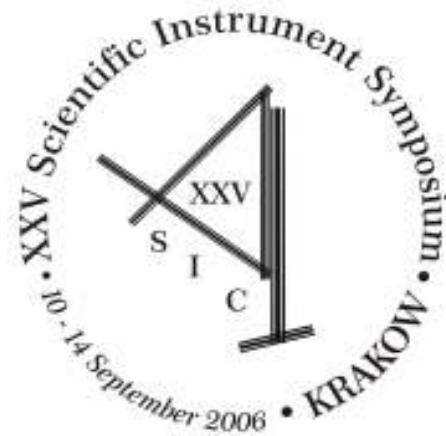


# **XXV SCIENTIFIC INSTRUMENT SYMPOSIUM**

**“East and West  
the Common European Heritage”**



## **PROGRAM**

Jagiellonian University Museum  
Krakow, Poland

10 -14 September 2006

## XXV Scientific Instrument Symposium organised by:

Scientific Instrument Commission  
International Union of the History and Philosophy of Science  
Division of History of Science  
<http://www.sic.iuhps.org/>

Jagiellonian University Museum  
Department of the History of Science and Scientific Instruments  
<http://www3.uj.edu.pl/Muzeum/index.en.html>

## Local Organising Committee:

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Zbigniew Bela  
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## Day 1

### Sunday, September 10th 2006

Jagiellonian University Museum, Collegium Maius, 15 Jagiellonska St., Krakow

The registration of the participants will take place in the *Libraria*, which is located on the first floor of the *Collegium Maius*. During the welcoming reception a guided visit in the Museum will be organised. Groups of about 20 people start the visit every 10 minutes from 7.00 p.m.

17:00-21:00	Registration
19:00-20:00	Welcoming reception
20:00-21:00	Guided tour



Collegium Maius, situated at the corner of St. Anna and Jagiellonska Streets, is the oldest university edifice in Poland. Its history goes back to the year 1400, when King Władysław Jagiełło purchased the Peçherz family's corner house and donated it to the University. The actual walls of the Peçherz house have been preserved in their foundations and on the side overlooking Jagiellońska Street. This is easily traceable by observing the wild-stone composition, so typical of the 14th century. The house was not large and hardly could hold the University activities. During the 15th century Collegium Maius was extended. The University was able to purchase the houses contiguous to the College and to combine them into a harmonious whole, complete with a courtyard enclosed with a ring of arcades, interrupted with the professor's staircase, leading up to the first-floor balconies.

On the ground floor there were lectoria, i.e. lecture rooms, low-vaulted, dark and often wet rooms. On the first floor were the Library (added c.1515-1519), the Stuba Communis (refectory for Professors), the Treasury rooms and the Asembly Hall. The Professor chambers were located all over the building.

Up to the second half of 19th century the appearance and interior arrangements of the Collegium Maius didn't change much. The neogothic reconstruction in the years 1840-1870, changed the original face of the Collegium and transformed it into the University Library, which used the building up to 1940. Between 1949 and 1964, on the personal initiative of Prof. Karol Estreicher Jr., the whole building underwent a major refurbishment and conservation, shedding all superfluous neogothic additions, that effectively blurred the austere elegance of its original structure. It this time the Collegium Maius was also designated as the seat of the Jagellonian University Museum, home to ancient university collections, including the collection of the historical scientific instruments.

## **Day 2**

### **Monday, September 11th 2006**

Aula of the Polish Academy of Arts and Sciences, 17 Sławkowska St., Krakow

Sessions will be held in the aula of the Polish Academy of Arts and Sciences, which is located on the second floor of the building of the Academy. In the foyer of the aula the registration desk will be open.

Lunch will be served in the Chimera Restaurant, 3 Św. Anny St., during the lunch break between the sessions.

In the evening we will come back to the courtyard of the Collegium Maius, to take the group photo of the participants.

After the group photograph the poster session will be held in the courtyard of the Collegium maius. Later, during the reception, participants will have free access to the two exhibitions located on the ground floor:

1. The interactive exhibition “Senses”. The subject area of this exhibition is focused on the human body, its biology and physiology. It is an attempt to explain, in the interactive way, how our sense organs are build and how do they work.
2. The temporary exhibition “Polish globes” presenting globes with geographical names in Polish from the 19th till 21st century.

At 7.45 p.m. we will have a Krakow tour by electric cars. We will take the cars in the front of the Collegium Maius.



The Academy of Arts and Sciences was founded in 1872, as a result of the transformation of the Cracow Learned Society, in existence since 1815. Though formally limited to the Austrian Partition, the Academy served from the beginning as a learned and cultural society for the entire Polish nation. Its activities extended beyond the boundaries of the Austrian Partition, gathering scholars from all of Poland, and many other countries as well.

After the First World War, the Academy was renamed 'the Polish Academy of Arts and Sciences' (PAU), and become the official representative - though not state-affiliated - of Polish learning, a status which entailed participation in international learned organizations; among other things, the PAU was a founding member of the Union Académique Internationale.

After the German Occupation, the PAU continued its activities in the same fields until 1952, when the authorities decided to take over its agencies and assets on behalf of the Polish Academy of Sciences in Warsaw, which was then being established. The PAU was never formally dissolved, however, so that it was able to resume its activities immediately after the systemic transformations of 1989.

Monday, September 11th 2006

9:00-9:25	Official opening	
<b>Session I: East-West – Cooperation, Competition and Trade</b>		
9:25-9:45	Gloria Clifton	British Scientific Instrument Makers and the Transmission of Knowledge in Europe
9:45-10:05	Anita McConnell	Ramsden's Workshop: Recruiting Craftsmen from East and West
10:05-10:25	Alison Morrison-Low	From West to East: Nineteenth-Century Scottish Lighthouse Technology in the Pacific Rim
10:25-10:45	Sara Schechner	The Adventures of Captain John Smith, Pocahontas, and a Sundial
10:45-11:05	Robert. D. Hicks	Instruments of Science and Technology in Early Virginia, USA, and New Historical Perspectives
11:05-11:20	Coffee break	
11:20-11:40	Michel Jean Morizet	Fahlmer and Diebolt: Two Instrument Dealers of Strasbourg at the End of the 18th Century
11:40-12:00	Mathias Ullmann	Scientific Instruments from Saxony in the Petersburg Art Collections
12:00-12:20	Ewa Wyka	Liquefaction of Gases: Its History and the Problems Surrounding the Discovery
12:20-12:40	Pedro Ruiz-Castell, Ignacio de la Lastra	A Communist Instrument in Franco's Spain
12:40-13:00	David Pantalony	Propaganda or Education? The Controversy over the Importation of Soviet Scientific Instruments to America in 1959.
13:00-13:15	Session summary	
13:30-15:00	Lunch - Chimera restaurant	
<b>Session II: Shot at Noon – Aspects of Artillery Instruments from Early Modern Europe</b>		
15:00-15:20	Wolfram Dolz	Early Artillery Instruments - a Typology
15:20-15:40	Roland Schewe	Artillery Instruments from the German National Museum - Art Technology and Material Sources
15:40-16:00	Peter Plaßmeyer	Strategic Games? Remarks on the Function of Artillery Instruments in Princely Collections.
16:00-16:20	Silke Ackermann	Insular Views? Artillery Instruments from England.
16:20-16:30	Session summary	

Collegium Maius, ground floor, 15 Jagiellonska St.

16:45-17:00	The group photo of the participants (courtyard)
17:00-17:30	Poster session
17:30-19:30	Reception and parallel visits to exhibitions "Senses" and "Polish globes"
19:45-20:15	Krakow tour by electric cars

## **Day 3**

### **Tuesday, September 12th 2006**

Jagiellonian University Museum, Collegium Maius, 15 Jagiellonska St., Krakow

Sessions will be held in Bobrzyński Room which is situated on the second floor of the Collegium Maius and in Cellarium. Coffee breaks will be organised in Cellarium and in the courtyard.

Lunch will be served in the Chimera Restaurant, 3 Św. Anny St., during the lunch break between the sessions.

In the evening we will have reception in the Museum of Pharmacy, 25 Florianska St., Krakow. It is in walking distance from the Collegium Maius (about 10 minutes); therefore we will go there together just after last session. During the reception we will visit this Museum.



Museum of Pharmacy at the Jagiellonian University of Cracow, founded in 1946, is one of the few museums of the type in the world. Exhibits collected here show the history of pharmacy from the Middle Ages to modern times. The collections contain antique apothecary jars, mortars of various size and shape, apothecary utensils, medicinal raw materials, memorabilia of eminent pharmacists, postage stamps and envelopes referring to the history of pharmacy, and curiosa pharmaceutica. An eighteenth-century pharmacy has been reconstructed, as well as some other interiors - like an old laboratory, an apothecary cellar with barrels and bottles for medicinal wines, and an apothecary attic for drying and storing herbs. There are also pieces of furniture from old monastic pharmacies, as well as furniture in Empire, Neo-Baroque and Biedermeier style. The museum houses also the library preserving old herbals, antidotaria, pharmacopoeias and other old prints relating to the history of the art of preparing medicines.

Collegium Maius, Bobrzynski room, 2nd floor, parallel session

**Session III: Astronomy from Kepler to the 20th Century**

9:00-9:20	Inga Elmqvist Söderlund	The Identity of the Astronomer in 17th Century Imagery - Instruments Used as Attributes
9:20-9:40	Yaakov Zik, Giora Hon	Science and Instruments: Kepler's Optical Part of Astronomy
9:40-10:00	Suzanne Débarbat	Is Lacaille (1713-1762) the First in Attempting to Uniformize Instruments in View of a European Cooperation in Astronomy?
10:00-10:20	Peter Abrahams	The Telescopes of William Lassell (1799-1880)
10:20-10:35	Coffee break	
10:35-10:55	Kevin Johnson	The 1876 Special Loan Exhibition; a Global Snapshot of Astronomy?
10:55-11:15	Klaus Staubermann	Instrument and Image: the Nineteenth Century Astronomical Lantern Slide
11:15-11:35	Anna K. Zawada	Tadeusz Banachiewicz (1882 – 1954) Director of the Krakow Observatory and Inventor of Chronocinematograph
11:35-11:45	Session summary	
11:45-12:00	Coffee break	

**Session V: Astronomical Observatories**

12:00-12:20	James Caplan	Meridian Instruments of the Marseille Observatory
12:20-12:40	Gudrun Wolfschmidt	Development of Radioastronomy in Germany before the Effelsberg Telescope
12:40-13:00	Françoise Le Guet Davoigneau	Tully, Jean The German Tradition and 19th Century French Observatories
13:00-13:20	Ileana Chinnici	Historical Instruments in Italian Astronomical Observatories: State of the Art and Perspectives
13:20-13:30	Session Summary	
13:30-15:00	Lunch – Chimera restaurant	

Collegium Maius, *Cellarium*, parallel session

**Session IV: Instruments of the 20th Century**

9:00-9:20	Leonardo Gariboldi	Studying Cosmic Ray Physics in Milan: the Four Cloud Chambers (1938-60)
9:20-9:40	Sofia Talas	Balloons and Nuclear Emulsions: the Role Played by the University of Padua in the 1950's European Collaborations
9:40-10:00	J. Batlló, C. Clemente, F. Pérez-Blanco, J. Morales	The Seismographs of the "Observatorio de Cartuja" (Granada, Spain). Restoration of the "Cartuja macroseismograph"
10:00-10:20	Richard Kremer	Harold E. Edgerton's High Speed Cameras
10:20-10:35	Coffee break	
10:35-10:55	Vasily Borisov	The Birth of the Electronic Television: Cooperation and Competition
10:55-11:15	Šimon Krýsl	The Resounding Heart: dr. Leo Jacobsohn's Heart Sound Transmission
11:15-11:35	Tacye Phillipson	Mallard and the Mouse Box: Prototype MRI Material from Aberdeen
11:35-11:45	Session summary	
11:45-12:00	Coffee break	

**Session VI: Instruments of the Hellenic World**

12:00-12:20	Giorgio Strano	The In-existent Instruments of Ptolemy's "Almagest": The Mysterious Error and Oscillation of the Obliquity of the Ecliptic
12:20-12:40	Yanis Bitsakis	The Antikythera Mechanism Research Project
12:40-13:10	Michael T. Wright	The Antikythera Mechanism: Hellenistic Bodging. After the talk demonstration of the model of Antikythera Mechanism
13:10-13:30	Session Summary	
13:30-15:00	Lunch – Chimera restaurant	

Collegium Maius, Aula, 1st floor

**Session VII: Historical Laboratories**

15:00-15:20	Paolo Brenni	The Physics Collection of the Istituto Tecnico Toscano: 20 Years of Work
15:20-15:40	Jan Waling Huisman	Historical Laboratories at the University of Groningen
15:40-16:00	Staffan Andersson	Acquisition of a Collection in Context - a Case Study of the Uppsala Cabinet of Physics
16:00-16:20	Tatiana Moiseeva	The Chemical Laboratory of Lomonosov is the First Scientific and Educational Laboratory in Russia
16:20-16:35	Coffee break	
16:35-16:55	Joan Muñoz, Jaume Valentines, Santiago Vallmitjana	The Mentora Alsina: a Century of Teaching Experimental Physics in Barcelona
16:55-17:15	Santiago Vallmitjana, Carme Clemente	The Collection of Scientific Instruments of the Faculty of Physics of the University of Barcelona
17:15-17:35	Ad Maas	Mesmerized by Onnes. Research with the Large Electromagnet of the Kamerlingh Onnes Laboratory in the 1930s.
17:35-17:55	Zbigniew Bela	The "Virtual" Laboratory of Michał Sędziwoj Reconstructed from his <i>Operatie Elixiris Philosophici</i> and Andreas Libavius's <i>Alchimia</i>
17:55-18:10	Session summary	

Museum of Pharmacy, 25 Florianska St., Krakow

18:30-20:00	Reception
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## Day 4

### Wednesday, September 13th 2006

Jagiellonian University Museum, Collegium Maius, 15 Jagiellonska St., Krakow

Sessions will be held in Bobrzyński Room which is situated on the second floor of the Collegium Maius and in Cellarium. Coffee breaks will be organised in Cellarium and in the courtyard.

Lunch will be served in the Chimera Restaurant, 3 Św. Anny St., during the lunch break between the sessions.

In the evening we will visit the Polish Aviation Museum. We will go there by our bus. The bus will take us from the bus stop "Teatr Bagatela" on the Podwale Street, situated close to the Museum (3 minutes walk). The bus cannot wait in this place therefore we must strictly keep the time. We will meet at the courtyard of the Collegium Maius exactly at 3.15 p.m.

In the Museum we will have one scientific session. After it we will have a guided tour in the Museum as well as the reception.



The Polish Aviation Museum in Krakow occupies part of the premises of Krakow's former military airport at Rakowice-Czyżyny: one of Europe's oldest airports.

Founded in 1964, the Polish Aviation Museum collects and displays exhibits connected with aviation from all over the world and its large collection is among the world's best. Displayed here are aeroplanes, gliders, helicopters, anti-air missiles, and aircraft engines. The museum runs also an extremely well stocked library and a large photo collection. Some of the aeroplanes gathered here are world unique. These include fuselages from First World War German fighter planes: Halberstadt Cl.II, Albatros C.I, Aviatik C.III, and Roland D.VI. Our collection boasts of the only surviving intact Grigorovich M.15, Russian airship dating from 1916, a German Albatros B.IIa and the fuselage of a well-known English fighter plane of 1917, the Sopwith F.1 Camel. The aeroplanes are on display thanks to the work of the technical and maintenance department, which has brought these badly damaged relics back to display condition. Work on the reconstruction of further aeroplanes is in progress.

The museum is the only place where pre-war Polish military aircraft can be viewed intact. One of these planes is particularly worth your while: it is a PZL P.11c fighter which took part in dogfights in September 1939. Once property of the 121st Fighter Squadron of the II Air Group, the plane was stationed at Rakowice - exactly on the premises of today's museum. Another Polish craft from between the two world wars is the training plane PWS 26. Besides these, you can see here two Polish passenger aircraft, an RWD 13 from 1935 and an RWD 21 from 1939. Second World War exhibits include two particularly beautiful models: a British Supermarine Spitfire LF Mk XVI E and Soviet medium-range bomber Tu-2S, one of the best in its class towards the end of war.

The collection includes also Polish post-war aeroplanes and foreign planes used by the Polish Air Force and in civil aviation. It has examples of almost all the fighter jets in the history of Polish aviation, including numerous Jak, Il, Su and MiG (and Lim - the Polish versions produced under licence). There are also Polish and licensed helicopters and gliders well-known throughout the world. In a separate part of the exhibition, there are aircraft engines dating from 1908 to the present day. The constantly growing collection is augmented by rocket engines and anti-air missiles.

Wednesday, September 13th 2006

Bobrzynski room, 2nd floor, parallel session

**Session VIII: Scholars, Constructors, Mechanics**

9:00-9:20	Jim Bennett	Christopher Middleton and the Practice of Navigation 1730-50
9:20-9:40	Hans Hooijmaijers	The True Method of Finding the Longitude at Sea
9:40-10:00	Richard Dunn	Touched, Cleaned and Repaired; Equipping and Maintaining Trading Voyages to the Baltic
10:00-10:20	Julian Holland	Angelo Tomaghi: Migrations of a Mathematical Instrument Maker
10:20-10:40	Stephen Johnston	Science, Satire and the Architectonic Sector
10:40-10:55	Session summary	
10:55-11:10	Coffee break	
11:10-11:30	Vladimir Schurov, Pavel Bandakov	Ivan Kublin: Russian Leonardo or the Slave of Clockwork?
11:30-11:50	Karl Grandin	Linnaeus's Apostles and Their Instruments
11:50-12:10	Klaus Hentschel	Life and Work of the Gottingen Instrument Maker Moritz Meyerstein (1808-82)
12:10-12:30	Alberto Meschiari	The Website and the First Volume of the National Edition of the Works and Correspondence of Giovanni Battista Amici (Modena 1786 - Florence 1863) Optical Instrument Maker, Astronomer, Naturalist
12:30-12:50	Session summary	
12:50-14:30	Lunch – Chimera restaurant	

Wednesday, September 13th 2006

Collegium Maius, *Cellarium*, parallel session

**Session IX: Calculating Machines and Computers as Scientific Instruments**

9:00-9:20	Larisa Brylevskaya	Prizes of the St-Petersburg Academy of Sciences: Joining of Efforts of Russian and European Inventors in Creation of Mechanical Calculating Machines
9:20-9:40	Theodore Lekkas, Aristotle Tympas	Ideologies of World Fair Classification and Display of Calculating Artefacts, 1851-1914
9:40-10:00	Allan Olley	Digitizing Measurement: Automating Scientific Table Making
10:00-10:20	Ola Nordal	GIER - a Computer Revolution in a Wardrobe. The Birth of Digital Computing at the Norwegian Institute of Technology in 1962.
10:20-10:40	Jos Uyttenhove, Danny Segers	Nuclear Electronics as a Pioneer in the Implementation of Minicomputers and Microprocessors in Laboratory Instrumentation
10:40-10:55	Session summary	
10:55-11:10	Coffee break	

**Session X: Study through the Replica, Virtual Experiments**

11:10-11:30	Efthymios Nicolaidis	The Project Organothea: 19th - 20th Century Instruments and Virtual Experiments
11:30-11:50	Steven Turner	Opening a Window to the Past: James Smithson and the Chemical Blowpipe
11:50-12:10	Marvin Bolt	Databases for Instruments and Makers: Two Examples
12:10-12:30	Peter Heering	Materialised Skills and Strange Encounters: Experience from the Practice with Solar Microscopes
12:30-12:50	Danny Segers, Jos Uyttenhove	The Working of Einstein's "Maschinchen" Studied with the Help of a Replica
12:50-13:05	Session summary	
13:10-14:30	Lunch – Chimera restaurant	

Polish Aviation Museum, 39 Jana Pawła II St., Krakow

**Session XI: Conservation and Dating of Scientific Instruments**

15:30-16:00	Trip to the Polish Aviation Museum	
16:30-16:50	Krzysztof Mroczkowski, Piotr Łopalewski	Preservation of the Aviation Technology Artefacts in the Polish Aviation Museum
16:50-17:10	Dariusz Niemiec	Compasses from the Time of Galileo Found at the Excavations in the Collegium Novum of the Jagiellonian University
17:10-17:30	Richard Paselk	Craft Knowledge in Understanding Scientific Instruments
17:30-17:45	Session summary	
18:00-19:00	Guided tour in the Museum	
19:00-21:00	Reception	
21:00-22:00	Return to the city center	

## Day 5

### Thursday, September 14th 2006

#### The State Przypkowski Museum, Jędrzejów

We will meet in the front of the Auditorium Maximum. We will take two buses. Please check the number of the bus on the ticket you got during the registration. Because the space in the Przypkowski Museum is limited we have to divide into two groups. The first group will go directly to the Museum, the second will visit the Cistercian Abbey at Jędrzejów. After about one hour the groups will change. We will meet together at lunch in the “Lanckorona” restaurant on the outskirts of Jędrzejów. After lunch, in the restaurant, the plenary meeting of the Scientific Instrument Commission will be held.

After return to Krakow we will meet at the Symposium Official Dinner in the “Pryzmat Gallery”

8:30-10:30	Trip to the State Przypkowski Museum
10:30-12:30	Visit in the Museum and the Cistercian Abbey at Jędrzejów
13:00-14:00	Lunch in “Lanckorona” restaurant
14:00-15:00	SIC Plenary Meeting in the restaurant
15:00-17:00	Return to Krakow

”Pryzmat Gallery” restaurant, 3 Łobzowska St., Krakow

19:00-22:00	Symposium Official Dinner
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**The State Przypkowski Museum** in Jędrzejów, about 100 km from Krakow, presents the largest in Poland and third in the world collection of sundials. The Museum was established as a result of the donation of the collection of sundials, astronomical instruments and library of old books to the State by the Przypkowski family. The Przypkowski’s first made their astronomical and gnomonic collection available to visit by those interested in 1909. The main section of the museum is the collection of sundials. Horizontal, vertical, multiple, altitude, equatorial sundials ranging in date from the fifteenth century to contemporary times are all represented. The collection also includes astronomical, gnomonic and other time measuring instruments, such as hourglasses, fire clocks and mechanical clocks. In the library there are about 600 old books from the 16<sup>th</sup>-18<sup>th</sup> centuries, including Baslean edition of the famous *De revolutionibus orbium coelestium* by Nicolas Copernicus (1566), and books with the autographs of Hevelius, Descartes and Huyghens. One of the largest sections of the Museum is the collection of graphic arts and ex-libris. In the cellars there are the collection of pharmaceutical and catering utensils, such as pans, kettles, samovars and the like, as well as of restaurant menus.

### **The Church of the Assumption and Saint Adalbert (Wojciech)**

Order of the Cistercians

The group of 20 Benedictine monks with Abbot Robert from Molesmes Abbey moved to the Citeaux in 1098.

They established the order of the Cistercians. The church in Brzeźnica (today Jędrzejów) is the oldest Cistercian church in Poland. It was built in 1140 in the place of Saint Adalbert (Wojciech) church. The oldest survived part is from 1110. The construction of the church was finished in 1210 with the help of bishop of Krakow, Wincenty Kadłubek.

Wincenty Kadłubek was buried in front of a high altar. In 17<sup>th</sup> the relic of Saint Kadłubek was moved to north aisle. It is worth to see the front of the church, which is eastward. Unknown Silesian architect built it in 1751-54. We enter inside through the stone baroque portal. In 16<sup>th</sup> century the church was equipped with an organ. The system of vaults and pillars is in the early Gothic style, ornamentation is in Roman style. According to Cistercian rules, they did not use any ornamentation until 2<sup>nd</sup> half of 13<sup>th</sup> century. The high altar in the presbytery is devoted to the Assumption and it is the most beautiful part of the church. The altar was designed by Jakub Antoni Buzzini (he also designed a high altar on Jasna Gora, Częstochowa monastery) and was executed by Antoni Frączkiewicz in 1731. The altar was consecrated in 1767 by bishop of Krakow Franciszek Potkański. The temple was plundered during the Swedish Deluge (1655). In 1726 the church was burned down and then rebuilt in Baroque style. Black-and-white marble floor was made in 1733, the walls in 1736. The next fire destroyed the tower and the roof in 1800. The church and the cloister fell into decay under Russian partition in 19<sup>th</sup> c. The church was destroyed during First World War. In 1915 parish priest Stanisław Marchewka started to rebuilt and renovated the church. He made electric lighting in 1921. The temple and the cloister survived the Second World War. The Cistercians took over the church in 1945 and started to renovate it.

## **Day 5**

**Friday, September 15th 2006**

Post-conference excursions:

### **Excursion I**

#### **The Historic Salt Mine in Wieliczka**

We meet at 8 a.m. at the parking in front of the *Auditorium Maximum*, 35 Krupnicza St. We expect to come back at 4 p.m. We start our visit in the Saltwork Castle, then we have guided tour in the historical Salt Mine. During the visit we have a break for a lunch in the underground restaurant.

The historic Salt Mine in Wieliczka is the only mining site in the world functioning continuously since the Middle Ages. Several hundreds of years of rock salt exploitation has shaped the spatial arrangement of its excavated structure. Lying on nine levels, concealed under the town, the mine reaches down to the depth of 327 metres. Subterranean Wieliczka consists of nearly 300 kilometres of corridors and almost 3,000 chambers. The tourist route accessible to visitors includes c. 3.5-kilometres section located from 64 to 135 metres below ground level.

In 1976 the Wieliczka Salt Mine was entered in the National Monuments Registry. Two years later, in 1978, the mine was inscribed in UNESCO's First World List of Cultural and Natural Heritage, and in 1994 it was acknowledged as the National History Monument by the President of Poland.

Magnificent chapels, captivating underground lakes, original tools and equipment, traces of mining works allow us to understand the human struggle against the elements, their work, their passion and their beliefs. The Wieliczka miners have left behind many salt carvings and murals. After sightseeing, tourists can rest in the chamber complex 125 metres underground where they can find souvenir shops, a restaurant, and a post office.

At present, the underground tourist route is visited annually by over 1,000,000 tourists.

#### **The Salt-Works Castle**

The defensive complex of the Salt-Works Castle in Wieliczka consists of buildings sited in the north-western part of the town - since the end of the 13th century till 1945 the seat of the Cracow Salt-Works (i.e. Bochnia and Wieliczka mines) administration. They are the only site of this kind in Poland and also a splendid example of Mediaeval and contemporary architecture connected with the development of salt mining in Europe.

## Excursion II

### Memorial and Museum Auschwitz-Birkenau, Oświęcim

We meet at 8 a.m. in front of the *Collegium Maius*. We expect to come back at 4 p.m. We go to Auschwitz Museum by bus, there we have guided tour in the Auschwitz Concentration Camp and we see a short movie about the camp. During the return to Krakow we have a lunch.

All over the world, Auschwitz has become a symbol of terror, genocide, and the Holocaust. It was established by the Nazis in the suburbs of the city of Oswiecim which, like other parts of Poland, was occupied by the Germans during the Second World War. The name of the city of Oswiecim was changed to Auschwitz, which became the name of the camp as well.

The camp consisted of three main parts: Auschwitz I, Auschwitz II-Birkenau, and Auschwitz III-Monowitz. It also had over 40 sub-camps. At first, Poles were imprisoned and died in the camp. Afterwards, Soviet prisoners of war, Gypsies, and prisoners of other nationalities were also incarcerated there. Beginning in 1942, the camp became the site of the greatest mass murder in the history of humanity, which was committed against the European Jews as part of Hitler's plan for the complete destruction of that people. The majority of the Jewish men, women and children deported to Auschwitz were sent to their deaths in the Birkenau gas chambers immediately after arrival. At the end of the war, in an effort to remove the traces of the crimes they had committed, the SS began dismantling and razing the gas chambers, crematoria, and other buildings, as well as burning documents.

The camp was liberated by Red Army soldiers on January 27, 1945. A July 2, 1947 act of the Polish parliament established the Auschwitz-Birkenau State Museum on the grounds of the two extant parts of the camp, Auschwitz I and Auschwitz II-Birkenau. The site was added to the UNESCO World Heritage List in 1979.

The Museum grounds cover 191 hectares, of which 20 are at Auschwitz I and 171 at Auschwitz II-Birkenau. On the museum grounds stand several hundred camp buildings and ruins, including the ruins of the gas chambers and crematoria, over a dozen kilometres of camp fence, camp roads, and the railroad spur ("ramp") at Birkenau.

## Excursion III

### Krakow sightseeing tour

We meet at 8.45 a.m. at the courtyard of *Collegium Maius*. We expect to finish our trip at 3.30 p.m. in Kazimierz District. During the excursion we see the exhibition “Krakow in the Christian Europe from 10th to 13th century”, visit the St. Mary Church and walk through the Main Square. Next we visit Cathedral, Crown Treasury and Armoury on the Wawel Hill. Then we take electric cars and we go to see Kazimierz. The last point of the program is the lunch in Kazimierz.

Krakow is a city wrapped in legend, where time flows differently, and where every moment becomes a moment of history. For centuries Krakow was the capital of Poland, the seat of kings, drawing great scholars and artists from the whole world. It is their talents and imagination we must thank for the city's rich legacy of unique historical relics, which reflect the most important trends in European culture. During the excursion we see the most beautiful places in the city.

#### The Main Square - Rynek Główny

The Main Square (Rynek Główny) is the natural centre of Krakow: a stage for various minor and major events, a reference point, a meeting place, and the starting point or destination for countless walkers. Historically speaking, the Main Square began to operate in a shape and size similar to what we see today (a square with 200-metre-long sides) already in the earliest days of the Chartered City, i.e. after the granting of the Great Royal Charter in 1257. The centrally located Cloth Hall (Sukiennice) has survived to this day; the building was originally a commercial establishment for trading in cloth, and for over a century has been transformed into a Museum. Other buildings standing to this day in the heart of the Main Market Square include the diminutive Church of St Adalbert - a site of important archaeological discoveries, and the solitary tower - a remnant of the Town Hall demolished in the 19th century. In the north-eastern corner of the square stands **St Mary's Church**, frequently referred to as a basilica. With its two slender, spired towers reaching high above the whole city, it is one of Krakow's landmarks. The Nuremberg master, Wit Stwosz (Veit Stoss) created his magnum opus here - the monumental High Altar of St Mary's - a marvel that attracts thousands of tourists every day.

#### The Royal Castle on Wawel Hill

From the dawn of Polish history Wawel Hill in Cracow was a centre of secular and ecclesiastical power. The establishment in 1000 of the bishopric of Cracow was soon followed by the construction on Wawel of the first cathedral. The Wawel castle functioned as the residence of the Polish rulers from the mid-11th to the early 17th century. The present structure incorporates Romanesque fragments and considerable Gothic parts, but it acquired its present form mainly in the period c. 1504-1535, during the reign of the kings Alexander (1501-1506) and Sigismund I the Old (1506-1548) of the Jagiellonian dynasty. The construction of the Renaissance castle was begun by Master Eberhard Rosemberger - responsible for the actual building - and Francesco the Florentine, who executed decorative stone elements and the arcaded galleries. Their work was continued by Master Benedykt and another Florentine, Bartolomeo Berrecci. Those artists created together one of the most stately monuments of Renaissance architecture in Europe.

### **Wawel Cathedral**

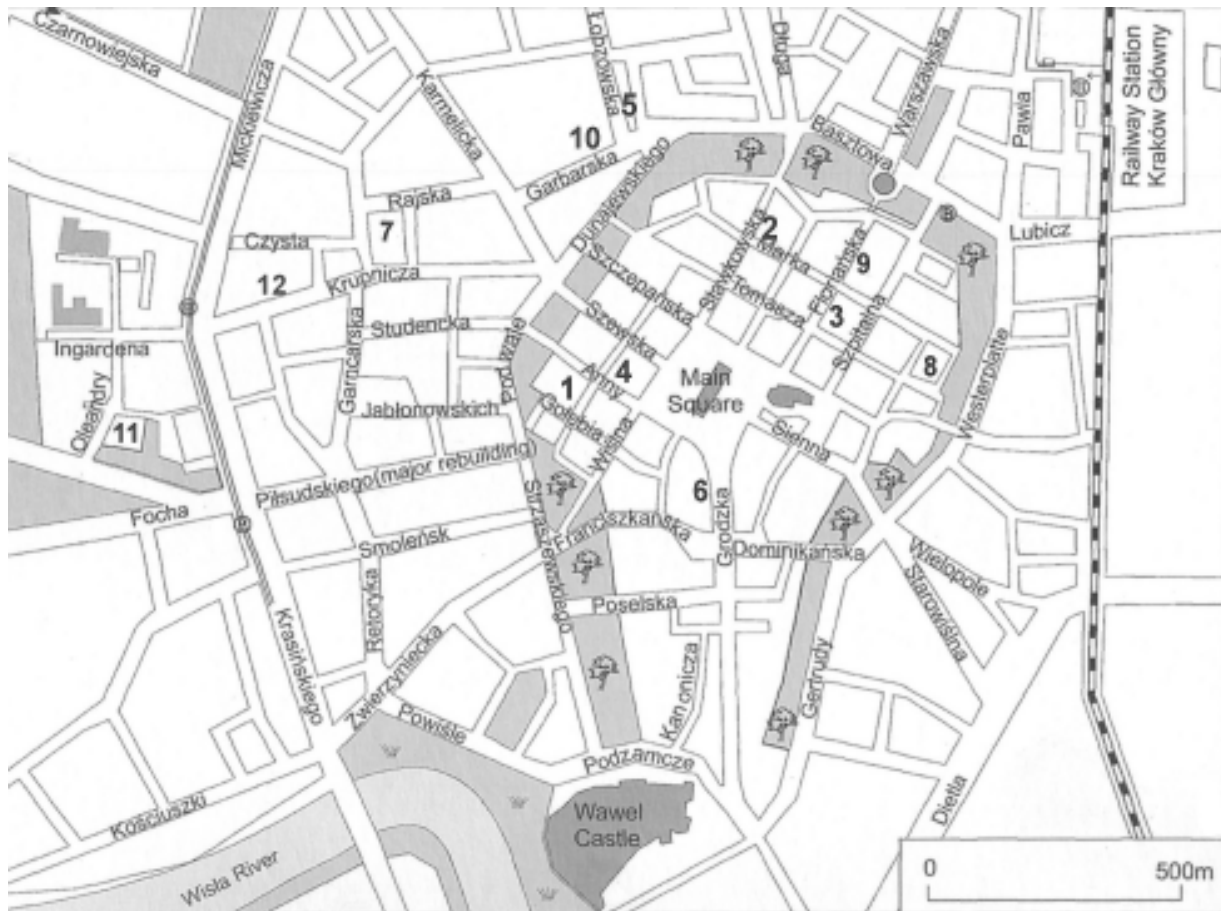
The Wawel Cathedral was once the coronation church of the kings of Poland. One of its numerous chapels - the Sigismund Chapel - is the most perfect achievement of Renaissance architecture and sculpture in Poland and in the whole of northern Europe. The Cathedral Treasury includes, among other items, monstrances and liturgical vessels, reliquaries, regalia, and insignia of royalty. Among the five bells hung in the belfry is "Zygmunt", one of the largest in Europe. The crypts of the Cathedral contain the tombs of the kings and their families and also of great poets and national heroes.

### **Kazimierz District**

Every corner of Kazimierz is witness to a very Krakowian tale: the history of Polish Jews. It is visible in the system of narrow streets itself, in the abundance of markets, in the small tenements, synagogues, and kirkuts - Jewish cemeteries. Following the tragedy of the Second World War and the extermination of Jews by Nazi invaders, Kazimierz was deserted and, for decades, continued to fall into a desolate ruin. The changes that took place at the turn of the 1980s triggered a change that continues to influence the fast-paced growth of this part of the city. Having regained their property, heirs of former inhabitants immediately took to renovation. Today, beautifully restored buildings stand in close vicinity of those totally devastated, whose number luckily continues to diminish.

The key to the understanding of the popularity that Kazimierz enjoys today is its unbelievable and lasting tolerance: two nations and two great religions existed here for centuries in harmony. It is in Kazimierz that the massive, Gothic churches of St Catherine's and Corpus Christi sprung up alongside synagogues. Kazimierz is Krakow's centre of artistic and intellectual ferment.

Friday, September 15th 2006



- 1 *Collegium Maius* Jagiellonian University Museum, 15 Jagiellońska St.
- 2 Polish Academy of Arts and Sciences, 17 Sławkowska St.
- 3 Museum of Pharmacy, 25 Floriańska St.
- 4 Chimera restaurant, 3 Św. Anny St. (lunch)
- 5 “Pryzmat Gallery” restaurant, 3 Łobzowska St. (official dinner)
- 6 Hotel Rezydent, 9 Grodzka St.
- 7 Hotel Logos, 5 Szujskiego St.
- 8 Hotel Campanile, 34 Św. Tomasza St.
- 9 University Guesthouse, 49 Floriańska St.
- 10 University Hotel Bursa im. Pigońia, 7a Garbarska St.
- 11 Student Dormitory “Żaczek”
- 12 *Auditorium Maximum*, 35 Krupnicza St.