

INTERDISCIPLINARIA ARCHAEOLOGICA

NATURAL SCIENCES IN ARCHAEOLOGY





A look at the region

Institute of Archaeology of the Slovak Academy of Sciences Nitra

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1. Introduction

The Institute of Archaeology (IA) is one of the oldest scientific and research institutions in Slovakia and has been continuously active for more than seventy years. Between 1939 and 1952 it conducted archaeological research as the Institute of Archaeology and Conservation at the Slovak National Museum. In 1953 IA was incorporated into the then newly founded Slovak Academy of Sciences as an independent research institution. IA is based in the city of Nitra, with branch offices in Košice, Spišská Nová Ves and Zvolen.

Within its mandate IA conducts research in archaeology and related disciplines, and participates in interdisciplinary research in the fields of archaeometry-geophysics, archaeozoology, palaeobotany, palaeoanthropology and numismatics. From a practical and methodological perspective IA directs thematic and rescue excavations. In collaboration with related institutions at home and abroad it contributes to theoretical and scientific research in cultural development. For many years IA has provided training for doctoral (PhD) researchers and has been the first home for many new archaeologists over the years.

2. Department of Prehistoric Archaeology

The scientific team in this department is engaged in research on the earliest human populations and the continuity of cultural development in Slovakia. Within the framework of multiple research projects they are mandated to investigate cultural development from the Palaeolithic to the Iron Age.

Figure 1. Zohor – cleaning a richly equipped Roman-Period Germanic grave (Photo by M. Ruttkay).







Figure 2. Hainburg – partly reconstructed fortification of a Celtic *oppidum* (Photo by M. Ruttkay).

The department has a major focus on Palaeolithic and Mesolithic cultures. Current knowledge is largely based on data derived from Linear Band Ware (LBK) settlements, and considerable attention is paid to the rise and development of agrarian cultures in the Neolithic and the related question of the colonisation of central Europe. Theoretical research focuses on settlement forms during the Neolithic and Eneolithic. Bronze Age and Early Iron Age research focuses on the rise and development of the earliest metallurgy on the territory of present-day Slovakia, related social stratification and the development of crafts. As part of its thematic studies on Urnfield Period grave goods, the department has conducted systematic excavations at a Kyjatice culture cremation graveyard, settlement and hillfort in Cinobaňa, central Slovakia. Within the framework of a bilateral project the department also investigated three different Early Bronze Age settlement sites at Vráble, Santovka and Rybník.

3. Department of Early History and Cooperation with the Natural Sciences

The research activity of the department covers the La Tène, Roman and Migration Periods, with a particular focus on western and northern Slovakia, and the study of the first recorded ethnic groups, and the relationship between Classical and "Barbarian" cultures. Roman period studies include the systematic survey, and excavation, of the Roman occupation of southern Záhorie. Significant find have been made in Stupava and Zohor. A long-term project is the conservation and reconstruction of buildings in the area of a Roman *castellum* in Iža. Migration Period discoveries include the tomb of a Germanic king or duke, probably a member of the Vandal tribe, buried at Poprad-Matejovce in the time of great migrations at the turn of the 4th and 5th centuries. It is remarkable for its uniquely well preserved wooden



Figure 3. The area of a Roman *castellum* at Iža – Leányvár including a sketchy reconstruction (Photo by I. Kuzma).



Figure 4. Bíña – a grave from the 9th century including a preserved wooden coffin (Photo by M. Ruttkay).



construction and mortuaria, including furniture, textile, mats, leather and other organic objects. Since 2005 a team from this department, in cooperation with the Department of Medieval and Early Modern Archaeology have systematically surveyed and excavated the Slavic stronghold Bojná I – Valy. Research at this site has included detailed geophysical, geodetic, geological, dendrochronological and pedological survey. Research in northern Slovakia is concentrated around Liptov where an outdoor archaeology museum was built close to the excavation basecamp at Liptovská Mara.

The department employs specialists in the natural sciences who process and evaluate anthropological, zoological and palaeobotanical material. On a theoretical level they are looking at questions related to human evolution, animal morphology, and changes to the landscape and environment related to human colonisation.

4. Department of Medieval and Early Modern Archaeology

This department concentrates on the study of Medieval and early post-Medieval periods (known regionally as the "Early Modern Period"). The team in this department is researching questions related to the ethnogenesis of the Slavs, their political history, the importance of inter-ethnic relationships, and the historical development of Great Moravia. Their research is based primarily on settlement and funerary excavations,

Figure 5. Majcichov – recovered part of timber elements of a defensive wall dating from the end of the Great Moravian Period (Photo by M. Ruttkay).



with an emphasis on the spiritual and material culture. The department also investigates the historical position of what is now Slovakia within the medieval Kingdom of Hungary, the emergence of the medieval cultural landscape and on specific features of medieval culture in Slovakia, but within a broader civilizational context. Members of the scientific team also focus on new settlement types, settlement structure, and Post-medieval and Industrial Period archaeology.

5. Department of Rescue Excavation and Survey

This department was created in response to the passing of the new Act on the Protection of Monuments and Historic Sites, and new rules for rescue excavation. The activities of the department include comprehensive excavation and non-destructive aerial and geophysical survey at select archaeological sites. Of the high number of projects the department is involved in it is worth highlighting the extensive developer-driven excavations associated with road and motorway constructions, such as those between Nitra and Tekovské Nemce and the section of national highway D1 between Prešov and Svinia. Recording and documentation in support of site preservation is prepared in cooperation with relevant state and local government authorities. In an effort to improve the availability and flexibility of the department a research branch was established in Zvolen, responsible primarily for rescue excavations in central Slovakia and systematic excavations taking place at Pustý Castle. In recent years key activity has included not only developmentled rescue excavations but also thematic domestic research and cooperation with foreign partners. Important research has included a long-term research project at Nitra Castle, dendrochronological and radiocarbon dating, recovery of part of the earthworks in Majcichov, geophysical survey at Pobedim fort and grave research in Bíňa. Excavations are

done in collaboration with an international summer school programme.

6. Department of Eastern Slovakia Research

Located in our branch office in Košice the main scientific and research goal of this department is the study of the prehistoric and early historic occupation of eastern Slovakia and adjacent areas, from a regional perspective. For regional state and local governments the department prepares records and documents in support of site preservation and conducts sites survey and field excavations in the region. These tasks are supported from the branch office in Spišská Nová Ves, which also specialises in the study and documentation of prehistoric and medieval cave occupation. Thematic research includes long-term excavations at an Early Bronze Age settlement and graveyard in Nižná Myšľa, a cremation graveyard in Ždaňa and at some Palaeolithic sites.

7. Department of Scientific and Technical Information and Restoration Laboratories

The department collects, processes and manages information. The division of records and documents curates and analyses reports, photographic and drawn documentation from surveys, rescue or research excavations, and site data for all of Slovakia. Archaeological materials collected in surveys and excavations by IA is stored and protected in special repositories. The department includes IA's publishing division and growing library. The library acquires its resources largely from inter-institutional and international exchange, with the help of the DaVinci database. It is also responsible for a specialist information system for archaeology and related disciplines. The Restoration Laboratories Division includes



Figure 6. Failaka – excavating a part of a Bronze Age village (Photo by K. Pieta).



Figure 7. Štúrovo – western part of a forefield of the Turkish fortification of Esztergom from the 16^{th} – 17^{th} centuries (Photo by I. Kuzma).



laboratories for conservation, pottery and drawing office. It reconstructs and conserves objects acquired through IA's research activities, and prepares the graphic and photographic documentation.

8. International projects

Independently and in cooperation with foreign and other domestic scientific institutions, IA collaborates in numerous projects. It is a principle investigator in "The Old Slovakia" project of the Centre of Excellence of the Slovak Academy of Sciences currently preparing a nine-volume monograph about culture-historical development in the northern Carpathians, from prehistory to the Late Middle Ages. IA takes part in multiple archaeological excavations in Hungary, Bulgaria and Austria. Within the framework of a Slovak-Kuwaiti project it has carried out a comprehensive research at a Bronze Age settlement and an early medieval village on the Isle of Failaka in the Persian Gulf. Interdisciplinary cooperation with the Romano-Germanic Commission (RGK) of the German Archaeological Institute (DAI) in Frankfurt am Main is continues on the multicultural locality of Fidvár in Vráble. IA participated in the UNESCO IGCP project No. 442 "Raw materials of the Neolithic/Eneolithic polished stone artefacts: their migration paths in Europe", and EU 2002-2005 project "Fremde im Frühmittelalter. Migration - Integration - Akkulturation", where it is partially responsible for building an internet database on cultural contacts and interactions in early medieval Europe. A group of researchers is currently involved in the CEVNAD project - Centre of Research on the Earliest History of Middle Danube Region (EU structural fund, Chapter 2.1 Science and Research), creating a central registry of archaeological finds,



Figure 8. Matejovce – unique wooden construction of a tomb with furnishings and pottery (Pieta, K., Roth, P.: Kniežacia hrobka z Popradu-Matejoviec. In: Pamiatky a múzeá 3/2007, 44–47).

searching for new sites and conserving artefacts. IA is one of the twenty-five co-investigators in "Archaeolandscapes Europe", coordinated by DAI RGK, Frankfurt am Main.

IA has presented its work, independently and in partnerships, to foreign and domestic audiences in various special exhibitions, using innovative methods of presentation, including models and digitalised representations. It cocurated "Central Europe around 1000 A.D.", an extensive touring exhibition that appeared in Berlin and Mannheim, and published the exhibition catalogue. It also curated the "Golden Age in the Carpathians" exhibition on the Slovak Bronze Age, held in Fiorano Modenese, and "Slovakia – A Crossroads of European Civilisation" installed in Florence, Rome, Forlí and San Cipirello.

9. Protection and Preservation of Cultural Heritage

Along with its scientific and research programme IA is involved in preservation and protection of the archaeological heritage, largely through remote survey and field excavation. It applies its scientific knowledge to reconstruct and present significant archaeological features at well-known sites, such as Iža, Ducové and Nitra Castle. At Liptovská Mara IA conducts experimental pottery firing. IA plays a significant role creating and curating some rare and unique archaeological/historical open-air museums, usually also associated with experimental archaeology.

10. Selected publications

IA edits and publishes the journals Slovenská archeológia, Študijné zvesti AÚ SAV, Archeologické výskumy a nálezy na Slovensku, Východoslovenský pravek, and Slovenská numizmatika. It also publishes the monograph series Archaeologica Slovaca Monographiae (Studia, Fontes, Communicationes, Catalogi), Acta Interdisciplinaria Archaeologica and Archeologické pamätníky Slovenska.

PIETA, K. 2010: Die Keltische Besiedlung der Slowakei. Archaeologica Slovaca Monographiae – Studia XII. Nitra.

HORVÁTHOVÁ, E. 2010: Osídlenie badenskej kultúry na slovenskom území severného Potisia. *Archaeologica Slovaca Monographiae – Studia XIII*. Nitra.

VARSIK, V. 2011: Germánske osídlenie na východnom predpolí Bratislavy. Archaeologica Slovaca Monographiae – Fontes XVIII. Nitra.

LAMIOVÁ-SCHMIEDLOVÁ, M. 2010: Žiarové pohrebisko z mladšej doby bronzovej na lokalite Dvorníky-Včeláre. *Archaeologica Slovaca Monographiae – Catalogi XI*. Nitra.

KAMINSKÁ, Ľ. 2010: Čičarovce-Veľká Moľva. Výskum polykultúrneho sídliska. Archaeologica Slovaca Monographiae – Catalogi XII. Nitra.

FURMÁNEK, V., MIROŠŠAYOVÁ, E. 2010 (Eds.): Popolnicové polia a doba halštatská. Archaeologica Slovaca Monographiae – Communicationes XI. Nitra.

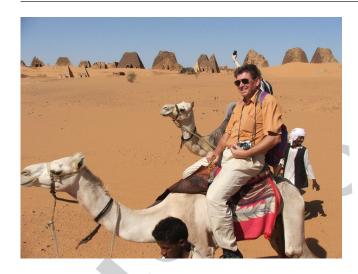
KUZMOVÁ, K., RAJTÁR, J. 2010 (zost.): Rímsky kastel v Iži. Archaeologica Slovaca Monographiae – Communicationes XII. Nitra.

ŠALKOVSKÝ, P. 2009: Detva. Praveké a včasnohistorické hradisko k dávnym dejinám Slovenska. Archeologické pamätníky Slovenska X. Nitra

Books and journals can be ordered through gabriela.holkova@savba.sk







Ivan Cheben - Scientific Profile

PhDr. Ivan Cheben, CSc. is an archaeologist employed at the Institute of Archaeology of the Slovak Academy of Sciences in Nitra since 1978. He completed archaeological studies in the Faculty of Arts at Comenius University in Bratislava with his dissertation research on the Lusation culture ("The Lusatian Culture in Orava" in Acta Archaeologica Carpathica 31, 1981, 5 – 39). In 1997 he obtained his CSc. with his major research publication "Bajč – A Settlement of the Želiezovce Group and the Origins of the Lengyel Culture in Slovakia" (Bonn 2000) while at the Institute of Archaeology of the Slovak Academy of Sciences in Nitra. He was fellow of the Alexander von Humboldt Foundation during which he conducted research with the Goethe University in Frankfurt, and Ruprecht-Karls University in Heidelberg.

Dr. Cheben's work at the Institute of Archaeology has focused primarily on inter-disciplinary and multifaceted investigations of the earliest agrarian civilisation in the north-western Carpathians. He has participated in many international and domestic projects, including the UNESCO IGCP project No. 442 "Raw materials of the Neolithic/Eneolithic polished stone artefacts: their migration paths in Europe". This research focused on the evaluation of the raw materials used in the polished industry in southwest Slovakia: a topic closely associated with the sourcing, exploitation,

distribution and production of artefacts from siliceous raw materials. In the course of this research evidence of mining pits was found for the first time in the area between Vlára and Pruské. Knowledge acquired from field excavations became the base for the evaluation of individual archaeological features and contexts. Cultural development within the latest phase of the Želiezovce group and the onset of the Lengyel culture was posited on the basis of a thorough examination of the settlement at Bajč. As a result of new Bell Beaker and Corded Ware finds, the excavations in Skalica and Trenčín enabled researchers to trace the intervention of foreign cultures in southwest Slovakia at the end of the Eneolithic. Research from an inhumation graveyard and partially recovered Únětice culture settlement were partly published, in relation to the other related finds from southwest Slovakia. In 2009, Dr Cheben took part in an international expedition surveying and mapping Ptolemaic period archaeological sites in Wad Ben Naga, Sudan.

Currently Dr. Cheben is synthesizing the results of a multiyear excavation being conducted at the largest Lusatian urn cremation graveyard in Slovakia, at the town of Trenčín. He is co-investigator in the "Archaeolandscapes Europe – Culture 2000" project, focused on introducing modern methods of remote survey, a post which he has held since 2010. Dr. Cheben also participates in several other EU projects including the Operational Programme Research and Development in the EU project "Centre of Research on the Earliest History of the Middle Danube Region".

Important recent publications:

CHEBEN, I., SOJÁK, M. 2008: Sídlisko kultúry lineárnej v Matejovciach. In: Cheben, I. Kuzma, I. (Eds.): *Otázky neolitu a eneolitu naších krajin* – 2007. Nitra. 15–48.

CHEBEN, I., CHEBEN, M. 2009: Prírodný výskyt rádiolaritov v oblasti Bielych Karpát. In: Gancarski, J. (Ed.): Surovce naturalne w Karpatach oraz ich wykorzystanie w pradziejach i wczesnym średniowieczu. Krosno, 129–140.

CHEBEN, I., CHEBEN, M. 2009: Získavanie rádiolaritov z primárnych zdrojov v okolí Vršatského Podhradia. In: Labuda, J. (Ed.): *Argenti Fodina 2008*. Banská Štiavnica, 6–11.

CHEBEN, I., CHEBEN, M. 2010: Research on Radiolarites of the White Carpathian Klippen Belt. Slovenská archeológia 58, 13–52.

CHEBEN,I.,RUTTKAY,M.2010: Römische Militärausrüstungsgegenstände aus dem germanischen Grubenhaus in Cífer. *Slovenská archeológia 58*, 309–336.

CHEBEN, I., FUSEK, G. 2011: Neolitické a eneolitické sídlisko v Bielovciach. Archeologie ve středních Čechách 15/1, 51–66.



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