

## Conference Program Cryogenics 2008

lecture poster

Up-dated on April 1, 2008

### Monday, 21<sup>st</sup> April, 2008

from	duration	till	
8:00	7:30	15:30	Preparation of the exhibition area and construction of stands
15:30	2:30	18:00	<b>Registration</b>
15:30	2:30	18:00	Installation of the exhibition stands by exhibitors
18:00	2:00	20:00	<b>Welcome toast</b> in the conference centre

### Tuesday, 22<sup>nd</sup> April, 2008

from	duration	till	number	author name	title
9:00	0:15	9:15	<b>Opening of the conference</b>		
9:15	0:20	9:35	63	Coulomb D.	Centenary of International Institute of Refrigeration

#### Helium Liquefaction

from	duration	till	number	author name	title
9:35	0:25	10:00	62	Scurlock R.	The Centenary of the First Liquefaction of Helium
10:00	0:25	10:25	56	Kaiser Z.	Fifty years of helium liquefaction in Czechoslovakia
10:25	0:25	10:50	17	Muehlegger M.	Customizing standard Helium liquefier / refrigerator

10:50	0:15	11:05	<b>Coffee break</b>		
11:05	0:25	11:30	47	Caillaud A.	Evolution of the standard helium liquefier and refrigerator range.
11:30	0:25	11:55	40	Haberstroh Ch.	Liquid Helium in Laboratory Use – Practical Remarks
11:55	1:35	13:30	<b>Lunch break</b>		
12:15	1:00	13:15	<b>Meeting of Commission A1</b>		

#### Pulse tubes and other refrigerators

from	duration	till	number	author name	title
13:30	0:25	13:55	31	Saidi M.H.	Effect of Alternate tube Characteristics on High Capacity Pulse Tube Cryocoolers Performance
13:55	0:25	14:20	58	Scurlock R.	Green Cryogenics: the use of natural convection to improve the efficient use of cryogens and cryocoolers.
14:20	0:25	14:45	12	Gschwendtner M.A.	The Development of a Vuilleumier Cryocooler for New Zealand's High Temperature Superconductor Industry
14:45	0:15	15:00	<b>Coffee break</b>		

15:00	0:25	15:25	5	Ladner D.R.	Thermal Model for a Mars Instrument with Thermo-Electric Cooled Focal Plane: CCD Subsystem with Heat Switch
15:25	0:25	15:50	20	Baker R. A.	The Efficient Management of Liquid Helium at South Pole Station During the Austral Winter
15:50	0:25	16:15	34	Goulden A.	Installation, Commissioning and Operation of the Super Conducting RF LINAC Cryomodules for Energy Recovery
16:15			<b>End of the session</b>		
19:00	2:00	21:00	<b>Meeting of the committees</b>		

## Wednesday, 23<sup>rd</sup> April, 2008

### Helium Temperature Techniques

from	duration	till	number	author name	title
8:30	0:25	8:55	4	Anghel A.	Cryogenic System of the Swill Ultra Cold Neutron Source
8:55	0:25	9:20	54	Fydrych J.	Experimental set-up of heat transfer measurements in He II
9:20	0:25	9:45	38	Winkler H.	Stability Characteristics for Thermo-Acoustic Oscillations in Hydrogen Systems
9:45	0:15	10:00	<b>Coffee break</b>		
10:00	0:25	10:25	39	Ribeiro Gomes M.	S-N-S phase transitions of geometrically-metastable superconducting thin films
10:25	0:25	10:50	7	Králik T.	Black Surfaces for Cryogenic Applications

### High-Temperature Superconductivity

from	duration	till	number	author name	title
10:50	0:25	11:15	11	Good J.	Cryocooled 25 Tesla Magnetic Field Insert Coil Made from High Temperature Superconductors (HTS)
11:15	0:25	11:40	24	Kovalev K.L.	HTS high-dynamic electrical motors
11:40	1:20	13:00	<b>Lunch break</b>		
11:40	1:20	13:00	<b>Meeting of Commission A2</b>		

### Poster session (all themes)

#### Helium temperature technology

from	duration	till	number	author name	title
13:00	1:30	14:30	18	Gherghinescu S.	Exergetic analyses for design the automatic systems usable to Increase the Performances of the helium processing plants
13:00	1:30	14:30	9	Kaiser G.	Split Pulse Tube Cryocooler with Innovative Double-Piston Linear Compressor

13:00	1:30	14:30	1	Martelli	V.	Very-low Temperature Thermal Conductivity of Structural Materials for Large Cryogenic Experiments
13:00	1:30	14:30	21	Lottin	J.-P.	Cryogenic features of the R3B-Glad magnet
13:00	1:30	14:30	36	Gatti	F.	Characterization of the superconducting transition of thin Ir films
13:00	1:30	14:30	10	Klier	J.	Versatile surface tunnelling microscope setup suitable for experiments from 300K to milliKelvins
<b>High Temperature Superconductivity</b>						
13:00	1:30	14:30	14	Bae	J.H.	Design, Fabrication and Test Results on a Conduction Cooled HTS Magnet
13:00	1:30	14:30	23	Bae	D.K.	Analysis on the quench at the conduction-cooled joint between HTS wire and normal conductor
13:00	1:30	14:30	37	Sosnowski	J.	Analysis of the Magnetic Properties of HTc Superconductors and Applications them as Permanent Magnets
13:00	1:30	14:30	30	Kolalev	L.K.	The Cryogenic Electrical Pump with YbCo Bulk for Hydrogen Energy
<b>Nitrogen temperature technology</b>						
13:00	1:30	14:30	2	Stipsitz	J.	Gas Flow Through Narrow Gaps at Low Pressure in Super-insulation Packages
13:00	1:30	14:30	46	Klier	J.	New developments of non-metallic cryostats for high sensitive electronic devices
13:00	1:30	14:30	3	Pearsica	C.	Cryogenic Distillation Column Behavior at the Variation of an External Factor
13:00	1:30	14:30	44	Bondarenko	V.L.	Analysis of Periodic Adsorption Processes, Used in Neon and Helium Production
13:00	1:30	14:30	45	Bondarenko	V.L.	Neon Liquefiers and they using in the Installations for Inert Gases Production
13:00	1:30	14:30	35	Preda	A.	Gas-Chromatographic Analysis of Mixtures of Hydrogen Isotopes using different Parameters
13:00	1:30	14:30	19	Gherghinescu	S.	Design of column for isotopic exchange process in the Pilot Plant for Tritium and Deuterium Separation
13:00	1:30	14:30	15	Zashlyapin	R.A.	The Creation of Vehicles for Multimodal Transportation of Liquefied Gases
13:00	1:30	14:30	28	Cheremnych	O.Ya.	The increase of efficiency and safety of liquid hydrogen transportation
13:00	1:30	14:30	29	Cheremnych	O.Ya.	The creation of vapor cooling devices for liquid oxygen in a stationary reservoirs using liquid nitrogen as a cooling reagent.
<b>Coffee will be served during the poster session</b>						
<b>Gas separation and liquefaction</b>						

14:30	0:25	14:55	59	Kalbassi M.	Liquid Distribution from Structured Packings and Distributors under Tilt and Motion and Potential Consequences for Floating Cryogenic Separation Plants
14:55	0:25	15:20	43	Bondarenko V.L.	Complex Separation of Multicomponent flows to Extract Industrial and Inert Gases
15:20	0:25	15:45	41	Delcorso F.	Solubility of propane and ethane in liquid oxygen
15:45	0:25	16:10	64	Navasardyan E.	Modeling Heat-mass Transfer process on regular Packings of Distillation Plants
16:10	0:25	16:35	33	Popa V.	Performance of rectification and minimal entropy production in mass transfer in an air separation column.
16:35	0:30	17:05		CRYOSTAR SAS Reichenshammer L.	<b>Commercial Presentation:</b> How to optimize your gas filling productivity? Distribution of Industrial & Natural Liquefied gas (transfer and high pressure filling)
17:05			<b>End of session</b>		
19:00	3:00	22:00	<b>Conference dinner - Restaurant La Provence, Stupartska Street, Praha 1</b>		

## Thursday, 24<sup>th</sup> April, 2008

### Storage and transport of industrial gases

from	duration	till	number	author name	title
9:00	0:25	9:25	42	Hnízdil T.	Operation of small and high pressure tanks for liquefied air gases
9:25	0:25	9:50	52	Mátl P.	40 foot cryogenic intermodal ISO containers
9:50	0:25	10:15	53	Takacz D.	Vacuum jacketed pipelines

10:15 0:15 10:30 **Coffee break**

### Use of low temperatures in industry

from	duration	till	number	author name	title
10:30	0:25	10:55	57	Parise J.A.R.	Thermodynamic study of the simultaneous production of electrical and cooling power from LNG.
10:55	0:25	11:20	51	Klepal J.	Gas impurities freezing out technologies.
11:20	0:25	11:45	49	Alava L. A.	Multistage cryogenic treatment of materials: process fundamentals and examples of application

11:45 1:15 13:00 **Lunch break**

11:45 1:15 13:00 **Meeting of Commission C1**

### Cryostorage of cells and tissues

from	duration	till	number	author name	title
13:00	0:25	13:25	6	Měříčka P.	From a Tissue Bank to a Tissue Establishment

13:25	0:25	13:50	32	Lain	M.	Ventilation of cryostorage facilities of tissue establishments
13:50	0:25	14:15	25	Spoerl	G.	Special equipment for cryopreservation of tissue in a standard freezing unit
14:15	0:15	14:30	<b>Coffee break</b>			
<b>Use of low temperatures in cryotherapy</b>						
from	duration	till	number	author name		title
14:30	0:25	14:55	55	Strnad	P.	The liquid air cryochambers for whole-body cryotherapy
14:55	0:15	15:10	<b>Closing ceremony. The three best posters awards.</b>			
15:10			<b>End of the conference</b>			
15:10	3:00	18:10	<b>Technical excursion</b>	<b>A</b>	<b>Cryotherapy center in Praha Modrany.</b> After technical and medical explanation participants will have an opportunity to experience a cryo-chamber.	
15:10	5:00	20:10	Dismantling of exhibition stands			

<b>Friday, 25<sup>th</sup> April, 2008</b>						
8:30	7:00	15:30	<b>Technical excursion</b>	<b>B</b>	<b>Air Products Litvinov.</b> Two air separation plants in Litvinov, back up systém on water bath vaporizers, emergency back-up on ambient vaporizers.	
8:30	7:00	15:30	<b>Technical excursion</b>	<b>C</b>	<b>Praktik Liberec.</b> Technology of recycling of freons from scrapped home refrigerators using liquid nitrogen.	
8:30	7:00	15:30	<b>Technical excursion</b>	<b>D</b>	<b>Lasselsberger Kaznejov.</b> A large pulsed superconducting magnet cooled by liquid helium i used for cleaning caolin ore from the local large caolin surface mine.	