Heyrovský Discussion

Molecular Electrochemistry in Organic and Organometallic Research

Programme

Castle Třešť (Czech Republic)
June 18-22, 2017
50th Heyrovsky Discussion

Organizers:

Jiří Ludvík (JHI FCH): jiri.ludvik@jh-inst.cas.cz
Irena Hoskovcová (ICT): Irena.Hoskovcová@vscht.cz
Ludmila Šimková (JHI FCH): ludmila.simkova@jh-inst.cas.cz
Alan Liška (JHI FCH): alan.liska@jh-inst.cas.cz
Miroslava Guricová (ICT): Miroslava.Guricova@vscht.cz


J. Heyrovský Institute of Physical Chemistry, v.v.i, 2017
Academy of Sciences of the Czech Republic
Dolejškova 3, 182 23 Praha 8, Czech Republic
PROGRAMME

Sunday, June 18

10:00 Refreshment, registration in the entrance hall of the J. Heyrovský Institute, possibility to leave the luggage and walk in the town

15:00 Departure of a special bus from the J. Heyrovský Institute (Dolejškova 3, Prague 8 – Kobylisy)

17:30 Arrival, registration at the Castle Třešť

18:30 Welcome apéritif

19:00 Dinner

20:15 Opening of the 50th Heyrovský Discussion

Martin Hof, director of the J. Heyrovský Institute
Olivier Buriez, chair of the ISE-Division 6 Molecular Electrochemistry

Chairman Jiří Ludvík

20:30 J-M. Savéant (France) - Introductory lecture
Some Recent Trends and Upcoming Challenges in Molecular Electrochemistry

Monday, June 19 - morning

from 7:00 Breakfast

Topic: General and organic electrochemistry

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<thead>
<tr>
<th>Time</th>
<th>Chairman</th>
<th>Speaker</th>
<th>Title of presentation</th>
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<tbody>
<tr>
<td>8:30 to 10:00</td>
<td>Flavio Maran</td>
<td>Diane K. Smith</td>
<td>US Electrochemically-Controlled H-Bonding for Supramolecular Assembly</td>
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<tr>
<td></td>
<td></td>
<td>Albert Fry</td>
<td>US Understanding the Formation of Ion Pairs between Tetraalkylammonium Ions and Electrogenerated Anions</td>
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<td></td>
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<td>Olivier Buriez</td>
<td>FR Combination of Electrochemistry and Confocal Fluorescence Microscopy to Monitor the Electro-Bleaching of Fluorescently labelled Giant Liposomes</td>
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10:00 Coffee break
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<th>Chairman</th>
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<tbody>
<tr>
<td>10:30</td>
<td>Heinrich Lang</td>
<td>Carlos Frontana</td>
<td>MX Successive Electron Transfer in the Reduction of Electron-Withdrawing Substituted Nitrobenzenes</td>
</tr>
<tr>
<td>to 12:15</td>
<td></td>
<td>Hayati Celik</td>
<td>TR Electrochemical Behavior of Some New Mannich Bases of 5-Methyl and 5-Nitro-2-benzoazolinone Derivatives</td>
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<td>Tatiana Magdesieva</td>
<td>RU Twisted Diary/Intrioxides: New Strategy for Tuning of Redox Properties and Stability</td>
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<td>Melek Sirin Baymak</td>
<td>TR Electrochemical Behavior of Dienogest in Aqueous Solutions</td>
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12:30 Lunch

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**Monday, June 19 - afternoon**

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<th>Time</th>
<th>Chair</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>14:30</td>
<td>Diane Smith</td>
<td>Janet Conradie</td>
<td>SA Electrochemical Behaviour of Group 6 Fischer carbenes containing an aryl substituent</td>
</tr>
<tr>
<td>to 15:45</td>
<td></td>
<td>Tomáš Mikysek</td>
<td>CZ Molecular Electrochemistry of New Derivatives of N-B-N and O-B-N Heterocycles</td>
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<td></td>
<td></td>
<td>Jiří Ludvík</td>
<td>CZ Electrochemical Oxidation of Carborane Anions in Liquid SO$_2$</td>
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<tr>
<td>15:45</td>
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<td>Coffee break</td>
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<th>Time</th>
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<tbody>
<tr>
<td>16:15</td>
<td>Patrizia Mussini</td>
<td>Bernd Speiser</td>
<td>GE Electrochemical Electron Transfers, Electronic Interaction and Coupled Follow-Up Reactions in TIPS-Substituted Acenes</td>
</tr>
<tr>
<td>to 18:00</td>
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<td>Rudolf Holze</td>
<td>GE Electrochemical Transformation of Lignin</td>
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<td>M. Belen Batanero</td>
<td>SP Novel electrode synthetic routes to organic compounds useful as perfumes, pigments or OLEDs precursors</td>
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<td>Anna Lielpetere</td>
<td>LV Electrochemical Generation of Carbenium Ions via Electroauxiliary and Their Reactions with Nucleophiles</td>
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18:30 Dinner

19:30 Concert (in the courtyard of the castle)

*Prague Barock Ensemble*

21:00 Open fire **sausage party** in the park
### Tuesday, June 20 - morning

**Topic:** Organometallics and Complexes

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<th>Time</th>
<th>Chairman</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>8:30 to 10:00</td>
<td>Richard Glass</td>
<td>Heinrich Lang</td>
<td>5-Membered Heterocycles with Directly-Bonded Ferrocenyl Termini as Multi-Redox Systems: Synthesis, Electrochemistry, Structure and Bonding</td>
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<td></td>
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<td>Alexander Hildebrandt</td>
<td>Electrostatic Interactions in Mixed-Valent Complexes</td>
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<td>Alexey Popov</td>
<td>Redox-active metal-metal bond in endohedral metallofullerenes</td>
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10:00 Coffee break

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<tr>
<th>Time</th>
<th>Chairman</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>10:30 to 12:00</td>
<td>Albert Fry</td>
<td>Rainer F. Winter</td>
<td>Metallamacrocycles Built From Redox-Active Divinylphenylene Diruthenium Building Blocks</td>
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<td></td>
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<td>Wolfgang Kaim</td>
<td>Charge and Spin Coupling in Copper Compounds with Hemilabile Noninnocent Ligands</td>
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<td></td>
<td>Sara Realista</td>
<td>Small molecule activation by salen-type Ni(II) complexes</td>
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12:00 Lunch

13:15 Departure of the bus for the trip:

15:00 Barock church of pilgrimage - **Zelená Hora** (close to Žďár nad Sázavou) (World UNESCO Heritage)

17:30 Traditional brewery "**REBEL**" (Havlíčkův Brod) - excursion and degustation

19:30 Dinner in the brewery restaurant

22:30 Expected arrival to the castle
**Wednesday, June 21 - morning**

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<th>Time</th>
<th>Chairman</th>
<th>Speaker</th>
<th>Title of presentation</th>
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<tbody>
<tr>
<td>8:30</td>
<td>Bernd Speiser</td>
<td>Patrizia R. Mussini</td>
<td>Enantioselective voltammetry on achiral electrodes: a comparison between inherently chiral additives based on different stereogenic elements</td>
</tr>
<tr>
<td>10:00</td>
<td></td>
<td>Serena Arnaboldi</td>
<td>Panoramic Overview on the Enantioselection Performance of Inherently Chiral Surfaces: a Comparison between Systems with Different Atropisomeric Cores and Stereogenic Elements</td>
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<td></td>
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<td>Alan Liška</td>
<td>Stereoelectrochemistry of calixarenes</td>
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10:00 Coffee break

**Topic:**

**Surfaces**

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<tr>
<th>Time</th>
<th>Chair</th>
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<th>Title of presentation</th>
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<tbody>
<tr>
<td>10:30</td>
<td>Jeanet Conradie</td>
<td>Felipe J. González</td>
<td>Grafting of carbon surfaces by chemical decarboxylation in carboxylic acid – carboxylate systems</td>
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<tr>
<td>to</td>
<td></td>
<td>Massimo Marcaccio</td>
<td>Wavy Graphene-like Sheets Electrochemically Obtained from Polycyclic Aromatic Hydrocarbons</td>
</tr>
<tr>
<td>12:15</td>
<td></td>
<td>Linda Gonzalez-Gutierrez</td>
<td>Ag(I) adsorption onto functionalized grapefruit peel with urea and melamine: mechanism evaluation using carbon paste electrodes</td>
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<td>Romana Sokolová</td>
<td>On the Differences in Oxidation Mechanism of Flavons, Flavonols and Flavanones. Electrochemical and <em>In situ</em> IR Spectro -electrochemical Research</td>
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</tbody>
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12:30 Lunch
Wednesday, June 21 - afternoon

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<tr>
<th>Time</th>
<th>Chairman</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>14:30 to</td>
<td>Wolfgang Kaim</td>
<td>Richard S. Glass US</td>
<td>[2Fe2S] Electrocatalysts for H2 Production – A Renewable, Green Fuel</td>
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<tr>
<td>15:45</td>
<td></td>
<td>Marie-Noëlle Collomb FR</td>
<td>Photo-induced redox catalysis for hydrogen production in water with molecular compounds based on earth abundant elements</td>
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<td></td>
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<td>Robert Francke GE</td>
<td>Mechanistic Studies on the Electrocatalytic Reduction of Carbon Dioxide using Iron Cyclopentadienone Complexes</td>
</tr>
<tr>
<td>15:45</td>
<td>Coffee break</td>
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<tr>
<td>16:15 to</td>
<td>Carlos Frontana</td>
<td>František Hartl GB</td>
<td>Steric, Electronic and Electrode Material Effects on Electrocatalytic CO\textsubscript{2} Reduction with Mn and Mo (\alpha)-Diimine Carbonyls</td>
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<tr>
<td>17:30</td>
<td></td>
<td>Chiu Marco Lam US</td>
<td>Photoredox Catalyst Based on an Arylimidazole Oxidative Electrochemical Mediator</td>
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<td>Anny Jutand FR</td>
<td>Mechanism of the reductive cyclization of unsaturated haloacetals catalysed by iron complexes</td>
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<td>18:00</td>
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<td>20:00</td>
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Thursday, June 22 - morning

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<tr>
<th>Time</th>
<th>Chairman</th>
<th>Speaker</th>
<th>Title of presentation</th>
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<tbody>
<tr>
<td>9:00 to</td>
<td>Rainer Winter</td>
<td>Peter Barath CZ</td>
<td>News from Metrohm for electrochemists (technical contribution)</td>
</tr>
<tr>
<td>10:15</td>
<td></td>
<td>Flavio Maran IT</td>
<td>Electron Transfer Properties of Monolayer Protected Gold Nanoclusters</td>
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<td>Milan Sýs CZ</td>
<td>Quantum dots as suitable electrochemical detection label for sensitive simultaneous determination of tumor markers</td>
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<td>10:15</td>
<td>Coffee break</td>
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<td>Time</td>
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<tr>
<td>10:45</td>
<td>Olivier</td>
<td>Magdaléna Hromadová</td>
<td>Charge Transport in Single Molecule Junctions of Pyridinium-based Molecules</td>
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<td>Buriez</td>
<td>CZ</td>
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<td>Cédric Tard</td>
<td>FR</td>
<td>Nanodiffusion in Molecular and Metal Electrocatalytic Films</td>
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<tr>
<td>11:45</td>
<td>Closing remarks</td>
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<tr>
<td>12:00</td>
<td>Lunch</td>
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<tr>
<td>13:00</td>
<td>Departure to Prague</td>
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<tr>
<td>16:00</td>
<td>expected arrival at the Václav Havel Airport Prague</td>
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**note:**

**POSTERS** **SHOULD BE ON DURING THE WHOLE MEETING IN THE FOYER OF THE CONFERENCE HALL**

(No special poster session will be organized, discussion may proceed during coffee-breaks)
CONCERT

Georg Friedrich Haendel (1685 – 1759)
Sonata g minor op. 2 No. 5 for two oboes and continuo HWV 390
   *(Larghetto – Allegro – Adagio – Allegro)*

Giuseppe Sammartini (1695 – 1750)
Sonata G major op. 13 No. 4 for oboe and continuo
   *(Andante – Allegro – Adagio – Menuet)*

Georg Friedrich Haendel (1685 – 1759)
Sonata F major for oboe and continuo HWV 363a
   *(Adagio - Allegro - Adagio - Bourrée anglaise - Menuet)*

Georg Philipp Telemann (1681 – 1767)
Sonata f minor for bassoon and continuo, TWV 41
   *(Triste – Allegro – Andante – Vivace)*

Jan Dismas Zelenka (1679 – 1745)
Sonata g minor for two oboes, bassoon and continuo ZWV 181 No. 2
   *(Andante - Allegro - Andante - Allegro)*

**Prague Baroque Ensemble**

Jana Brožková – oboe
Vojtěch Jouza – oboe, master of music
Jaroslav Kubita – bassoon
Edita Keglerová – harpsichord

The Prague Baroque Ensemble was founded by the oboist and music director Vojtěch Jouza in 1982. The ensemble’s specialty is music of the Baroque era performed by various instrumental configurations. Even though members of the ensemble play on modern instruments, they do their best to perform the music in an authentically Baroque style on the basis of the interpretive practices of that era. The ensemble is comprised of musicians from the Czech Philharmonic and other significant ensembles. Their concerts frequently include singers who perform the sacred and secular cantatas of Johann Sebastian Bach and others. In 1993 members of the ensemble recorded the complete sonatas of the Czech Baroque composer Jan Dismas Zelenka. The ensemble has also performed his works at the „Old Testament in Art“ festival and in the concert cycle „Hommage à Zelenka“ organized by Czech Radio on the 250th anniversary of Zelenka’s death. The ensemble collaborates with Czech Radio and television, performs during the Czech Philharmonic concert series and in concerts organized by the FOK agency, and performs abroad (regular tours of Japan and concerts in Germany).
The pilgrimage Church of St. John of Nepomuk near the monastery in Žďár was built thanks to the longtime, close and immensely fruitful cooperation of two extraordinary people. The impulse was given by Václav Vejmluva, an abbot of the Cistercian monastery in Žďár, who was a proven devotee of John of Nepomuk before he was beatified as well as after he was canonized. The preparation of the project dates back to the period from late April to the beginning of August 1719 and is considered a direct reaction of the abbot to the discovery of preserved tissue in the tomb of John of Nepomuk in the St. Vitus Cathedral on 15 April 1719.

The design of the building was entrusted to famous architect Jan Blažej Santini-Aichel to whom abbot Vejmluva is alleged to have presented his ideas about the new sanctuary and the symbols used, which was fully compliant with the requirement of the Church: “Fathers propose, artists create”. The architect then worked on the basis of the outline. Santini dealt with the project quite individually, without any respect to the traditions concerning the shapes of religious buildings; he only accepted the contemporary viewpoint of the structure of a pilgrimage destination. The architect melted the abbot’s idea of the church in which the main role was to be played by the pattern of a star, into an extraordinarily impressive form which was only appreciated by the modern time, yet not always. Friedrich Radnitzký, a member of the Central Committee, referred to the church as a "visually mysterious phenomenon" as late as 1886. The project was finished unusually quickly but this was nothing exceptional for Santini. Moreover, the abbot and the architect had cooperated together for many years and they were both specialists on symbology and the teaching of the Cabala which they used to a substantial extent in the project. Santini knew very well what the abbot wanted from him. Thus the resulting architecture must have been affected positively by the atmosphere of mutual understanding. The definitive shape of the building does not differ much from the first design and only a few changes were made.

Some photographs are at the link:
During the 13th century Czech inhabitants settled down in suitable places along Haberská business path that was crossing boardering woods and was connecting Czech with Moravia. One of these settlements at the bank of Sázava river was named in honour of its owner Smilův Brod (Smil’s Brod).

The name of the place was later changed to Německý Brod due to the increasing number of German settlers (German Brod). At those time beer was brewed and sold there – that’s the fact we are certain about.

The King Jan Lucemburský dedicated a complex of acts of grace to the contemporary owner of Německý Brod Jindřich of Lipé in 1333. This also included a contractual right to brew beer. Brewing beer was a contractual right that allowed citizens owing a house inside the town right to brew beer. This was probably for the first time when this contractual right was dedicated to a vassal town.

In 1422 the town was destroyed by the hussites. During following reconstruction were also breweries reconstructed. Consecutively all the contractual rights were certified including the right of brewing beer. Firstly by the King Jiří of Poděbrady (1452), later by the King Ludvík (1520) and the King Ferdinand (1544). In 1637 it was the last time when the Emperor Ferdinand III. claimed Havlíčkův Brod to be free regnal town and granted the town the municipal heraldry and civic rights of regnal towns.

Each citizen had originally prepared malt and beer himself. The citizens had also tapped beer themselves or sold it to hired inn-keepers. There were only a few houses in the town equipped completely for production of malt and beer. Therefore the citizens with the right to brew beer associated in companies that established bigger breweries. These breweries were better equipped and it was possible to prepare beer for all the citizens with contractual right to brew beer. This procedure was the same in Německý Brod.

In 1662 was a brewery near a townhall destroyed in huge fire of the town. The brewery was reconstructed in 1673 when also a guild of malsters was established. At the end of the 18th century there were two breweries in the town. One of them didn’t make profit and therefore was closed down and the second brewery burnt down. That’s why the citizens bought on the 18th of October the house of Bukovský (nowadays the
building of brewery restaurant Rebel), where was a little handheld brewery. This is the date of the establishment of our brewery. With increasing production of beer the capacity of the brewery couldn’t be able to cope with enquiry. Therefore it was decided to reconstruct the brewery. This big reconstruction was completed on the 12th of October 1880 when the brewery was consecrated. The production of beer was at those times 15 000 hectolitres a year.

At the turn of the 19th and the 20th century a complete equipment of the brewery was also reconstructed and in 1905 reached the most modern standard. After the rundown during the World War I. was the brewery provided with further refurbishments that influenced the production of beer. From 5320 hectolitres after the war to 30639 hectolitres in 1931. After the rundown during the World War II. production was increasing again. Name of the town was changed to Havlíčkův Brod. For almost three years was the brewery run by its owners and in 1948 was expropriated.

During the communist era was the brewery expropriated and became a part of Horácký Breweries Jihlava, Breweries of Havlíčkův Brod and East-Bohemian Breweries Hradec Králové. After the velvet revolution the brewery became again the property of the original owners. At the present the production of beer is 84 000 hectolitres a year.

In 2004 was the own production of the malt closed down because of economic reasons. In 2008 was the situation different and malt house was after necessary repairs and investment opened again. Due to prevailing starch sources from Vysočina region gains REBEL beer protected designation Vysočina – product of the region. In 2008 was new barreling line completed and installed in production. That meant building of a new hall and a storage area for barreled beer or a workstation for dispatch department.

Brewery Havlíčkův Brod belongs to the breweries with the most modern technological equipment and in the last three years has REBEL beer become one of the most often awarded beers in Czech Republic. Brewery Havlíčkův Brod belongs to the last few independent breweries that continue in one of the oldest tradition – brewing beer.

We are proud of protected designation České pivo (Czech Beer) and Vysočina regionální produkt (The Product of Vysočina Region). Czech Beer is by Council Regulation (EC) no 510/2006 under the protection of geographical indications and designations of origin for agricultural products and foodstuffs.
Jaroslav Heyrovský (1890 – 1967)

Jaroslav Heyrovský was born on 20th December 1890 in Prague as fifth child of Leopold Heyrovský and his wife Klára, née Hanel. Both his father and grandfather were lawyers; however, young Jaroslav did not show any interest in that family line. From his early childhood he was attracted by natural objects, mineral, botanical and animal.

In 1904 the recently introduced Nobel Prize for chemistry was awarded to the English physical chemist William Ramsay for his discovery and isolation of the rare gas elements. Jaroslav became inspired by the Ramsay’s experiments, described in the press, to that extent, that he firmly decided he must become physical chemist. After maturity examination in 1909 he registered at the Faculty of Philosophy of the Prague University for the study of physics, mathematics and chemistry. During the first year at the university he discovered that there was no special subject of physical chemistry, and he begged his father to allow him to continue his studies at the London University College where William Ramsay was teaching. There he still could attend Ramsay’s lectures until 1913, when the great scientist retired. In his position at University College Ramsay was followed by professor F.G.Donnan, who was specialized in electrochemistry. Jaroslav, who in that year gained the title Bachelor of Science (BSc), became Donnan’s demonstrator for the year 1913-14, which decided about his orientation towards electrochemistry.

The intensive work in that direction was interrupted in 1914 by the outbreak of the First World War, after the student went home for summer holidays. Instead of returning to London he was enrolled in the Austro-Hungarian army to serve as dispensing chemist and radiologist in military hospitals.

After the end of the war, he was able to pass doctorate examinations and to defend his PhD thesis at the Prague University. The examination in physics was conducted by professor Bohumil Kučera, author of the method of measuring surface tension of polarized mercury by weighing drops of mercury from dropping mercury electrode. Next day after the examination Heyrovský visited Kučera’s laboratory to get acquainted with his experimental set-up and the satisfied professor advised the student to continue in research of the method. Heyrovský replaced collecting, counting, drying and weighing the drops of mercury by measuring the drop-time, which is also proportional to surface tension. He found that from electrocapillary
curves the values of “decomposition voltage” of compounds of various metals could be determined. Of these results he lectured at a meeting of the Union of Czech Mathematicians and Physicists in spring 1921, still in presence of professor Kučera, who shortly after that passed away prematurely.

In order to gain more electrochemical data about the dropping mercury electrode system Heyrovský decided to measure, besides the drop-time, also **the current passing through the mercury drops at each value of applied voltage**. The first measurement of this kind was done on 10th February 1922 and it came out, that from the thus gained current / voltage curve one can determine both quality and quantity of substances dissolved in the solution into which the electrode drops. That day can be hence considered as the birthday of polarography, although the term „polarography“ was coined later. The work on electrolysis with dropping mercury electrode was published first in Czech in 1922 by Chemické Listy, an enlarged English version appeared one year later in Philosophical Magazine.

Aware of the disadvantage of the time-consuming manual recording of the curves point-by-point, Heyrovský together with M. Shikata from Japan (who joined him to learn about this new method) suggested automation of the method with photographic recording of the curves. For the automatic instrument they introduced the term “polarograph”, i.e., apparatus drawing course of electrochemical polarization.

Since 1922 Heyrovský was director of the newly established Department of physical chemistry, in 1926 he became full professor of that subject, first at Charles University. He had many students and coworkers from Czechoslovakia as well as from abroad (Wiktor Kemula from Poland, from Italy Giovanni Semerano, from USSR Emilia Varasova, from USA O.H. Müller, from France Edgar Verdier etc.).
After the 2nd World War in Czechoslovakia a specialized Polarographic Institute was founded in April 1950 under directorship of Jaroslav Heyrovský. Today's the J. Heyrovský Institute of Physical Chemistry of Academy of Sciences of the Czech republic is its direct follower.

Heyrovský himself was lecturing on polarography in many countries. Since 1934 he was repeatedly suggested for Nobel Prize for the discovery and development of polarography, finally in 1959 several simultaneous proposals were accepted, and in December that year the Swedish king transmitted the Nobel prize for chemistry to Heyrovský in Stockholm (foto). In that way Jaroslav Heyrovský’s whole life’s dedicated work got its highest appreciation.

He died in Prague on March 27th 1967. (Until now, he is the only Czech who received this prize for sciences; the second Czech Nobel prize winner was Jaroslav Seifert, poet, for literature.)

50 YEARS OF HEYROVSKÝ DISCUSSION MEETINGS (1967 – 2017)

Since 1967 his pupils and followers organise every year a small international meeting, called Heyrovský Discussion. The purpose of the Discussions is to bring together, on invitation by the Organizing Committee, a limited group of specialists in a particular field of electrochemistry, and to enable them to exchange ideas and views on their research problems in an informal and friendly atmosphere. This was the way how polarography was developing under the guidance of Professor Heyrovský between the I. and II. world wars at Charles University in Prague; hence the name of this scientific gathering. Every year a different subject has been selected for the Discussion. The theme of electrochemistry of organic, organometallic and coordination compounds (Molecular electrochemistry) has been discussed in last decades eight times (bold in the list below).

The following topics were discussed so far:

1967 Adsorption at Electrodes and its Influence upon Electrode Processes
1968 Adsorption and Processes on Catalytic Electrodes
1969 Mechanism of Redox Reaction Proper
1970 Intermediates and Products of Electrode Reactions
1971 Products and Intermediates of Redox Reactions
1972 New Principles in Electroanalytical Chemistry
1973 Deposition and Oxidation of Metals
1974 Electrochemistry in Non-Aqueous Solvents
1975 Electrochemical Phenomena in Biological Systems
1976 Redox Reactions of Coordination Compounds
1977 New Horizons in Polarography
1978 Electrochemical Energy Conversion
1979 Electrochemistry in Environmental Protection
1980 Electrochemical Phenomena on Membranes and Biomembranes
1981 Fundamentals of Preparative Organic Electrolysis
1982 New Principles in Electroanalysis
1983 Photochemical Stimulation of Redox Reactions
1984 Electrochemical Processes in Two-Phase Liquid, Microemulsion and Micellar Systems
1985 Recent Aspects of Electrocatalysis
1986 New Aspects of Electrochemical Materials Fundamentals
1987 Ecoelectrochemistry general
1988 Electrochemistry of Separation and Synthetic Processes at Liquid/Liquid Interfaces
1989 Catalytic Homogeneous Processes Combined with Electrochemical Charge or Group Transfer
1990 Electrochemistry on Organized Molecular and Polymolecular Structures
1992 Electroanalysis and the Environment
**1993 Progress in Organic and Organometallic Electrochemistry**
1994 Electrochemical Processes on Liquid Membranes
**1995 Electrochemistry of Biologically Active Compounds and Their Models**
1996 Advanced Techniques in Electrochemistry
1997 Electrochemistry at Liquid/Liquid Interface
1998 Electrochemistry for Analytical Separations
**1999 Organic Electrochemistry**
2000 Nanostructures on Electrodes
2001 Chemistry on Polarised Liquid-Liquid Interfaces
2002 Electrochemical Impedance Analysis
**2003 Electrochemistry of Biological Systems and Their Models**
2004 Applications and Methodologies in Electrochemistry on Liquid-Liquid Interfaces
2005 Electrocatalysis in Nanoscale
2006 Electrochemical Impedance Analysis
**2007 Electrochemistry of molecules with multiple redox centers**
2008 Electrochemical Impedance Spectroscopy
2009 Liquid-liquid Electrochemistry - from Fundamentals to Applications
**2010 Electrochemistry of Organic Molecules and Coordination Compounds**
2011 Nanostructures on Electrodes
2012 Electrochemistry of Biopolymers and Bioactive Compounds
**2013 Molecular Electrochemistry in Organometallic Science**
2014 Electrochemistry of Organic and Bioactive Compounds
2015 Progress in Electrochemistry at Liquid-liquid Interfaces and Liquid Membranes
2016 Electrochemical Interfaces at the Nanoscale
**2017 Molecular Electrochemistry in Organic and Organometallic Research**
HISTORY OF THE CASTLE TŘEŠŤ AND OF THE TOWN

In the heart of Czech-Moravian Highland, nearly at the halfway between Prague and Vienna, in the hill pass, the town of Třešť is situated. The parish village Třešť was founded during the colonization of the Czech-Moravian deep forest in the course of the 13th century at the crossroads of two historical trade routes. The first written record about Třešť comes from 1349, when the parish church is reminded. Jewish community appeared quite early in Třešť; there are some references about a rabbi Jakub from Třešť even from the second half of 13th century. The Jewish population in Třešť was 621 people in 1845 but the number was falling and, in 1930, only 64 Jewish citizens remained in Třešť. They became the victims of holocaust.

In the town, many handycrafts were developing and guilds were flourishing. In 19th century, the cloth making factories, furniture plants (producing especially carved clock cabinets exported all around Europe) and matches industry was gradually emerging.

The former aristocrat mansion, nowadays a castle hotel went through a rich development. It stands on the place of the medieval citadel from 12th century. Starting from 1513 the castle was rebuilt in the renaissance style: a four-wing building with corner towers and arcades was constructed. After 1945, the castle turned into a municipal museum and a gallery. Together with the adjoining park (15 ha) it became the property of the Academy of Science of the Czech Republic in 1984. After ten years of intensive restoration works, the castle was transformed into a conference centre in 1994.

The parish church of St. Martin
It is the oldest monument in the town. It was founded in the 13th century, completed in the second half of the 15th century and later baroquized. We can notice a Gothic tombstone, a stone late Gothic pulpit and a Renaissance Kryštof Venclík’s tombstone.

The church of St. Catherine Siens
is also a remarkable point of interest. It was founded in the 16th century, in times when Třešť belonged to the Venčlik family. The presbytery was rebuilt in the 18th century, the inside furnishing of the church is from the 19th century (the restoration after the fire in 1824). There are two late Renaissance tombstones: of J. V. Venčlík from Vrchoviště on the outside plaster from 1616 and an unknown knight with the coat of arms where a half-lion is pictured.

Former Jewish Synagogue
An Empire synagogue was constructed after a great fire (2nd October 1824) which destroyed all the Jewish ghetto. It was restored and consecrated on 22nd September 1825. On the ground floor facing the street an arcade is its typical feature. Nowadays the synagogue serves as a church of Czechoslovak Hussite Church. You can visit there an exhibition with many documents describing the history of Třešť Jewish community.