Castle Smolenice nearby Bratislava, Slovakia on September 2006, attracted 170 participants from 17 countries. 57 papers and 10 conference exhibitors were presented at this event organized by IIR and Slovak Association for Cooling and Air-Conditioning Technology. Main sponsors were Embraco Slovakia, Danfoss Compressors and company Bock. Conference has its own symbol compressor's bell.

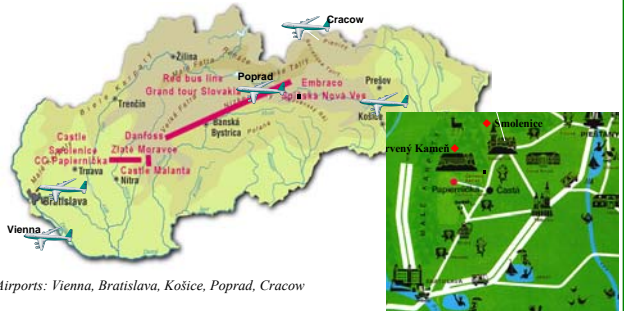
Didier Coulomb, Director of the IIR, gave a welcoming speech during the opening. Proceedings were available before of the conference. First day a welcoming glass of wine was held at the castle Red Stone with Fujara's show and the second day garden party was held on the courts of the castle Smolenice with typical medieval castle program and dancing school. Program was finished by firework.

## COMPRESSORS '2009

Congress Centre Slovak National Parliament

CONFERENCE 30.9. - 2.10. 2009, PAPIERNIČKA

**Free program:** The Congress Centre of Slovak National Parliament in Papiernička close to the historical town Trnava about 40 km from Bratislava offers all the services for scientific congresses, the congress halls with video system with seating for 130 participants. It's attractiveness is heightened by its situation in beautiful natural surroundings and also its proximity to interesting sites in the Low Carpathians, cave Driny, town Trnava, Bratislava, the largest castle in the middle Europe Červený Kameň (Red Stone), castle Smolenice where previous conferences in the years 2001, 2004 and 2006 were held and other tourist centers on the wine road from Smolenice to Bratislava.



Airports: Vienna, Bratislava, Košice, Poprad, Cracow

It is possible to fly to Vienna or Bratislava and travel by taxi to the Congress Centre in Papiernička. There are rail links from Prague or Wien to Bratislava and Trnava Smolenice. Buses run from Bratislava to Častá and Smolenice. Convenient is to take taxi from the airport Bratislava (40 km).

To take part on the Grand Tour Slovakia by buses from Embraco Spišská Nová Ves to Danfoss in Zlaté Moravce, castles Smolenice and CC Papiernička it is possible to fly to Košice or Poprad and to take a taxi, bus or train to Spišská N/V, hotel Metropol on 29<sup>th</sup> September. Registration in hotel Metropol Spišská N/V will start on 29<sup>th</sup> September at 16.00 and departure to the visit of factory Embraco with expert commentary will be at 17.00. Grand bus tour from compressor production in Embraco Spišská Nová Ves to Danfoss Zlaté Moravce will start on 30<sup>th</sup> September 6.30 o'clock. Registration in Congress Centers in Papiernička and Smolenice will start on 30.9.2009 from 13.00.

**Social program:** Within the conference program social gatherings for participants and presenters in the castles Red Stone and Smolenice with a typical Slovak and Castle program will be organized. Other social entertainment and relax activities will also be available.

## Timelines

Abstracts of almanac contributions are to be sent by the end of January, 2009 to:

Slovak Association for Refrigeration and Air-Conditioning Technology

Conference – Compressors' 2009

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