STUDIJNÉ ZVESTI

ARCHEOLOGICKÉHO ÚSTAVU SLOVENSKEJ AKADÉMIE VIED

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OJEDINELÉ NÁLEZY SKLA Z TRENČIANSKEJ KOTLINY

Tomáš Michalík

Isolated findings of glass from Trenčín Basin

There were some fragments of glass objects found during surface surveys of the southern parto of Trenčín Basin in the second half of 1990's. Finds from Trenčianska Turná and Trenčianske Stankovce may probably come from the end of middle ages or the beginning of modern time. Finds from Soblahov and Mníchova Lehota cannot be datable without analyzes, but we can exclude their recent origin.

NÁLEZY GOTICKÉHO SKLA Z VENTÚRSKEJ ULICE 5 V PAMIATKOVEJ REZERVÁCII BRATISLAVA

Branislav Lesák

Gothic Glass Finds from 5 Ventúrska Street at Bratislava Town Monument Reserve

The contribution informs about results of archaeological excavations on the allotment no. 479 at Bratislava, part Ancient City, Bratislava Town Monument Reserve, 5 Ventúrska Street. A well belonging to the original medieval allotment was excavated and explored at the object's northern wing. The excavation has brought small but self-contained collection of medieval glass and pottery dated to the 2nd half of the 14th to the beginning of the 15th cent.

DALŠÍ GOTICKÁ MOZAIKA NA PRAŽSKÉM HRADĚ? Mozaikové skleněné kostičky z kaple sv. Anny/P. Marie v klášteře sv. Jiří

Antonín Zeman - Jan Frolík - Anna Langrová

Another Gothic Mosaic at the Prague Castle? Glass Tesseras from the St. Anne/Virgin Mary Chapel in the St. George's Nunnery

Ten glass tesseras were found during archaeological excavations in the St. Anne Chapel in 1959. The tesseras are dated into Gothic period (between middle of 14th cent. and the year 1541). The glass is of better quality than glass of the mosaic of Last Judgement on the St. Guy's Cathedral dated to the 1370 and 1371 years.

SÚBOR RENESANČNÉHO SKLA Z VENTÚRSKEJ ULICE 3 V BRATISLAVE

Branislav Lesák

Collection of Renaissance Glass from 3 Ventúrska Street in Bratislava

A collection of glass that has been found in cesspit filling on the allotment no. 481 at 3 Ventúrska Street in Bratislava Town Monument Reserve provides us with recently the most complete picture of dining culture in urban milieu. The feature filling contained two relevant collections: collection of glass dated to the middle of the 16th till the middle of the 17th centuries; and that of pottery of the same time period. The glass collection included wide range of hollow glassware - approximately 100 of reconstructed shapes. Local production is completed with shapes from the "Venetian glass" circle.

SIGNOVANÝ POHÁR Z KONCA 16. STOROČIA Z BANSKEJ BYSTRICE

Marta Mácelová

The 16th Century Signed Glass from Banská Bystrica

Fragments of a conical glass cup made of a colourless glass with a diameter of 67 mm were found in the Renaissance object filling in Banská Bystrica. There is an inscription "Banská Bystrica" on the cup, an incomplete date "159(?)" above it, and the letters "AN", "SEI" and "SEP". This signed glass was probably made by a domestic glassmaker in the last decennium of the 16th century and was a house owner's commission.

OJEDINELÝ NÁLEZ SKLENENÉHO KRÚŽKU Z VENTÚRSKEJ ULICE 11-13 V BRATISLAVE

Branislav Lesák

Isolated Find of a Glass Ring from 11-13 Ventúrska Street in Bratislava

An unconventional glass artefact (*Lesák 2003*) was found during the salvage archaeological excavations held from October 2002 till April 2003 that were realized in connection with reconstruction of the University library buildings in Bratislava Town Monument Reserve at 11-13 Ventúrska Street, allotment no. 358, at the area of inner garden of the former De Pauli palace. The find is one of unconventional means of payment that had been used by population at the end of the 13th cent., when small change coins crisis occurred in Bohemia, Moravia, Poland and Hungary as well.

SKLO ZO ZANIKNUTEJ KOSTOLNEJ PEVNOSTI VO SVODÍNE

Zoltán Drenko

Glass from an Deserted Church Fort in Svodín

The Archaeological Museum of the Slovak National Museum in Bratislava realized excavations of an extinct church fort in the village of Svodín (part Maďarský Svodín) in the years 1995-2000. The first written account of the St. Michael's church comes from the year 1291. At the beginning of the 17th century a fort against Turks was built around it. The church was destroyed in 1945. The excavations revealed the church basement with graves, the fortification base trench, remains of ossarium, the castle storing pits and parts of a castle ditch. The excavation results were published already. Finds of glass were spread over the whole excavation area. A small glass bottle was found behind the church. The pit I included a coin of Magyar king Ferdinand III. (1639), neck of a kutrolf, fragment of a glass vessel with geometric and plant ornament and fragment of a glass vessel with coloured depiction of a warrior. In the pit IV a coin of Magyar king Matthias II. (1608-1619) was found together with 23 blue glass raspberry-shaped beads. The pit VIII included two legged glass cups.

SKLENÉ FRAGMENTY ZO STROPKOVSKÉHO HRADU

Mária Kotorová-Jenčová

Glass Fragments from Stropkov Castle

The article presents basic information about a set of modern glass fragments found at Stropkov castle (distr. of Stropkov, north-eastern Slovakia) with brief finding circumstances, general characterization of the plentiful assemblage (consisting of about 280 fragments) and its approximate dating.

NÁLEZY SKLA Z ARCHEOLOGICKÉHO VÝSKUMU ZOBORSKÉHO KLÁŠTORA

Marián Samuel

Glass finds from archaeological excavations at the Zobor Monastery

The contribution presents first brief information about finds of glass excavated during archaeological research of the Zobor monastery. Glass finds from the Benedictine monastery of St. Hyppolitus (the 11th-15th cent.) have been preserved only in fragments of window targets, which were usually found in secondary positions; collection of almost 30 glass vessels were revealed at a monk's abode cellar of the Camaldulian St. Joseph's monastery (1695-1782). Some glass vessels were made in Italy, from where several monks came after the monastery had been finished in 1695. A glass, most probably early-medieval bead found in a monk's abode Baroque masonry is a curious find.

NÁLEZY SKLA ZO ZÁCHRANNÉHO VÝSKUMU V ZLATÝCH MORAVCIACH

Mário Bielich

Glass Finds from a Salvage Excavation in Zlaté Moravce

The salvage archaeological excavations were realised at Námestie Janka Kráľa square in Zlaté Moravce. Traces of prehistoric settlement (the Neolithic) were found together with a modern cemetery and a settlement object. In the Object 1 fragments of glass bottle-shaped vessels, legged bowls and small vessels from the 17th cent. were revealed. At the cemetery 17 graves

have been documented that sketched a modern society picture. The grave 12A with burial of a young woman included a bonnet originally embroidered with small glass beads of blue, white, green and yellow colours. The bonnet probably represents a national costume from the turn of 17th and 18th cent. A bronze welt that had made the bonnet fixed preserved also fragments of fabric and tapes from its skeleton. The high-quality glass and beads shapes are documenting advanced technology of glass products of this type. In spite of its small extent, the salvage excavation in Zlaté Moravce has brought results that enriched recent knowledge of life at the Zlaté Moravce site in the incipient modern era.

SKLO V RENESANČNÍM STYLU Z ARCHEOLOGICKÝCH NÁLEZŮ Z PRAŽSKÉHO HRADU

Jana Veselá-Žegklitzová

Renaissance-Style Glass from Archaeological Finds at the Prague Castle

Prague Castle was a political and economical centre of Europe during Renaissance period. The rich sociable life is documented by the numerous archaeological finds including glass. The contribution is submitting the valuable typology of glass finds of the early post-mediaeval period.

NÁLEZY NOVOVEKÉHO SKLA Z RUŽOMBERKA

Monika Kopčeková - Mário Bielich

Modern glass finds from Ružomberok

Salvage archaeological excavations in Ružomberok have brought ethnographic information about using of glass vessels Hapsburg army barracks in Ružomberok. It is only a small section of an archaeological situation that cannot be documented for reasons of time. Among the finds glass bottle-shaped vessels are prevailing, probably used for storing wine and spirits as well as small ones for medicines with coats-of-arms of the Hapsburg monarchy. Archaeological finds of glass mostly from bottles and glass cups for spirits, together with pipes, represent interesting archaeological and historical collection of finds dated to the 19th century from army barracks in Ružomberok.

NÁLEZY SKLA Z MOSTNEJ ULICE V NITRE Výber z výskumov 1990-2007

Gertrúda Březinová - Marián Samuel

Glass Finds from Mostná Street in Nitra. Digest of Finds from Excavations in 1990-2007

Modern-era glass finds (vessels and beads) were excavated during the excavation seasons in 1990-2007 in the centre of Nitra at Mostná Street position. Majority of finds were dated to the end of the 19th cent. Among them a glass inkpot with a glassmaker's monogram MB is interesting.

SKLENÉ KORÁLIKY Z KOSTOLNEJ KRYPTY V DUNAJSKEJ STREDE

Pavel Paterka

Glass Beads froom a Church Crypt in Dunajská Streda

Reconstruction works in the Church of Virgin Mary's Ascension sanctuary required static and archaeological exploration of the crypt underneath. The exploration revealed there were three vaulted chambers built by the local noble family of Kondé de Pokatelek, in which their members were entombed during the 18th cent. Blue-coloured glass beads were found nearby lines of buttons on a dress.

SKLENÝ NÁLEZ Z VÝSKUMU V PÚCHOVE

Ivona Vlkolinská

Glass Find from Púchov

A glass bottle from the salvage excavation in Púchov in 2001 is presented in the article. The glass vessel was found at the bottom of a waste pit that belonged to a chemist's house and contained remains of Unicum vegetable medicine, which was produced by Zwack company in Budapest in the 19th cent. The bottle prototype was patented in 1883.

AD: VČASNOSTREDOVEKÁ SKLÁRSKA PEC V BRATISLAVE NA DEVÍNSKEJ KOBYLE

Vladimír Turčan

Ad: An Early Medieval Glass Oven in Bratislava-Devínska Kobyla

The experiment on reconstruction of upper parts of early medieval glass oven from Bratislava-Devínska Kobyla. The total number of 48 pieces of over-ground wall lining covered with a thin layer of dark green parison, some of them with pointed ends. The fragments could not be attached to the oven body.

INDÍCIE SKLÁRSKEJ(?) VÝROBY V POHORÍ TRIBEČ

Ján Jahn - Marián Samuel

Evidence of Glass(?) Production in the Tribeč Mountain Range

The contrubution gives information on evidences of extinct metallurgy in the Tribeč mountain range area, to which no historical sources exist and both kind and chronology of which have not been acceptably answered until recently. Results of surface prospection on some of these sites make us assume their connection with modern-era glass production.

STŘEDOVĚKÉ SKLÁŘSTVÍ V SEVEROZÁPADNÍCH ČECHÁCH Stručný přehled bádání a přínos současných povrchových průzkumů v Krušných horách

Eva Černá

Medieval Glass Production in Northwestern Bohemia. A Brief Research Survey and Contribution of Recent Surface Prospection in the Ore Mountains

Summarization of existing research into medieval glass in Bohemia. Outline of a general trend within which particular research phases can be separated depending on the research intensity and items. Brief specification of initial phases and detailed characterization after the year 2000. Information on recent surface prospection activities run by Ústav archeologické památkové péče (the Institute of Archaeological Monuments Care) at the central part of Krušné hory Mts. in north-western Bohemia that are focused on newly afforested areas of mountain ridges. Description of surface prospection that had led to localization of three extinct medieval glassworks around the Brandov village (distr. of Most). Evaluation of recent results and defining of their contribution to the knowledge on glass production history in the Top Middle Ages.

PREDBEŽNÉ VÝSLEDKY ARCHEOLOGICKÉHO VÝSKUMU SKLÁRSKEJ PECE V PLAVECKOM MIKULÁŠI Lesana Hrehorová - Peter Wittgrúber

Preliminary Results of a Glass Furnace Archaeological Research at Plavecký Mikuláš

An original glass furnace used for lime burning in the 1940s was excavated in the complex of at least four industrial objects remains. The glass production complex perished probably at the end of the 19th century.

PRIESKUM SKLÁRSKEJ OSADY ROVINA PRI JABLONOVOM Pokus o konfrontáciu archeologických a písomných prameňov

Peter Wittgrúber

Reconnaissance of a Glassmakers Settlement at Rovina near Jablonové. Attempted Confrontation of Archaeological and Written Sources

An original glass furnace used for lime burning in the 1940s was excavated in the complex of at least four industrial objects remains. The glass production complex perished probably at the end of the 19th century.

SKLOVITÉ A INÉ TROSKY Z TZV. SKLÁRSKYCH PECÍ Z NITRY Podnet pre výskum historických technológií

Danica Staššíková-Štukovská

Glassy and other type of slags in so called glassovens from Nitra town. A reason for research of historical technologies

In the current article we present the summarized results of the recent interdisciplinary research, which was focused on the production provenance of the glass artifacts from the 9th century AC. The artifacts were found in 1960 during a previous archaeological excavation of four ovens in Nitra town. They were published many times as a proof of the existence of a glass production. Multiphase interdisciplinary analyses of glassy artefacts were subsequently published in different editions. Here we present the results in resume and rise a discussion about the importance of these findings for the research of the historical glass and for the knowledge of the details connected with the technology of metallurgy of iron. We use a working term "glass-none glass" for the type of glass made during the iron production. This term should be understood as a contribution to the discussion on the necessity to distinguish through the verbal terms atypical to the glass production chemical compositions. These compositions have been evident for a long time among the results of the analysis of the glass beads mainly and of the other small items.

SKLO V RECENTNÍCH SEDIMENTECH

Ivan Turnovec

Glass in Recent Sediments

During his development the man has learned to produce many materials that serve him. These materials include also glassy - utility or waste - ones. In general, molten glass is a product of melting. At first slags appeared in melting of metals and burning of ceramics. Later on the glass itself started to be produced as a utility material. Waste glasses include various slags in metallurgical as well as glass production. In nature glassy materials are present different sets collected by man consciously or not. Finds of glasses always unambiguously indicate that we are in the space where men lived and worked.

NÁLEZ SKLOVITÉHO(?) ZLIATKU Z KURIMY

Marián Čurný

Find of Glassy(?) Sow in Kurima

The contribution presented at the round table informs about a glassy sow find that was revealed during the surface prospection in the position of Horna (Hurna) in Kurima, distr. of Bardejov. The sow is presupposed to be a metallurgical by-product.

NÁLEZ SKLENÉHO ZLIATKU ZO SENICE-KUNOVA "PODBRÍŽKY"

Pavol Jelínek

Find of a sow glass from Senica-Kunov "Podbrížka"

Author of the article introduces find of a sow glass from a polycultural site Senica-Kunov "Podbrížka". We are thinking that it is gonna be a waste from glass production. Unfortunatelly, we have no written evidence of this art of production and no wittness of similar finds. In the discussion we became a validity that it is truly trash of glass production. The question of sow provenance at this site is still open.

ČRIEPKY ZO SKLÁRSKEJ VÝROBY V ZLATNE

Ondrej Lepiš

Fragments of Glass Production at Zlatno

The article gives a brief glassworks history at Zlatno that stopped working in 2004. Main attention has been paid to original glassmaking receipts, an eight-ladelled glass furnace production and to dyeing oxides as well.

TURNOVSKÁ KOMPOZICE

Ivan Turnovec

The Turnov composition

The term Turnovská kompozice (Turnov composition) has been introduced for coloured glasses that were used in the Turnov region for grinding of jewellery and gemstones imitating natural precious stones. Local "soft stones" as the glass compositions were called were very popular not only in Bohemia but also abroad. The latest documented find from Slovakia is represented by rosettes excavated at Levoča in 2001. The History of Glass Symposium in 2006 has classified them to be a Turnov glass composition

METÓDY ROZLÍŠENIA SKIEL OD KRYŠTALICKÝCH LÁTOK

Ľudmila Illášová - Ivan Turnovec

Methods for Differentiation of Glasses from Crystalline Compounds

Glass imitations of natural precious stones are frequently met in gemmological as well as archaeological practice. A survey of methods and approaches used for quite a precise differentiation of glass from crystalline materials is given in the article. We were oriented in non-destructive methods first of all that allow relatively exact identification.

PŘÍRODNÍ SKLA

Ivan Turnovec

Natural glasses and their occurrence

Study of terrestric and cosmic glassy materials has been developed remarkably in the last thirty years. Before it majority of experts considered the occurrence of glassy bodies in nature a rarity. The opinion that glass is only a product of melting followed by heavy chilling that do not allow crystallization is outdated, too. Glasses are also produced under another conditions, e.g. in press deformations or by fugacity (gasification of rigid phase during explosion and its subsequent hardening). Glassy materials on Earth and at Universe are more frequent than it was presupposed originally. In the article basic kinds of natural glasses are given, starting with fulgurites up to anthropogenetic technolites, i.e. glasses made by man.

SKLENÉ IMITÁCIE DRAHOKAMOV V HISTORICKÝCH ŠPERKOCH

Ľudmila Illášová - Ivan Turnovec

Glass Imitations of Precious Stones in Historical Jewellery

Since the discovery of its production (from the Antiquity up to the Middle Ages), glass used to be a highly appreciated material. The oldest "artificial" gem in the ancient Egypt was aventurine that was imitated by glass with scattered copper dust). In jewellery, this material is still one of favourites. The effort to use glass in the most different ways led to production of various decorative materials and to imitations of precious stones as well. Glass production technology started to develop more remarkably in the 16th century. In this time glasses of various colours were produced that made imitations of natural precious stones of the whole colour range possible.

VYUŽITÍ VYBRANÝCH ANALYTICKÝCH A MIKROSKOPICKÝCH METOD PRO CHARAKTERIZACI NÁLEZŮ DOKLÁDAJÍCÍCH VÝROBU SKLA

Zuzana Cílová

Use of Selected Analytical and Microscopic Methods for the Characterization of Findings Related With Glass Making

The overview of some analytical and microscopic techniques, which can be used for the characterisation of findings related with glass production, is described. For this purpose the set of findings related directly and indirectly to glass making was studied. Samples come from in the oldest glassworks in the Krušné hory (at the site Jilmová) and the glass was produced here during the Middle Ages. Some Examples of results, which you can obtain by these methods, are shown.

ŠTÚDIUM SKIEL POMOCOU MÖSSBAUEROVEJ SPEKTROMETRIE

Marcel Bruno Miglierini

Study of Glasses by Mossbauer Spectrometry

A review of basic principles of Mössbauer spectrometry is given. An introduction to the study of glasses is provided using selected examples. Along with the determination of Fe^{2+}/Fe^{3+} ratio, Mössbauer spectrometry can be employed to identify structural sites of individual groups of Fe atoms in glasses. Possibilities of investigations of historical glasses from archaeological artefacts are outlined. Colour of glass can be, for example, correlated with the contents of iron atoms at different oxidation states.

VLTAVÍN - ČESKÝ DRAHOKAM

Ivan Turnovec

Moldavite - the Czech Precious Stone

Green glassy bodies are found in southern Bohemia and southern Moravia. They belong to the world natural attractions as their origin is connected with a cosmic catastrophe. In professional literature they were for the first time described in 1787 by the professor of natural sciences Josef Mayer. They were stones originating from river alluviums near Týn nad Vltavou. Recognition of their real substance has lasted for several years. Later similar materials started to be found also in another countries and they had got a summarizing term tektites.

KOROZE SKLA A ZACHÁZENÍ S ARCHEOLOGICKÝM SKLEM

Dana Rohanová - Helena Hradecká - Romana Kozáková

Glass Corrosion and Archaeological Glass Treatment

Glass is non crystalline inorganic material with unique optical properties such as transparency. Deterioration of glass (dulling and loss of transparency) is affected by low chemical durability of glass and by adverse effects of an ambient atmosphere. Glass corrosion is caused by diffusion of alkaline ions (Na^+ , K^+) contained in the glass material towards a glass surface. It's followed by their reaction with the liquid phase (moisture) at the interface. In the case of retention of the alkali products on the glass surface there is a formation of a thin layer with good chemical durability in comparison to the original glass. In the other case it could start total destruction of a glassy network. The corroded layers then step by step delaminate from the glass surface and by reason of an ambient atmosphere it could start a precipitation of alkali silicates, sulfates, carbonates, etc on this surface.

This paper is focused on an appropriate treatment of ancient glass, which could be corroded, from the archaeological point of view. Storage of ancient glass needs stabile conditions without sudden changes of temperature or relative humidity (RH).

UPLATNENIE DREVÍN A RASTLÍN V SKLÁRSTVE

Jana Mihályiová

Use of Woods and Plants in Glass Production

In the article woods and plants are given, which were used in glass production as firewood, for production of potash, glassworker's moulds, and handles of implements or for molten glass purification. Wood of European beech (*Fagus sylvatica*) was the most calorific and very frequently used in glassmaking workshops. Developing glass production resulted in increasing wood usage and caused its subsequent shortage. Beech wood was substituted for less calorific woods of oak (*Quercus* sp.), ash (*Fraxinus* sp.), pine (*Pinus* sp.), spruce (*Picea* sp.), maple (*Acer* sp.) or willow (*Salix* sp.). Beech wood was exclusively used for production of potash, what is chemical matter added to glass batch to influence a glass melt quality. Shortage of this wood forced glassmakers to look for new raw materials with high alkaline content. Abundant plant material that was usable was offered by straw of cereals: wheat (*Triticum* sp.), barley (*Hordeum* sp.), sunflower (*Helianthus* sp.), maize (*Zea mays*), leaves of bean (*Phaseolus* sp.), potatoes (*Solanum tuberosum*), pressed remains of grapes (*Vitis* sp.) and waste from distillation of spirit from sugar-making molasses (*beta vulgaris*). Wild plants of thistle (*Cardus* sp.), celandine (*Chelidonium* sp.), nettle (*Urtica* sp.) and aubergine (*Solanum* sp.) were usable as well. One thousand kilograms of beech wood was used to produce 1 kg of potash, while 25 kg of potash could be made from sunflower remains. Physical qualities of beech wood met all requirements of production of glass moulds or implement handles. Wood of pear (*Pyrus* sp.) and plum (*Prunus* sp.) are known to be used as well. Although there were attempts to substitute beech wood for another woods and plants, no alternative raw material compared to beech wood. This was achieved by chemically produced mineral salts only.

SKLO V KOMBINÁCII S KOVOVÝMI MATERIÁLMI V ZBIERKOVOM FONDE MÚZEA MESTA BRATISLAVY Anton Fiala

Glass Combined with Metal Materials in the Collections of the City Museum in Bratislava

In the collections of the City Museum in Bratislava except of functional glass articles there are also many glass objects combined with other materials. They mainly belong to the sphere of artistic blacksmith's and locksmith' s trade as well as to the production of glass windowpanes. From the 2nd half of the 19th century we have dividing bars in combination of iron, bronze and glass. Two painted windowpanes from the 18th century come from the interior of the church of Poor Clares. From our later aquisitions we should mention the windowpane from the Jewish neologic synagogue built in 1893-1894 according to the project of the architect Dionýz Milch.

SPOMIENKOVÉ SKLO 19. STOROČIA V ZBIERKACH MÚZEA MESTA BRATISLAVY

Zuzana Francová

Commemorative Glass of the 19th Century in Collections of the Bratislava City Museum

The Bratislava City Museum (founded 1868) has a relatively numerous collection of historic glass. The article analyzes its commemorative glass from the 19th century. From a manufactoring technique this collection may be divided into two fundamental groups: colourless transparent glass decorated by glyptic techniques (cutting, carving or engraving) and coloured glass decorated by painting and gilding, often also in combination with engraving. Alarger group of commemorative glass dates back to the period of Empire and Biedermeier (1st half of the 19th century). A number of artefacts originated in the middle of the century or in the period of neo-styles (2nd half of the 19th century). To the basic characteristics of commemorative objects belongs a combination of pictorial motives with texts - inscriptions, names (generally in German or Hungarian language) or initials. To the most interesting and qualitative examples belong coloured glasses with decoratively engraved inscriptions, individual letters being created by flowers and leaves. From the viewpoint of decorative motives the author divides the analyzed collection into following groups: motives of Bratislava, health resort architecture, names and initials, religious and allegorical motives, symbolic motives and curiousities.

ZBIERKA SKLA V SLOVENSKOM NÁRODNOM MÚZEU V MARTINE

Daša Ferklová

Glass in Collections of the Slovak National Museum in Martin

Remarkable and colourful glass production from our territory is deposited also in collections of numerous Slovak museums. This is true also in the Slovak National Museum, where glass artefacts are deposited in ethnographic, culture-historical and archaeological departments. In our article we are dealing with the glass collection concentrated in the Ethnographic museum (including about 2000 glass artefacts). We are giving its brief development from the museum's beginnings. The basis for our work has been written documents since 1890 up to now. Valuable information we have obtained from the Journal of Museum Slovak Society, documents in archives as well as those concerning artefacts themselves. These files helped us to follow the ways of establishing the collection, increasing the number of glass kinds and artefacts, widening its territorial representation, and knowing of donors, sellers and glass workshops. In spite of certain problems we partially succeeded in provenience identification of artefacts production. Based on these finds, we can state that we have glass collections from Uhrovec, Gápel glass works, Málinec, Katarínska Huta, Lednické Rovne, Utekáč, etc. The glass collection in the Slovak national museum in Martin is represented by these kinds of glass: packing glass, illumination glass, utility soda potash and lead glasses. Majority of the glass collection is made of artificial glass, which can be divided into three basic types: flat glass (sheet and window glass), hollow glass and pressed or cast (or made by another way) glass. In the collection utility glass is predominating, first of all beverage, table (service) and packing glass. Decorative glass is less numerous. Hand-blown glass includes mainly beverage glass (small cups), bowls, small bowls, vases, illumination glass, oil lamps, packing glass (bottles), etc. Utility pressed glass collection consists of cups of various kinds, plates, saltcellars, boxes, etc. In Slovak glass a great variety of kinds of utility glass had its place together with many technologies of cold or hot working, numerous shapes of artefacts for everyday use as well as exclusive ones with rich decorations. This all, documenting our history, is reflected also in the glass collection placed in the Slovak national museum in Martin that has been formed within a one hundred years.

ŤAŽIDLO Z RUDNA NAD HRONOM

Vladimír Karlovský

Paperweight from Rudno nad Hronom

Brief information about history of a glass works in Rudno nad Hronom that was established in 1872 and closed in 1922. Find of a glass paperweight has its origin in this glass works production in 1922.

SIMULACE PROCESU VÝROBY POTAŠE TRADIČNÍ TECHNOLOGIÍ

Zuzana Cílová - Jiří Woitsch

Simulation of potash production in a traditional way process

The article is based on description and analysis of the outcomes of the experiments proceeded in the years 2004 and 2006 during that the traditional potash production technology has been restored according to written sources from the 17th, 18th and 19th centuries as well as to the experiments already done in Sweden and Poland. Authors present a wide range of chemical analysis (based i. a. on powder X-ray diffraction and XRF spectrometry) of produced spruce, beech, fern and oats straw ashes, raw and calcinated potash and emphasise its importance for the study of the history of glassmaking in the Central Europe. The most important conclusions are: differences of chemical composition between beech, spruce, fern and straw potash were rather substantial (especially higher content of CaO, SiO₂, MgO, MnO and P₂O₅ in spruce potash and high content of SiO₂, P₂O₅, SO₃ and Cl in fern and straw potash). Burning ferns and straw for ash is much more efficient, however, especially the use of fern, as proved by the experiment, was complicated by the impossibility to obtain greater volumes of the plant in the past. The experiments have also shown that the burning temperature of wood as well as composition of soil on which the plant had grown influences the chemical composition and quality of potash; finally calcination had only inconsiderable influence on the purity of obtained product.

"NOSITELÉ TRADIC" A PERLY JIZERSKÝCH HOR

Luboš Kafka

"Bearers of tradition" and Beads from Jizerky

A process of leveling of traditional folk culture occurred in Bohemia since the middle of the 19th century, leading to the disappearance of certain spheres of cultural issues and values of the folk strata of the population. This trend continued during the 20th century due to the industrialization of the society and the technical evolution. The Ethnological Institute of the Academy of Science of the Czech republic, v. v. i., has taken part in the international UNESCO project aiming to safeguard immaterial cultural heritage with its projects: "Bearers of tradition - Living human treasures" and "Living human treasures - Bearers of tradition II". The leaders of these projects have focused on audiovisual documentation of traditional folk crafts, manual production and disappearing production technologies, because they believe this is the most complex form of safekeeping the data acquired during field research. With this method they have documented the making of glass jewelry, the beads of Jizerky mounts, which was a world famous part of the Czech glassmaking, which is lately threatened by a lingering crisis of sales and production.

SKLOM ZDOBENÉ ŽIVÔTIKY

Martin Mešša

Glass-Decorated Bodices

Apart from stitching of glass silver and later also coloured beads on their bodices, girls and women in villages close to the small town of Zborov (the Upper Šariš region) decorated their folk costumes in another attracting way - by gluing of colourful glass cullet - in the inter-war period. The technique was simple: a fabric had been coated with glue in patterns they wanted to bear specific colour and then dredged with glass cullet of the desired colour, thin layer of which remained attached to the cloth. In this way they continued gluing of other colours. Occurrence of this technique within rustic population was in direct connection with glassworks activities at Stebnícka Huta, relations with glass workers and their families and availability of glass cullet together with glass gluing techniques as well. The glassworks had moved there at the end of the 17th cent. from Bardejovská Nová Ves and it existed till the middle of the 19th cent. (1641-1856). Its production was oriented to blown sodium-potassium glassware - bottles, bevies, pharmaceutical glass, plate glass, chandeliers, candlesticks and other utility glassware. Bodices decorated with glass cullet in this microregion are unique and original proof of folk art spirit and creativity in using of techniques and material resources.

SKLENÉ KORÁLIKY NA KROJOCH ZÁHORIA

Mária Zajíčková

Glass Beads at Folk Costumes from Záhorie

Brief information on embroideries at folk costumes at Záhorie decorated with glass beads, colloquially referred to as "oves", the "ovsovanie" embroidery technique. Another way of glass usage for the costume decoration were small pieces of mirror, colloquially referred to as "špígeuka". This decoration was used at Záhorie mainly in the Chvojnická dolina valley (villages of Lopašov, Radošovce, Oreské, Dubovce, Trnovec, Popudinské Močidľany, Chropov, Holíč, Mokrý Háj, Kopčany and Kátov), in the vicinity of Unín (villages of Unín, Radimov and Štefanov) and in Jablonica and its surroundings (Hradište pod Vrátnom, Osuské, Cerová and Rozbehy) from the 1930s.