

# ENERGY SYMPOSIUM

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Prague, December 18–19th, 2013



*Organized by the Learned Society of the Czech Republic (LSCR)  
and Heidelberger Akademie der Wissenschaften (HAW)*



*Sponsored by The CEZ group, ČEPS and The PRE group.*

**ENERGY SYMPOSIUM**  
**Prague, December 2013 – Preliminary program**

*Organized by the Learned Society of the Czech Republic (LSCR)  
and Heidelberger Akademie der Wissenschaften (HAW).*

*Time: Wednesday, Dec. 18, 14.00 – 18.25 – Thursday, Dec. 19, 09.00 – 18.00*  
*Place: Academy of Science of CR (ASCR), Prague 2, Národní 3, room No.206*  
*Dinner on Wednesday at 20.30 in Villa Lanna, Prague 6, V Sadech 1*

As a rule two speakers, one from LSCR and one from HAW, will present a 15/20 minutes survey. (The order of the speakers will be given later.) There will also be a panel and general discussions including journalists on Thursday at the end of the Symposium.

**1st Day – Wednesday, December 18th**

12.00 – 13.45	Arrival and registration (room 205, Národní 3)
<b>14.00 – 14.15</b>	<b>Opening of the Symposium</b> by the Presidents/Vice-presidents of LSCR and HAW
<b>14.15 – 15.10</b>	<b>Survey of energy resources I</b> Chair Sigmar Wittig (HAW/KIT/DLR)
14.15 – 14.35	<i>Survey of the energy situation in the Czech Republic</i> Pavel Šolc, Vice-minister, Ministry of Industry and Trade of CR, Section on energy and raw materials
14.35 – 14.55	<i>Survey of the energy situation in the Federal Republic of Germany</i> Hans-Peter Villis (EnBW)(invited)
14.55 – 15.10	<i>Discussion</i>
15.10 – 15.30	<b>Coffee/Tea break</b>
<b>15.30 – 18.00</b>	<b>Survey of energy resources II</b> Chair Sigmar Wittig (HAW/KIT/DLR)
15.30 – 16.10	<i>Coal, gas, oil</i>
15.30-15.50	František Hrdlička, Dean of the Faculty of mechanical engineering
15.50 -16.10	Dietrich H. Welte, (AachenUniversity)(invited)
16.10 – 17.00	<i>Nuclear power and fusion</i>
16.10-16.40	Vladimír Wagner, Nuclear Physics Institute of ASCR
	Jan Mlynář, Institute of physics, AS CR
16.40-17.00	Alexander Bradshaw (IPP Garching)
17.00-17.40	<i>Solar energy</i>
17.00-17.20	Eduard Hulicius, Zdeněk Havlas (ASCR)
17.20-17.40	Eike Weber (Fraunhofer Institut für solare Energiesysteme / ISE, Freiburg) (will not be able to come but will nominate another expert)
17.40 – 18.25	<i>Discussion and summary</i>
<b>20.30</b>	<b>Conference dinner in Villa Lanna (starting with a short concert of Škampa Quartet playing Haydn and Dvořák)</b>

## 2nd day – Thursday, December 19th

<b>09.00 – 12.30</b>	<b>Regenerative energy resources I</b>
09.00 – 09.30	<i>Survey of Regenerative energies (wind,ocean included)</i>
09.00 – 09.15	Neilla Winkelmann – Heyrovská, Czech-German ecological consultancy
09.15 – 09.30	Frank Behrendt (Innovation Centre Energy, TU Berlin)
09.30 – 09.50	<i>Hydroenergy</i>
09.30 – 09.50	Hermann Hahn (HAW / KIT) <i>Hydroelectric Power</i>
<b>09.50 – 10.10</b>	<b>Geothermic energy</b>
09.50 – 10.10	Willi Jäger (HAW / IWR)
10.10 – 10.30	<b>Coffee/Tea break</b>
<b>10.30 – 12.30</b>	<b>Regenerative energy resources II</b>
10.30 – 11.10	<i>Bioenergy</i>
10.30 – 10.50	František Kaštánek, M.Punčochář, Institute of chemical processes of ASCR
10.50 – 11.10	Matthias Kind (HAW / Inst. Thermal Process Engineering KIT) <i>Role of Process Industry in Energy Systems</i>
11.10 – 12.40	<i>Storing and transporting energies, energy networks (smart grids)</i>
11.10 – 11.30	Hynek Beran, Miroslav Vrba
11.30 – 11.50	Rainer Helmig (HAW/ Hydromechanics and Modelling of Hydrosystems, University of Stuttgart)
11.50 – 12.10	Alexander Martin ( Networks, Wirtschaftsmathematik, Uni Erlangen)
12.10 – 12.40	<i>Discussion</i>
12.40 – 13.30	<b>Lunch break</b>
	Chair Václav Pačes
13.30 – 16.00	<b>Environmental, economic and political aspects of the energy problem</b>
13.30 – 14.00	<i>Climate effects</i>
13.30 – 13.45	Václav Cílek, Institute of Geological science, ASCR
13.45 – 14.00	Volker Wulfmeyer (HAW / Physics and Meteorology, Univ. Hohenheim)
14.00 – 14.30	<i>Economic and financial aspects</i>
14.00 – 14.15	Lubomír Lízal, Vladimír Tomšík, Czech National Bank
14.15 – 14.30	Ulrich Platt (HAW / Environmental Physics, Heidelberg University) <i>100% Renewable Energy – a Feasible Scenario</i>
14.30 – 15.30	<i>Political and ethical aspects of the energy problem</i>
14.30 – 14.45	Bedřich Moldan, Charles University
14.45 – 15.00	Stefan Wurster (IPW Universität Heidelberg)
15.00 – 15.20	Johann-Christian Pielow (Economics, Bochum University)
15.20 – 15.30	Discussion
<b>15.30 – 16.00</b>	<b>Coffee/Tea break</b>
	Chair Vladimír Wagner
<b>16.00 – 18.00</b>	<b>Panel and general discussion</b>
	V. Pačes M., Lázňovský, P. Lukáš, M. Uhlíř
	J-C. Pielow, G. zu Putlitz, S. Wittig, J. Wolfrum
<b>18.00</b>	<b>Closure of the Symposium</b>

## **Possible topics for a general (panel) discussion**

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- How do both sides see the perspectives of the energy mixture, necessary to maintain and to develop all essential activities of our societies?
- How to reduce energy consumption and to guarantee the necessary energy supply under conditions acceptable under all relevant aspects: technological, economical, environmental, social and political, ...
- How to evaluate the pros and cons of energy resources, which became subject of ideological/political struggles, i.e. primarily renewable and nuclear sources?
- What are the risks arising and how to manage them, if possible?
- How do the energy markets function? What is the role of politics and legislation, nationally and internationally?
- What are the main challenges arising for science and technology, for industry and commerce, for politics and legislature?
- What can we learn from each other? What are the opportunities and perspectives of bilateral, of international cooperation?

## **Contacts to the organizers and (some) speakers**

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### **Local Organizing Committee:**

Prof. J. Bičák (LSCR)  
Dr. Z. Havlas (LSCR)  
Prof. V. Pačes (LSCR)  
Ing. H. Beran (energy expert)  
Dr. J. Jedináková (secretary LSCR)  
Dr. V. Wagner (Nuclear Physics Inst)

### **From HAW:**

Prof. Th.W. Holstein (HAW)  
Prof. J. Wolfrum (HAW)  
Prof. W. Jäger (HAW)  
Dr. M. Freerk (Science manager HAW)  
Mrs. S. Leslie (secretariat HAW)  
Mrs. G. Schocke (Prof. Jäger's secretary)

## Speakers

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Dr. V Cílek  
Dr. Z. Havlas (LSCR)  
Prof. Hrdlička  
Doc. Ing. E. Hulicius  
Prof. F. Kašánek  
Doc. L. Lízal  
Prof. B. Moldan  
Dr. J. Mlynář  
Prof. V. Pačes  
Ing. M. Punčochář  
Ing. P. Šolc  
Prof. V. Tomšík  
Dr. V. Wagner  
Dr. N. Winkelmann-Heyrovská  
Prof. M. Kind  
Prof. U. Platt  
Prof. V. Wulfmeyer  
Prof. H. H. Hahn  
Prof. S. Wittig  
Prof. G. zu Putlitz  
Prof. Johann-Christian Pielow  
Dr. S. Wurster