

NE • RRS 2011

STANE SE JADERNÁ ENERGIE OBNOVITELNÝM ZDROJEM ? STANE SE JADERNÁ ENERGIE OBNOVITELNÝM ZDROJEM ? STANE SE JA
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PARTNERS



ŠKODA JS a.s.



MEDIA PARTNERS



SUPPORT

The conference is supported from the State Program „EFEKT 2010 MPO ČR“



AUSPICES



Svaz průmyslu a dopravy ČR

HOLY FIGHT FOR NUCLEAR POWER DOES NOT CEASE

4th Annual Conference

November 9, 2011

Prague, Kaiserstejnsky Palace, Malostranske Square





He is the consultant in the field of power industry and is the Head Executive of JMM Consulting, Ltd. – a company focused on advisory services and organization of professional activities. After graduating from the Czech Technical University, Faculty of Technical and Nuclear Physics, he worked in research; he has been working in the power industry field since 1974 (until 1996 in ČEZ). For the last eighteen years, he was the advisor of the Minister of Industry and Trade, chairman and vice-chairman of the Supervisory Board of ČEZ, a member of supervisory boards in several energy distribution companies and an advisor of Deputy Ministers of Finance. In these positions, he was dealing with the reorganization of state administration in power industry, the development of state energy policy, the establishment of the State Office for Nuclear Safety and with the preparation of the privatization of Czech power industry. He is occupied by publication activities, mainly in the field of nuclear power industry and has wide experience in organizing of international and specialized professional conferences and meetings. His positions are quoted on TV, radio and in economic periodicals.

Dear colleagues,

The world is shaking. A financial crisis, limited economic growth. On the other hand, however, meeting our future energy demand seemed simple. Then the accident in the Fukushima nuclear power plant happened, and suddenly everything was different and the energy sector started shaking as well. Germany declared a nuclear phase-out. Some countries followed. Others were able to assess the benefits and risks of nuclear energy rationally and see their energy future in an energy mix of which nuclear power is an integral part.

That is why we have prepared the programme of today's conference as a response to all this. The Czech Republic remains on course, and I do believe that it will play its part in ensuring that the decisions on how energy needs should be met in developed technological societies will be made based on arguments and not emotions. And that is what today's presentations and discussions were about.

I believe that the conference NERS 2011 met your expectations, and we look forward to meeting you on the next the 5th Annual Conference on Nuclear Power NERS 2012 in Prague.

Jiří Marek
NE•RS Chairman

Prague, November 9, 2011

CONFERENCE PROGRAM

morning session

conference opening and welcome address

Aleš JOHN Chairman of the Board of Directors and CEO, Nuclear Research Institute Řež, plc., Chairman of the Morning Session

Graduated from the Faculty of Electrical Engineering, Brno University of Technology (1972). In the year 1986 he finished his postgraduate studies at the Comenius University in Bratislava (Nuclear Energy and Ecology), and in 2003 he received MBA degree from the PIBS. His career in the energy sector began in 1982 at Dukovany NPP. There he held various management positions starting as a Chief Engineer for Radiation Protection, continuing as the Head of the Department of Radiation Safety, Deputy Director of Safety, to the Director of Dukovany NPP (1987–2002). During the years 2003–5 he was with ČEZ Division of NPP as the Director of the Management and External Relations. When the Division of Generation was established in ČEZ he became the Deputy Division Director for Foreign Affairs. In connection with this position he was associated with FORATOM in Brussels, where he acted till the end of 2007. In the period 1994–2010 he was the WANO Moscow Center Governing Board Chairman and a member of the Board of WANO. In April 2008 he was appointed as CEO and Chairman of Board of the Nuclear Research Institute Rež. A. John is a member of the Engineering Academy of the Czech Republic. He is publishing articles focused on nuclear energy, and often presents his views at conferences with themes Nuclear Energy, International Cooperation, Communication.

• CZECH ENERGY STRATEGY FOR THE FUTURE – NUCLEAR HAS GOT THE GREEN LIGHT • ENVIRONMENTAL IMPACT ASSESSMENT – A WAY TO UNDERSTAND NUCLEAR ENERGY • TRANSMISSION GRID AND LARGE NUCLEAR UNITS – HOW IT FITS TOGETHER? • LESSON LEARNED FROM FUKUSHIMA – ANALYSIS OF ENVIRONMENTAL IMPACTS • WILL FUKUSHIMA LESSONS CHANGE THE FUTURE OF NUCLEAR POWER IN THE 21ST CENTURY?



morning session



NUCLEAR POWER AS AN IMPORTANT PART OF THE ENERGY MIX – THE INDISPUTABLE WAY FOR THE CZECH REPUBLIC TO MEET ITS ELECTRICITY DEMAND

- state energy policy – open document representing the sovereign Czech approach to its energy future
- new nuclear power plants as part of our energy mix, in accordance with respected European principles, will guarantee our energy self-sufficiency

Roman PORTUŽÁK Director, Power Engineering Department, Ministry of Industry and Trade of the Czech Republic

After graduating from Technical University of Ostrava (Faculty of Mechanical and Electrical Engineering, branch of power engineering, 1986) he continued in his scientific training, and in 1992 he received the PhD. degree. Then he joined the SME (North Moravian electricity distributor), where he held a number of functions including Business Department Director and Manager of the Strategic Information. In connection with it he participated in the management of several subsidiaries. At that time he completed a number of management courses including the International Institute of Certified Studies in Strategic Management (Certified Strategic Manager, 1999–2002). Since late 2003, he acted as an independent consultant in the energy sector. From the September 2008 R. Portužák is leading the Department of Electrical Power Engineering of the Ministry of Industry and Trade. Currently he is the Chairman of the Radioactive Waste Repository Authority, a member of the Supervisory Board of the Electrotechnical Testing Institute and acts as the Czech representative in the Governing Board of the International Energy Agency (IEA).



EIA PROCESS – INITIAL STEP IN LICENSING OF NEW NUCLEAR POWER PLANT BUT ALSO AN IMPORTANT TOOL FOR COMMUNICATION WITH THE PUBLIC

- task of EIA process in the project
- what the particularity of nuclear EIA is?
- public participation in EIA process not only as a legal duty but also as an opportunity to communicate project
- practical experience and matters of interest of Temelín 3,4 EIA process

Iva KUBÁŇOVÁ Quality and Safety Manager, Nuclear Power Plants Construction, ČEZ plc.

Graduated in 1985 at Faculty of Mechanical Engineering, Czech Technical University, nuclear power facilities branch. After graduation she joined ČEZ – NPP Temelin Nuclear Safety Department. Since 1987 till 1994 she worked in the Czechoslovak Atomic Energy Commission and in the State Office for Nuclear Safety, first in the area of nuclear materials safeguards and later on as a resident inspector at Temelin construction site. Since 1994 she managed implementation and certification of quality management system in I&C Energo as Director of Quality; in addition she was in charge of human resources and IT. In the years 2005–2008 she worked in Japanese manufacturing company, member of Toyota Group. Since 2008 she acts as the Manager responsible for the new nuclear units licensing in ČEZ, NPP Construction Department.



Jan BEJBL, Július BEMŠ, Tomáš KRÁLÍK Faculty of Electrical Engineering, Czech Technical University in Prague

MANAGING THE TRANSMISSION GRID – TRIVIAL OR DIFFICULT? – OR HOW TO DO IT IN THE CASE OF LARGE NUCLEAR UNITS AND RENEWABLE SOURCES WITH UNSTABLE OUTPUT OVER TIME

- the current structure of the sources creating the power grid
- specific role of the nuclear power plants within the power grid
- how to manage the system with resources of different parameters?
- electricity storage limitations and issues related to it in the transmission grid context
- ancillary services – in what quantity and quality they will be required?
- possible scenarios of power grid development – how many new nuclear power plants will be needed and acceptable?



Jan BEJBL representative of the student's think-tank of the Faculty of Electrical Engineering, Czech Technical University in Prague

Graduated from the Faculty of Electrical Engineering, Czech Technical University in Prague, Department of Energy Economics and Management (2011). In his diploma thesis he dealt with the issue of co-firing of biofuel with fossil fuel in cogeneration plants. In the same Department he continues on the doctoral dissertation with the topic "Energy Complexity of the Energy Production Processes".

think-tank guidance:

Jiří VAŠÍČEK Deputy Chairman, Department of Economics, Management and Humanities, Faculty of Electrical Engineering, Czech Technical University

Josef FANTÍK Director, Energy Control & Information Systems, ČEPS plc. (Czech Transmission Grid Operator)



Jiří HŮLKA, Jan JOHN, Kamila ŠŤASTNÁ

FUKUSHIMA – THE FIRST ASSESSMENT OF THE THE ENVIRONMENT MONITORING

- scope of measurement of the environmental impact of the Fukushima NPP accident and the available results - what possibilities of analysis, evaluation and interpretation are already given ?
- the path to a comprehensive assessment of environmental impacts



Jiří HŮLKA Deputy Director for R&D, National Radiation Protection Institute

Jiří Hůlka received his M.Sc. in nuclear sciences and physical engineering in 1980 from the Czech Technical University in Prague. His whole professional carrier is connected within the National Radiation Protection Institute in Prague (NRPI) – he gradually engaged in monitoring of nuclear power plants, monitoring of high natural radioactivity in the buildings and coordinating the Radon Programme of the Czech Republic. Since the year 2000 he is responsible for research and development in the field of radiation protection. He focuses mainly on general issues of protection against ionizing radiation, modern methods of NPP monitoring and the impact of accidents on the environment, including impact of the Chernobyl accident. He is a member of Group of Experts referred to in Article 31 of the Euratom Treaty.



Jan JOHN Chairman, Nuclear Chemistry Department, Faculty of Nuclear Sciences and Physical Engineering, Czech Technical University

After graduating from Czech Technical University in Prague, Faculty of Nuclear Sciences, field of study in nuclear chemical engineering, he joined the maternity department, where he is today. After he completed his PhD Degree, he attended post-gradual studies at the Universities of Oslo and Trondheim in the years 1985–6, and from 1987–90 a working visit in the United Institute for Nuclear Research in Dubna. His main areas of research interest include the treatment of radioactive waste, separation methods, radioanalytical methods, nuclear spectroscopy, and monitoring and speciation of radionuclides in the environment. Since 2004, he participates in projects of the 6th and 7FP EU focused on the separation of minor actinides from high active liquid radioactive wastes for their subsequent transmutation. He is the author or coauthor of more than one hundred publications in scientific journals or conference proceedings and a member of the International Editorial Board of the Journal of Radioanalytical and Nuclear Chemistry. J. John is a Chairman of the Group of Experts in Nuclear Chemistry of the Czech Chemical Society and the Secretary of the Division of Nuclear and Radiochemistry at the European Association for Chemical and Molecular Science.

Kamila ŠŤASTNÁ researcher, Faculty of Nuclear Sciences and Physical Engineering, Czech Technical University

Researcher and PhD student at the Department of Nuclear Chemistry, Faculty of Nuclear Sciences and Physical Engineering, Czech Technical University in Prague dealing with reprocessing of spent nuclear fuel. The topic of her PhD thesis is the development of methods for separation of curium from americium. Since the last month, she has been on a half-year stay at the University of Hawaii. There, she is participating in a project aiming at establishing radionuclide levels in sea water in response to releases from the Fukushima Daiichi nuclear power plant. Sea water samples taken during the research cruise in costal Japan and the western Pacific Ocean are processed for the determination of radioactive cesium.

EPR DESIGN SAFETY IN THE POST-FUKUSHIMA CONTEXT

- the EPR™ reactor is designed to resist exceptional events and prevent damage to the surroundings • EPR™ is a robust design, the Fukushima accident has validated AREVA's Safety approach

Jean-Philippe FRONTIGNY Vice-President Reactors Technologies, AREVA Group

Graduated from Ecole Polytechnique in 1983 and held a Master of Science Degree in nuclear science and physical engineering from ENSTA (1985). Jean-Philippe Frontigny has more than 20 years of experience in the nuclear industry within AREVA, including work in thermal hydraulic design, quality assurance program, manufacturing, support of maintenance strategy, bid preparation and project. Since 2009, he is in charge to support development of AREVA reactor portfolio.



afternoon session

panel discussion developing the theses

THE POLITICAL DIMENSION OF NUCLEAR ENERGY, OR DO POLITICIANS NEED NUCLEAR POWER PLANTS AND DO NUCLEAR POWER PLANTS NEED POLITICIANS?

- causal relationship between the evolution of homo sapiens and the meeting of its energy needs
- exploitation and transformation of energy sources for mankind's benefit – a purely scientific and technological issue
- is an advanced technological society able to self-regulate its demand for energy?
- unequal geographical distribution of energy resources on Earth – the source of problems between supply and demand and a possible factor of geopolitical tensions
- availability of energy resources and the authorisation for the decision to use them – to what extent should it influenced by engineers and to what extent by politicians?
- nuclear energy – the subject of political struggle – why?
- is there a rational reason for why the public and its political representatives should intervene in the development of technological processes?
- in a discussion of energy issues, where is the limit for saying "The less I understand, the more I talk about it"?
- lobbyists of the energy resources business and their influence on politicians
- in the debate about nuclear energy, what role is played by the media?
- the useful idiots or the unscrupulous newshunters who need their headlines?
- or something else?
- what attracts politicians to the debate on nuclear energy?
- is the political responsibility of decisions made about nuclear energy quantifiable?
- why are there referenda on the use of energy resources, and no referenda on the use of various instruments of the financial markets?
- may political decisions on nuclear energy have fatal consequences?
- if so, what are they?
- where is the equilibrium between politics and technological development?
- will it ever be achieved?





Jan MACHÁČEK analyst, Respekt Magazine

Journalist and musician. Under the communism in 1980s he was involved in culture underground and samizdat publishing, he signed Charta 77. After the revolution in 1989 he participated on creating the first independent media in the country, weekly Respekt. Currently he works as commentator for both the daily newspaper Hospodarske noviny and the weekly Respekt, to which he also occasionally contributes articles and interviews. For his work in Respekt he was repeatedly awarded for both his investigative and analytical writing (e.g. the best journalist of the country – Ferdinand Peroutka Award). Additionally, Jan Macháček has also been a fellow of the National Forum Foundation in Washington (1994) and the William Davidson Institute at the University of Michigan (1998). He also serves as a board member of Transparency International, Czech Republic, member of the Board of Trustees of the Library of Václav Havel and teaches journalism at University of New York in Prague. Recently he published the book “Effortless World Champions” on financial and economic crisis.



Jan MLÁDEK Shadow Minister of Finance, Czech Social Democratic Party

He graduated from the University of Economics in Prague (1983) and passed two-years' course in Mathematics and Physics Faculty of Charles University (1989). He obtained the PhD. degree in the Prognostics Institute of the Czechoslovak Academy of Sciences (1990). During the period of 1991–2 he was appointed as the Deputy Federal Minister of Economy and from 1999 to 2001 as the Deputy Minister of Finance. In the years 1993–8 he cooperated with the Central European University, Prague/Budapest on the study of the transformation and privatization of the post-communist countries of Central and Eastern Europe; also acted in the civil service – adviser to the Minister of Trade and Industry, member of the Steering Committee for the privatization of banks and representative of the Czech National Bank Governor in the International Monetary Fund. He has published many scientific papers at home and abroad. His main task within the Czech Social Democratic Party structure is to chair the Economics Committee. Between June 2002 and December 2005 he was a Member of the Chamber of Deputies of the Czech Parliament; he held the position of the Minister of Agriculture during the years 2005–6. Currently Vice Chairman of the Supervisory Board of the Czech Post, state enterprise, director of the Czech Institute of Applied Economics and the Chairman of the FONTES RERUM, cooperative for economic, political, and social studies.



Bedřich MOLDAN Director of the Charles University Environment Center, expert of the TOP 09 Party

Czech geochemist, environmentalist, publicist and politician. He is a graduate of Mathematics and Physics Faculty of the Charles University (1958). Bedřich Moldan played a major role in the introduction of environmental legislation in the Czech Republic after 1989. He served as the first Czech Minister of Environment (1990–1991), and has since then served in many national and international public policy positions including Chairman of the Scientific Committee of the European Environment Agency (2000–2004); Chairman of the UN Commission on Sustainable Development (2001); Senator of the Senate of the Czech Republic (2004–2010). Founder and director of the Charles University Environment Center and author of hundreds of publications and articles. His publications includes “Geology and Environment” (1974), “Ecology, Democracy, Market” (1992), “Acid Deposition as a Biogeochemical Process” (1992), “Sustainability Indicators” (1997), “(Un)Sustainable Development – Ecology, Threat and Hope” (2001) and his latest “Subdued Planet” (2009).



Petr OTČENÁŠEK consultant

In 1962 he graduated from the Faculty of Applied and Nuclear Physics of the Czech Technical University, where he further obtained a Ph.D. and was appointed Associate Professor in Applied Nuclear Physics. The longest and most important part of his professional carrier he spent as a university lecturer and scientist; during the period of 1976 – 1980, he held the position of the Chair of the Applied Nuclear Physics Dept. He is the author of approx. 200 publications (including 12 textbooks for university students). In parallel he has working as a consultant in a number of projects in the field of nuclear technologies and energy strategies for Czech and foreign institutions, bodies and companies. He was a member of the Governmental Independent Energy Commission, which creates the basis for the actual energy strategy of the Czech Republic.



Dalibor STRÁSKÝ Authorized Representative of the Government of Upper Austria Country for Nuclear Power

He studied nuclear engineering at the Faculty of Nuclear and Physical Science at the Czech Technical University in Prague, specializing on the theory and technology of nuclear reactors. After graduation in 1985 he worked as a designer in Energoprojekt Praha on the Dukovany NPP site. Later on he held the position of the operator of the secondary circuit in this nuclear power plant. Following that, he joined the Temelín NPP, Section of the Production Preparation. From the year 1990 until the year 1997 he provided services as an energy consultant for the non-governmental organization. From 1998 until 2010 he performed as an advisor of energy connected issues to the Minister of the Environment. Since June 2011 he is acting as the Authorized Representative of the Government of Upper Austria Country for Nuclear Power.



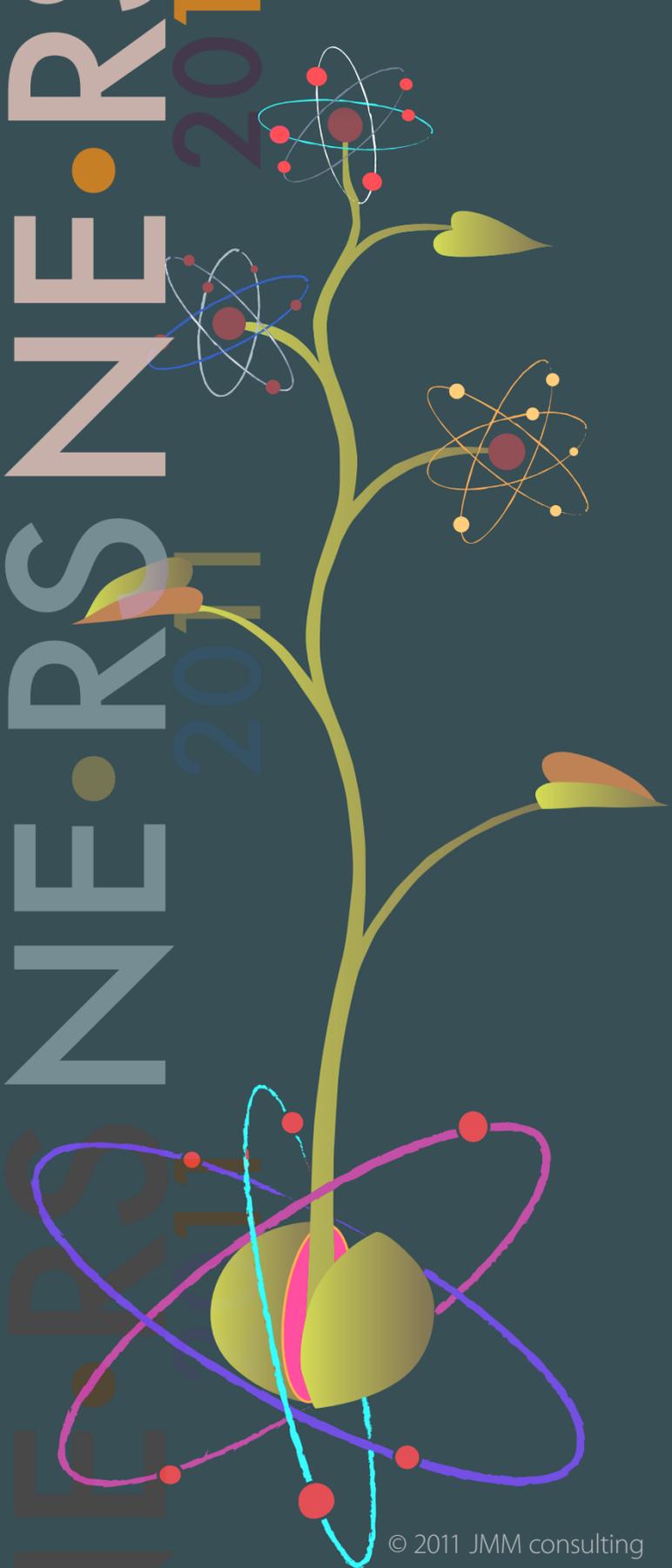
Ivo STREJČEK Member of European Parliament (Civic Democratic Party)

Ivo Strejček earned the degree of Doctor of Pedagogics from the Purkyně University, Faculty of Pedagogics in Brno (1985), and a Master's degree from the Masaryk University, Brno. He worked as a teacher and a translator. In the years 1996–7 he acted as the press spokesman of Václav Klaus, the Prime Minister of the Czech Republic. Since 1998 till 2010 he was a Member of Žďár nad Sázavou Municipal Board and a Member of Žďár nad Sázavou Municipal Council (2002–5). He joined the ODS (Civic Democratic Party) in 1992; from the year 2001 he is a Member of the Jihlava Regional Council and from 2002 a Member of the ODS Executive Council. In the year 2004 Ivo Strejček was elected as a Member of European Parliament, in June 2009 he defended his mandate. Currently he is a part of the Economic and Monetary Committee, a substitute of the Agricultural Committee and a Member of the European Parliament Delegation for the cooperation with China.



Ceremony on the occasion of the 80th birthday of Professor František Janouch, nuclear physicist, currently best known promoter of the nuclear power development, Professor of the Royal Institute of Technology, Stockholm, and founder and President of the Board of Trustees of the Charta 77 Foundation. As a part of the ceremony, F. Janouch introduced the well known essay of Prof. Andrei Sakharov (laureate of Nobel Peace Prize) titled "Nuclear Power and the Freedom of the West", importance of this essay is now steadily growing.

welcoming words to greet F. Janouch was presented by Milan HOVORKA, Deputy Minister of Industry and Trade of the Czech Republic



COURSE OF THE CONFERENCE
IN PICTURES

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LOOKING FORWARD TO SEEING YOU AT THE **NE·RS 2012** CONFERENCE



HISTORY OF KAISERSTEJNSKY PALACE

1699–1720 Baroque reconstruction initiated by Sir Kaiserstein but completed by Petr Radecký. 1859 Monument of marshal Radecký was built on the square. Until 1918 the square carried his name.

1866 Václav Petzold, a hotelier, buys the palace and opens an exclusive restaurant. For the next hundred years it is called „U Petzoldů“.

1904–8 Famous opera singer Emmy Destinn, a partner of Enrico Caruso, rents an apartment here.

1977 Total reconstruction begins under the architects Zdeněk Pokorný and Jaroslav Bělský.

1981 The palace is registered as a UNESCO heritage site.

1997 Restitution procedures are completed and the palace is returned to its original owners.

<http://www.kaiserstejnskypalac.cz/Text/uvodni-stranka?MenuItemId=1>