

## PCMA FIELD MISSIONS AND PROJECTS IN 2014 AND 2015

Fieldwork listed in this section chronicles PCMA and associated projects carried out in the archaeological seasons of 2014 and 2015. Sites are presented in alphabetical order by country in the following sequence: Egypt (page 15), Sudan (24), Cyprus (27), Lebanon (27), Jordan (29), Iraqi Kurdistan (29), Georgia (30), Armenia (30), Saudi Arabia (30), Kuwait (31) and Oman (32) [see Maps A and B on the following centerfold]. Projects not reported in full in this volume are described here in brief, giving full information on the dates of the fieldwork and team composition, as well as a summary of the most important results and relevant other publications.

The Syrian projects: Hawarte, Palmyra, Tell Arbid and Tell Qaramel, remained suspended due to the political situation in the region.

## EGYPT

**ALEXANDRIA, KOM EL-DIKKA**, see in this volume.

**BERENIKE**, see in this volume.

See also:

- Sidebotham, S.E. (2014a). Berenike, Archaeology of. In C. Smith (Ed.), *Encyclopedia of global archaeology* (pp. 850–857). New York: Springer.
- Sidebotham, S.E. (2014b). Religion and burial at the Ptolemaic–Roman Red Sea emporium of Berenike, Egypt. *African Archaeological Review*, 31(4), 599–635
- Wilburn, D. (2015). Inscribed ostrich eggs at Berenike and materiality in ritual performance. *Religion in the Roman Empire*, 1(2), 263–285

### DEIR EL-BAHARI: TEMPLE OF TUTHMOSIS III

Operating as a subproject of the Polish–Egyptian Archaeological and Conservation Mission to the Hatshepsut Temple at Deir el-Bahari

The project is aimed at reconstructing from fragments the iconographic program of the decoration of the Temple of Tuthmosis III in Deir el-Bahari. The theoretical reconstruction of the various temple chambers is particularly advanced with regard to the painted relief decoration of walls of the temple in the Hypostyle Hall, Sanctuary, and Rooms D, G and H. The reconstruction drawings were checked against the reliefs, verified and completed. The process of complementing drawings with photographs of surviving fragments progressed, allowing photomontages of chosen parts of the decoration to be prepared. A 3D reconstruction model of the temple was processed and 26 large blocks and fragments of Osiride statues were documented with orthophotography. All the while restorers worked on reconstructing from fragments the last two decorated blocks from the east wall of the Sanctuary.

*Dates of work:* November–December 2015

*Director:* Dr. Monika Dolińska (National Museum in Warsaw)

*SCA representative:* Mohamed Azaab

*Egyptologists:* Janina Wiercińska (National Museum in Warsaw), Dr. Andrzej Ćwiek (Archaeological Museum in Poznań)

*Photographer:* Zbigniew Doliński (National Museum in Warsaw)

*Architect:* Mariusz Caban (PhD candidate, Wrocław University of Technology)

*Conservators:* Joanna Lis, Andrzej Karolczak (both National Museum in Warsaw)

PCMA field missions and projects in 2014 and 2015



Map A. Archaeological sites excavated by the PCMA: Egypt, Sudan, Cyprus, Syria, Lebanon, Jordan



Map B. Archaeological sites excavated by the PCMA: Iraqi Kurdistan, Georgia, Armenia, Saudi Arabia, Kuwait and Oman

**DEIR EL-BAHARI: TEMPLE OF HATSHEPSUT**

The Royal Cult Complex continued to be the chief object of restoration and documentation work in 2013/2014 and 2014/2015, including the collation of plates for publication. Several fragments were attributed to the walls of the Chapel of Tuthmosis I, as well as to the western tympanum and the religious texts inscribed on the south and north walls of the Chapel of Hatshepsut. The architectural layout of the niche located above the entrance to the Chapel of Hatshepsut was studied to prepare for a digital reconstruction of its decoration. The northern part of the west wall of the Chapel of Hatshepsut was restored.

The decoration of the walls in the Main Sanctuary of Amun-Re, Southern Middle Portico (Punt Portico) and the Southern Chamber of Amun continued to be documented, as was the documentation of fragments of the Tuthmosis I temple, stored in MMA 828 tomb/magazine. In the Upper (Festival) Courtyard, excavations of the foundation of the Ptolemaic Portico (S.1/14) resulted in its study and documentation.

Above the Vestibule of the Hathor Shrine an artificial roof was constructed, covering the ceiling slabs and a special iron construction which protects and stabilizes the building. Behind the Vestibule, the upper part of the Hathor Retaining Wall was restored with 104 ancient limestone blocks. Architectural documentation of rock-cut Tomb II (dated to the Twenty-fifth/Twenty-sixth Dynasty), located to the west of the temple of Tuthmosis III, was completed after the tomb had been excavated and cleared.

The first sandstone sphinx of Hatshepsut was reconstructed and placed in position, to the north of the processional path in the Lower Courtyard. Additional fragments of a colossal sculpture of Hatshepsut in the form of Osiris were restored in place in the so-called Northern Colossus, restored by the Metropolitan Museum Mission almost a century ago.

Digital inventory and documentation of objects discovered in the temple excavation was continued. These were mostly remains of grave goods (coffins, cartonnages, textiles, canopic jars, faience bowls, shabti figurines, etc.) discovered in the tombs of the Third Intermediate Period cemetery in the Third Terrace of the temple. Documentation of four Roman limestone sarcophagi and five lids was completed for publication, as was also the documentation of coffins and cartonnages, as well as the results of X-ray examination of mummies from the so-called Tomb of Montu Priests (Tomb XVIII, Twenty-fifth Dynasty), discovered in 1930 in the temple.

**SEASON 2013/2014**

*Dates of work:* 7 November 2013–4 April 2014

*Director:* Dr. Zbigniew E. Szafrński, egyptologist (Research Center in Cairo, PCMA)

*SCA representatives:* Elazab Rageb Ahmed Abd Rabu, Asmaa Sayed Ahmed Mahmoud, Saudi Salah Said Hussein, Rasha Ahmed el-Ameen Ahmed

*Egyptologists:* Dr. Franciszek Pawlicki (PCMA), Dr. Anastazja Stupko-Lubczyńska, Jadwiga Iwaszczuk, Dawid F. Wiczorek and Dr. Teodozja Rzeuska (all four Institute of Mediterranean and Oriental Cultures, Polish Academy of Sciences), Prof. Salima Ikram and Cynthia May-Sheikholeslami (both American University in Cairo), Dr. Nathalie Beaux-Grimal (Ifao), Marta Sankiewicz (PhD candidate, Adam Mickiewicz University, Poznań), Aleksandra Hallmann (PhD candidate, Institute of Archaeology, University of Warsaw), Agnieszka Niemirka (Ministry of Culture), Kamila Braulińska and Katarzyna Kapiec (both PhD candidates, Center for Research on the Antiquity of Southeastern Europe, University of Warsaw), Agata Smilgin (independent)

*Architects:* Mariusz Caban, Marta Grzegorek (both Wrocław University of Technology)

*Conservators:* Magdalena Szewczyk (independent), Izabela Uchman (Japanese Mission in Giza)

*Engineers:* Mieczysław Michiewicz (independent), Mariusz Dybich (PCMA)

*Registrars:* Sarah Fortune (student, University of Manchester), Beata Dzedzic (Poland, volunteer)

**SEASON 2014/2015**

*Dates of work:* 29 October 2014–17 March 2015

*Director:* Dr. Zbigniew E. Szafrński, egyptologist (Research Center in Cairo, PCMA)

*Deputy director:* Dr. Mirosław Barwik, egyptologist (Institute of Archaeology, University of Warsaw)

*SCA representatives:* Mohamed Ahmed Salim Abuel-Hagag, Mahmoud Kamal Abuel-Wafa Ali

*Egyptologists:* Dr. Franciszek Pawlicki (PCMA), Filip Taterka (Adam Mickiewicz University, Poznań), Katarzyna Kapić (PhD candidate, Center for Research on the Antiquity of Southeastern Europe, University of Warsaw), Jadwiga Iwaszczuk (Institute of Mediterranean and Oriental Cultures, Polish Academy of Sciences)

*Architects:* Mariusz Caban, Dr. Aleksandra Brzozowska, Dr. Teresa Dziedzic (all three Wrocław University of Technology), Sergio A. Robledo (University of Technology, Madrid)

*Conservators:* Rajmund Gazda, Maria Lulkiewicz, Andrzej Sośnierz (all three freelance), Wojciech Myjak (Ministry of Culture)

*Engineers:* Mieczysław Michiewicz, Anna Caban (both freelance)

*Astronomer:* Dr Marcin Sękowski (Institute of Geodesy and Cartography)

*Anthropologist:* Agata Bebel (PCMA scholarship-holder)

*Photographer:* Maciej Jawornicki (freelance)

*Documentalists:* Marek PuszkarSKI (PCMA), Anastazja Gulijewskaja (PCMA scholarship-holder), Kamila Braulińska (PhD candidate, Center for Research on the Antiquity of Southeastern Europe, University of Warsaw)

*Registrars:* Sarah Fortune (student, University of Manchester), Marta Franiec, Justyna Jańska, Witali Kozłowski and Ines Prokopczuk (all four students of architecture, Wrocław University of Technology), Asta Junevičius (volunteer)

## GEBELEIN ARCHAEOLOGICAL PROJECT

The Gebelein Archaeological Project comprises archaeological and epigraphic surveys as well as analysis of archival data aimed at recording and publishing local archaeological heritage endangered by modern development. The archaeological survey was carried out with the use of a GNSS tool with mobile GIS application, documenting archaeological features and finds *in situ*, including specifically human skeletal remains and ceramics.

Of greatest interest among the archaeological features is a rock-cut chapel dedicated to the goddess Hathor and another, unidentified male deity, dating from the reign of Hatshepsut. The documentation of this previously unpublished speos was initiated in 2015. The concentration of graffiti in the southern part of the Western Mount of Gebelein also merited attention despite their poor preservation. A new methodological approach was developed, combining decorrelation and Reflectance Transformation Imagining (RTI) to good effect in recognizing different aspects of the graffiti.

See also:

- Ejsmond, W. with contribution of J.M. Chyla and P. Witkowski (2015). New archaeological research at Gebelein. *Egyptian Archaeology*, 47, 7–9
- Ejsmond, W., Chyla, J.M., Witkowski, P., Wiczorek, D.F., Takács, D., Ożarek-Szilke, M., and Ordućowski, J.M. (2015). Comprehensive field survey of Gebelein — preliminary results of a new method in processing data for archaeological sites' analysis. *Archaeologia Polona*, 53, 617–621
- Takács, D., Ejsmond, W., Chyla, J.M., and Witkowski, P. (2015). Hatshepsut's Speos at Gebelein — preliminary conclusions on the unpublished temple. *GM*, 247, 117–120
- Wiczorek, D.F. (2015). A Ramesside rock inscription at Gebelein — an unknown expedition of Ramesses IV. *EtTrav*, 28, 217–229

*Dates of work:* 16–25 February 2014; 25 January–8 March 2015

*Director:* Wojciech Ejsmond, archaeologist (PhD candidate, Center for Research on the Antiquity of Southeastern Europe, University of Warsaw; 2014, 2015)

*Field director* (in 2015 season): Julia M. Chyla, archaeologist, GIS specialist, UniGIS (PhD candidate, Center for Research on the Antiquity of Southeastern Europe, University of Warsaw, and Jagiellonian University, Kraków; 2014, 2015)

*SCA representatives:* Mamduh Saad Mostafa (2014), Ali Mohamed Ahmed (2015)

*Egyptologists*: Cezary Baka (PCMA; 2014), Daniel Takács (Institute of Archaeology, University of Warsaw; 2015)

*Epigrapher*: Dawid F. Wieczorek, archaeologist (Institute of Mediterranean and Oriental Cultures, Polish Academy of Sciences; 2014)

*Anthropologist*: Marzena Ożarek-Szilke (PhD candidate; Institute of Archaeology, University of Warsaw; 2015)

*Geophysicist*: Jakub M. Ordukowski, archaeologist (Maria Curie-Skłodowska University in Lublin; 2015)

*Photographer*: Piotr Witkowski, archaeologist, RTI specialist (independent; 2014, 2015)

*Restorer*: Arkadiusz Ostasz (freelance; 2015)

*Expert consultation*: Michał Madej, geologist (University of Warsaw; 2015), Adam Grylak, prehistoric lithics (Institute of Archaeology, University of Wrocław; 2015)

*Acknowledgment*: The project thanks the University of Warsaw Foundation and the Consultative Council for the Students' Scientific Movement of the University of Warsaw for their financial support, as well as the Polish Centre of the Mediterranean Archaeology for granting research scholarships.

## MAREA

Late Antique house in Marea project (Polish National Science Center (NCN) grant 2011/01/b/hS3/02918), see in this volume.

## MAREA

Basilica project: The southern aisle of the basilica and the southern entrance to the church was explored in 2014. A bone-crafting workshop was located by the outside wall, yielding 230 semi-finished products for the making of beads, appliquéés, buttons etc. A courtyard paved with marble led onto a street with a sewage system that received water directly from the baptistery located in this part. A room directly next to the baptistery was paved with marble tiles in the *opus sectile* technique, including ones in the shape of human hands. A semicircular niche in its east wall may have housed the bishop's throne. A later installation in the southern aisle, associated with thick layers of burning in the fill, consisted of a brick-built vaulted structure which may have been a bread-baking oven. In 2015, a poster exhibition showing fifteen years of discoveries and conservation by the Polish team in Marea was shown at the National Museum in Alexandria (and later in Cairo).

*Dates of work*: 2 August–15 October 2014; 14 October–23 November 2015

*Director*: Krzysztof Babraj, archaeologist (Archaeological Museum in Kraków; 2014, 2015)

*SCA representative*: Eslam Tailon

*Archaeologists*: Anna Drzymuchowska, ceramologist (Archaeological Museum in Kraków; 2014, 2015), Anna Mędrała, student (Andrzej Frycz Modrzewski Krakow University; 2015), Dominika Majchrzak (Archaeological Museum in Kraków; 2015), Joanna Szczepkowska (PCMA UW; 2014)

*Ceramologist*: Julia Górecka (independent; 2014)

*Architects*: Katarzyna Rozmus (Universidad Politècnica de València trainee; 2014), Daria Tarara, chief architect (freelance; 2014, 2015)

*Restorer*: Tomasz Skrzypiec (Academy of Fine Arts in Kraków; 2014)

*Civil engineer*: Dr. Janusz Gogut (Kraków University of Technology; 2014)

**MARINA EL-ALAMEIN: CONSERVATION PROJECT**, see in this volume.

**MARINA EL-ALAMEIN: ARCHAEOLOGICAL PROJECT**, see in this volume.

**NAQLUN (Deir el Nekloni)**, see in this volume.



## SAQQARA

Work in the Dry Moat concentrated in 2014 on clearing the entrance to a rock-cut chapel (No. 32, identified already in 2012) in the lower tier, about 0.50 m below the Chapel of Ichy and in 2015 on exploring the chapel itself. An offering formula taking up the width of the facade was noted, but no wall decoration. Conservators protected the severely eroded rock face of the facade, including structural work inside the chapel, reinforcing a broken wall separating it from a neighboring chapel. Comprehensive interdisciplinary research was carried out on human remains from the cemeteries (mainly from the Ptolemaic period). Artifact restoration covered all categories: wood, stone, gypsum, clay and textile, papyrus.

See also:

- Rzeuska, T.I. (2015). Noughts and crosses. Pot marks on the late Old Kingdom beer jars from West Saqqara. In J. Budka, F. Kammerzell, and S. Rzepka (eds), *Non-textual marking system in Ancient Egypt (and elsewhere)* [=Lingua Aegyptia. Studia monographica 16] (pp. 255–281). Hamburg: Widmaier Verlag
- Welc, F., and Mieszkowski, R. (2015). Unknown ancient funerary structures discovered in West Saqqara (Egypt) using Ground-Penetrating Radar (GPR). *EiTrav*, 28, 201–215
- Welc, F., Mieszkowski, R., Trzciński, J., and Kowalczyk, S. (2015). Western section of the 'Dry Moat' channel surrounding Step Pyramid complex in Saqqara in the light of Ground-Penetrating Radar prospection. *Archaeological Prospection*, 22(4), 293–305

*Dates of work:* 12 February–19 March 2014; 23 February–23 March 2015

*Director:* Prof. Karol Myśliwiec (Institute of Mediterranean and Oriental Cultures, Polish Academy of Sciences; 2014, 2015)

*Deputy director:* Assoc. Prof. Kamil Kuraszkiewicz, egyptologist (Oriental Faculty, University of Warsaw; 2014, 2015)

*SCA representatives:* Mohamed Hussein Mohamed Hendawi (2014), Samir Ramadan Mohamed (2014)

*Archaeologists:* Dobiesława Karst (Museum of Ancient Trade, Świdnica; 2015), Agnieszka Kowalska (independent; 2014), Małgorzata Radomska (Institute of Mediterranean and Oriental Cultures, Polish Academy of Sciences; 2014, 2015), Tomasz Stępnik (independent; 2015), Marek Woźniak (independent; 2014, 2015)

*Anthropologists:* Iwona Kozieradzka-Ogunmakin (2014, 2015), Constance Lord (2015), Eily Marlow (2015) (all University of Manchester)

*Geologists:* Dr. Fabian Welc (Cardinal Stefan Wyszyński University, Warsaw; 2014), Assoc. Prof. Anna Wysocka (Faculty of Geology, University of Warsaw; 2014)

*Restorers:* Magdalena Abramowska (freelance; 2014), Amr Abd-Alfattah (Supreme Council of Antiquities, Cairo), Iwona Ciszewska-Woźniak (freelance; 2014), Urszula Dąbrowska, chief conservator (freelance; 2015), Krzysztof Olszowski (freelance; 2015), Robert Wolny (freelance; 2015), Ragab Mohamed Ragab (Supreme Council of Antiquities, Cairo; 2015)

*Documentalist:* Beata Błaszczuk (freelance; 2014, 2015)

*Photographer:* Jarosław Dąbrowski (freelance; 2014, 2015)

*Technician:* Mariusz Dybich (PCMA UW, Research Center in Cairo; 2015)

## SHEIKH ABD EL-GURNA

The season in 2014 was devoted to continued study of the ceramic assemblage collected from the Coptic hermitage from the beginning of excavations in 2003. This project is headed by Tomasz Górecki. The main focus was on the common wares. The set was divided into typological groups, permitting a determination of function in many cases. A statistical count of the sherds enabled an estimation of the minimum and maximum number of given types of vessels, as well as clay artifacts, such as stands and incense burners. Many vessels were restored in the course of the documentation process. In 2015, wine containers were examined, the objective being a study of their weight and

capacity. Altogether 31 complete containers, mainly LRA 7, but also a few from Aswan as well as Aswan imitations, were weighed and their volume calculated, in order to be able to compare the results with other similar studies (amphorae from Edfu, Naqlun, Shenhur and Abu Fana). Vessel weight ranged from 3 kg to 6 kg, the capacity from 3 liters to 8 liters, thus they formed a fairly diverse assemblage in terms of their size.

See also: Górecki, T. (2016). Phasing out LRA 7 amphorae in favor of new wine containers: Preliminary remarks based on finds from excavations in Naqlun. In A. Łajtar, A. Obłuski, and I. Zych (eds), *Aegyptus et Nubia Christiana. The Włodzimirz Godlewski Jubilee volume on the occasion of his 70th birthday* (pp. 113–137). Warsaw: PCMA UW

Research on the Pharaonic structures, namely the tombs MMA 1151 and MMA 1152 (in which the hermitage had been installed in the Byzantine age), as well as on Pharaonic objects found on the site was supervised by Andrzej Ćwiek. The tombs dated to the Middle Kingdom but were reused in later periods. Work concentrated in the shaft of tomb MMA 1152, already explored halfway in the past, aiming to explore and document the underground structures still filled with debris. A special construction of wooden beams was built over the mouth of the shaft to ensure safe passage of people and rubble removed from the underground. Exploration down to the end of a sloping corridor that starts at the bottom of the shaft yielded a large quantity of archaeological material, including fragments of mud-bricks, Pharaonic and Coptic potsherds, pieces of wood (probably also parts of coffins), pieces of cartonnages, textiles, ropes, strings and plaited wickerwork, fragments of small clay shabtis, faience beads, parts of faience amulets, as well as human and animal bones. Unique in this set was a piece of linen with remains of cartouches of Ptolemy XII, written in ink.

*Dates of work:* 13 February–30 March 2014; 5 February–1 March 2015

*Director:* Tomasz Górecki, archaeologist (National Museum in Warsaw)

*Deputy director:* (in 2015) Dr. Andrzej Ćwiek, egyptologist (Archaeological Museum in Poznań; Adam Mickiewicz University in Poznań)

*SCA representatives:* Fatma Hassan Mohamed (2014), Megahed Abd el-Mowgod (2015)

*Ceramologist:* Julia Górecka, archaeologist (independent; 2014)

*Architects:* Anna Caban, Mariusz Caban (University of Technology in Wrocław; 2015)

*Archaeologist:* Patryk Chudzik (University of Wrocław; 2015)

*Student-trainees:* Adam Grylak, Marta Kaczanowicz (both Institute of Prehistory, Adam Mickiewicz University in Poznań; 2015)

*Photographer:* Maciej Jawornicki (freelance; 2015)

*Restorer:* Arkadiusz Ostasz (freelance; 2015)

*Acknowledgment:* The mission is indebted to the Authorities of the Adam Mickiewicz University for supporting the research in the 2015 season: Rector Prof. Jacek Witkoś, Dean of the Faculty of History Prof. Kazimierz Iłski and Director of the Institute of Prehistory Prof. Danuta Minta-Tworzowska.

## SHEIKH ABD EL-GURNA MANUSCRIPTS CONSERVATION MISSION

Three medieval manuscripts (one parchment and two papyrus codices), found in 2005 at the Coptic hermitage in Sheikh Abd el-Gurna by Tomasz Górecki's team and now kept in the Coptic Museum in Cairo, are still undergoing conservation treatment. Monitoring resulted in further recommendations for safe storage of the manuscripts even as the project had to be suspended for financial reasons.

*Dates of work:* season in 2014 suspended; 8 November–30 December 2015

*Acting director:* Anna Thommée, senior conservator of art works (Polish Ateliers for Conservation of Cultural Property)

*Coptic Museum liaison:* Sherin Lotwi Aziz

*Book restorer:* Dominika Popiołek (freelance)



**TELL EL-FARKHA (GHAZALA)**, see in this volume.

**TELL EL-MURRA (NORTHEASTERN NILE DELTA SURVEY)**

Following up on research in 2008 and in 2010–2013, excavation in 2014 and 2015 was conducted in the southwestern part of the mound (trenches S3, S3B) and in the northeastern one (trench T5). Sixteen graves of Early Dynastic date were explored in trench S3; most were simple pit burials, whereas in three cases the bodies had been buried in pottery coffins. Remains of settlement architecture, interspersed with deposits of alluvia representing flood events, were uncovered in underlying strata in S3 as well as S3B.

The architecture uncovered in trench T5 suggested a fairly domestic and industrial sector of the settlement. The lowest layers excavated were dated to the early Old Kingdom. The nature of the ceramic assemblage collected from this level suggested storage and distribution functions, as well as bread-baking activities (ruins of a bakery and a collection of vats, bowls and bread molds). The late Old Kingdom layer comprised a number of pits with finds dating to the Fifth and Sixth Dynasties. The presence of spouted bowls used during beer or grain distribution suggested food production of some kind taking place in this area.

*Dates of work:* 7 March–14 April 2014; 17 February–29 March 2015

*Co-directors:* Dr. Mariusz A. Jucha (Institute of Archaeology, Jagiellonian University, Kraków; 2014, 2015), Grzegorz Bąk-Pryc, archaeologist (PhD candidate, Institute of Archaeology, Jagiellonian University, Kraków; 2014, 2015)

*SCA representatives (Tanis Inspectorate):* Abd el Baset Ismail Mohamed Khaery (2014), Mohamed Al-Sayed Mohamedien Mohamed, Amira Hussein Ibrahim Elsaid (both 2015)

*Archaeologists:* Krzysztof M. Ciałowicz, Piotr Kołodziejczyk (both Institute of Archaeology, Jagiellonian University, Kraków; 2014), Natalia Małecka-Drozd (PhD candidate, Institute of Archaeology, Jagiellonian University, Kraków; 2014, 2015)

*Archaeologist/ceramologist:* Magdalena Kazimierczak (PhD candidate, Institute of Archaeology, Jagiellonian University, Kraków; 2014, 2015)

*Archaeologist/ceramic analyst:* Mary F. Ownby (University of Arizona; 2015)

*Documentalists:* Ewa Glimos (2015), Konrad Grzyb (2014, 2015), Monika Kozubal (2015), Katarzyna Lajs (2015), Mikołaj Maciejewski (2015), Jakub Niebylski (2014, 2015), Ewa Rydzewska (2015), Aleksandra Siciak (2014, 2015), Adelina Szczerbińska (2014) (all Institute of Archaeology, Jagiellonian University, Kraków)

*Anthropologists:* Katarzyna Mądryk, Barbara Woźniak (both PhD candidates, Department of Anthropology, Jagiellonian University, Kraków; 2015)

*Archaeozoologist:* Renata Abłamowicz (Silesian Museum, Katowice; 2015)

*Photographer:* Ewa Kuciewicz (PhD candidate, Institute of Archaeology, Jagiellonian University, Kraków; 2015)

*Acknowledgment:* The project is financed from the Polish National Science Centre (NCN) grant DEC-2013/09/B/HS3/03588.

**TELL EL-RETABA**, see in this volume.

**VALLEY OF THE KINGS: TOMB OF RAMESSES VI**, season cancelled.

**WADI KHASHAB** (subproject of the Berenike Project)

The southwestern part of the monumental ceremonial enclosure was explored, uncovering 23 features which included cattle and ram burials. A single infant skeleton was found with a necklace of *Conidae* sp. shells and a bracelet of faience beads on the ankle. Importantly, measurement of the cattle bones identified them as belonging to the African humped species.

See also:

- Osypiński, P. and Osypińska, M. (2014). Wadi Khashab — ceremonial complex of cattle keepers in the Egyptian Eastern Desert, season 2014. *Nyame Akuma*, 82, 84–90
- Osypiński, P. and Osypińska, M. (2016). The Wadi Khashab ceremonial complex — a manifestation of cattle keepers in the Eastern Desert of Egypt before the end of the fifth millennium BC. *Azania: Archaeological Research in Africa*, 51(2), 257–281. <https://doi.org/10.1080/0067270X.2016.1186335>

*Dates of work:* 6–20 January 2015

*Director:* Piotr Osypiński, archaeologist (Patrimonium Foundation)

*SCA representative:* Farag Shazly Mohamed

*Archaeologist:* Marek Woźniak (Polish Ministry of Education scholarship holder, PCMA UW; PhD candidate, Institute of Archaeology and Ethnology, Polish Academy of Sciences)

*Archaeozoologist:* Dr. Marta Osypińska (Institute of Archaeology and Ethnology, Polish Academy of Sciences, Poznań branch)

*Acknowledgment:* The project was funded from Polish National Science Centre (NCN) grant UMO-2012/07/N/MS3/04056

## SUDAN

### DONGOLA

Fieldwork in 2014–2015 and 2015–2016 was carried out in three sectors: citadel ramparts, site SWN in the citadel and the monastic complex on Kom H, continuing earlier work reported on in previous volumes of *PAM*. A stretch of the fortifications, 80 m long, consisting of three lines of curtain walls, was explored between bastions NE and E.2. The lower lines, probably constructed in the 16th century, proved to be built of stone and mud brick on top of sand dunes accumulated against the original fortifications of the citadel. The sand dune, which is about 4 m high in this area, and a Funj-period facing wall covering the original 5th/6th century defenses were removed from the full length of the rampart between the two towers. The original wall had a face of irregular stone blocks and was preserved to a height of over 8 m. Tower N.2, destroyed most likely in the 13th century, was rebuilt in mud brick during the Funj period.

Investigation and conservation continued inside Building SWN.B.V. The upper-layer deposits from this royal church were removed from the naos and the northeastern part of the building (prothesis). Wall paintings preserved on the walls and pillars of the church were successively protected and studied. Three representations of priests were identified as presbyters by the accompanying legends. The most complete image was of presbyter Theophorou, depicted presenting two big vessels to an enthroned Virgin Mary and Child. A new shelter was constructed over the building, the first one having been damaged by extremely harsh weather conditions in the previous year.

On Kom H, comprehensive clearing was undertaken of the funerary monuments in the cemetery along the western facade of the monastery complex, between the Northwest and the Southwest Annex. Excavations were conducted in the monastery courtyard and inside the Central Building on the northern side of the church. A shelter of sorts was constructed over the western part of the monastic church and all the fragments of wall paintings from the late church were transferred there.

A wall shielding the site from windblown sand was constructed to the north of the fortifications and the religious complex formed by the Cruciform Church and Cathedral 4. Granite capitals from Cathedral 3 were arranged in a display on the southern side of this new wall.

See also: W. Godlewski and D. Dzierzbicka (eds). (2015). *Dongola 2012–2014. Fieldwork, conservation and site management* [=PCMA Excavation Series 3]. Warsaw: PCMA

See also article on the pottery from B.I in the Studies section of this volume.

*Dates of work:* 17 January–5 March 2014; 9 November–14 December 2014; 3 January–6 February 2015; 9 November–14 December 2015

*Co-directors:* Prof. Włodzimierz Godlewski, archaeologist (2014/1–2, 2015/1–2), Prof. Adam Łajtar, epigraphist (2014/1, 2015/1), Dr. Dorota Dzierzbicka, archaeologist (2014/2, 2015/2) (all Institute of Archaeology, University of Warsaw)

*NCAM representatives:* Balsam Abd El-Hamid (2014/1), Fatah Alrahman Mohamed Osman (2014/2), Shawgi Tawalbed (2015/1), Alsamani Ezeldeen Kara (2015/2)

*Archaeologists:* Lucia Dominici (PhD candidate, Institute of Archaeology, University of Warsaw; 2014/1), Piotr Makowski (independent; 2014/2, 2015/1), Maciej Marciniak (PhD candidate, Institute of Archaeology, University of Warsaw; 2015/2), Szymon Maślak (PCMA UW; 2014/1), Dr. Dobrochna Zielińska (Institute of Archaeology, University of Warsaw; 2014/1, 2015/1)

*Ceramologists:* Katarzyna Danys-Lasek (independent; 2014/1), Dr. Anna Wodzińska (Institute of Archaeology, University of Warsaw; 2014/1)

*Epigraphist:* Agata Deptuła (PhD candidate, Faculty of History, University of Warsaw; 2014/2, 2015/1–2)

*Architect:* Dr. Romuald Tarczewski (Wrocław University of Science and Technology; 2014/2, 2015/2)

*Conservators:* Maciej Karpiński (2014/2, 2015/2), Jolanta Ewa Kurzyńska (2014/1, 2015/1), Urszula Kusz (2015/1–2), Dorota Moryto-Naumiuk (2014/2) (all freelance)

*Archaeozoologist:* Dr. Marta Osypińska (Institute of Archaeology and Ethnology, Polish Academy of Sciences, Poznań branch; 2015)

*Archaeologist/topographer:* Szymon Lenarczyk (PhD candidate, Institute of Archaeology, University of Warsaw; 2014/2, 2015/1–2)

*Documentalist:* Hanna Kozińska-Sowa (independent; 2014/2)

*Student-trainees:* Agnieszka Ryś, Maciej Wyzgoł, students of archaeology (both Institute of Archaeology, University of Warsaw; 2014/1, 2015/1)

**BANGANARTI and SELIB**, see in this volume.

**EARLY MAKURIA RESEARCH PROJECT: EL-DETTI**, see in this volume.

### **EARLY MAKURIA RESEARCH PROJECT: EL-ZUMA**

The sixth and seventh seasons at the site saw a continuation of exploration and studies of the various tumuli of Meroitic date, 28 of which, representing three different types in terms of size and structure, exist in this burial field. Tumuli 3, 6 and 8 are all of type I and have the mysterious subterranean tunnels, which were the main focus of research in 2014. Further data on the function and dating of these structures came from investigation in 2015 when two more tombs of type I were studied from this angle. Excavation of Tumulus 7 was resumed, where the entrance to the tunnel was located in 2011 (see El-Tayeb, M., Juszczak-Futkowska, K., and Czyżewska, E. (2014). El-Zuma 2011: the fourth season of excavations on the site. Preliminary report. *PAM*, 23/1, 365–366), and a test trench at the southern edge of Tumulus 1 revealed the external shaft and entrance to the subterranean tunnel of this tomb.

See also: El-Tayeb, M., Skowrońska, E., and Czyżewska, E. (2016). Early Makuria Research Project. The results of three seasons of excavations at el-Zuma cemetery, 2013, 2014 and 2015. *Sudan & Nubia*, 20, 110–126

*Dates of work:* 10 January–15 March 2014; 10 January–15 March 2015

*Director:* Assoc. Prof. Mahmoud El-Tayeb, archaeologist (PCMA UW; 2014, 2015)

*NCAM representative:* Neamat Mohamed El-Hassan (2014, 2015)

*Archaeologists:* Anna Jaklewicz (independent; 2015), Dr. Karol Juchniewicz (independent; 2014), Katarzyna Juszczyk-Futkowska (independent; 2014), Zofia Kowarska (independent; 2014, 2015), Szymon Lenarczyk (independent; 2014), Justyna Niderla-Bielińska (independent; 2015), Ewa Skowrońska (independent; 2014), Dr. Urszula Wincenciak (PCMA UW; 2014, 2015), Tomasz Wojtczak (independent; 2015)

*Ceramologist:* Ewa Czyżewska-Zalewska (PCMA UW; 2014, 2015)

*Metal finds specialist:* Łukasz Zieliński (independent; 2014, 2015)

*Anthropologist:* Robert Mahler (PCMA UW; 2014)

*Archeozoologist:* Urszula Iwaszczuk (PCMA UW; 2014, 2015)

*Photographers:* Adam Kamrowski (Archaeological Museum in Gdańsk; 2014), Tomasz Wojtczak (independent; 2014, 2015)

*Construction engineers:* Dr. Zenon Duda (freelance, Kraków; 2014), Jolanta Juchniewicz, topographer (freelance; 2014)

*Acknowledgment:* The Early Makuria Research Project is a joint research program of the Polish Centre of Mediterranean Archaeology, University of Warsaw and the National Corporation for Antiquities and Museums of Sudan. The project is sponsored by the Qatar–Sudan Archaeological Project and the PCMA.

### GHAZALI ARCHAEOLOGICAL SITE PRESENTATION PROJECT (G.A.S.P.)

The G.A.S.P team was in the field for a total of 12 months in 2014 and 2015, thanks to generous funding from the University of Münster and the Qatar–Sudan Archaeological Project. Excavation confirmed Cemetery 2 as a monastic burial ground. All of the burials from the original phase of the cemetery were male and several tombstones identifying the deceased as monks were found *in situ*. Bioarchaeological samples collected for isotope analyses (to be done by Robert Stark at McMaster University, Canada) will answer questions concerning the origin of the monastic population and the monks' diet. South of the settlement at Ghazali, six almost fully preserved iron-smelting furnaces were identified and excavated. Samples will be analyzed by Jane Humphris (UCL Qatar). Cleaning the already excavated part of the monastic enclosure of debris and wind-blown sand was aimed at preparing it to serve as a touristic destination. The team excavated a monastic dormitory, food production facilities, and monastic latrines.

A site presentation and management plan was prepared by Archinos Architecture, a cultural heritage management company.

*Dates of work:* January–March 2014; October–December 2014; January–March 2015; October–December 2015

*Director:* Dr. Artur Obluski (Oriental Institute, University of Chicago)

*NCAM representative:* Zaki el-Din Mahmoud, archaeologist (2014/1–2, 2015/1–2)

*Archaeologists:* Adrian Chlebowski (independent; 2014/1, 2015/1), Szymon Maślak (PCMA UW; 2014/1, 2015/1), Bartosz Wojciechowski (independent; 2014/1, 2015/1), Szymon Lenarczyk (Institute of Archaeology, University of Warsaw; 2014/1, 2015/1)

*Architect:* Tomasz Tymiński (independent; 2014/1, 2015/1)

*Bioarchaeologists:* Joanna Ciesielska (PhD candidate, Institute of Archaeology, University of Warsaw; 2014/1, 2015/1), Robert Mahler (PCMA UW; 2014/1, 2015/1), Robert James Stark (McMaster University, Canada; 2014/1, 2015/1)

*Ceramologists:* Agnieszka Dzwonek (independent; 2014/1, 2015/1), Małgorzata Korzeniowska (National Museum in Warsaw; 2014/1, 2015/1), Monika Więch (independent; 2014/1, 2015/1)

*Epigraphist:* Grzegorz Ochała (Department of Papyrology, University of Warsaw; 2014/1, 2015/1)

*Photographer:* Adam Kamrowski (independent; 2014/1, 2015/1)

*Restorers:* Cristobal Calaforra-Rzepka, Urszula Kusz, Wisłomira Niciejka, Maciej Żelechowski-Stoń (all freelance; 2014/1, 2015/1)

*Student-trainees:* Aleksandra Błaszczuk, Aleksander Misiurny (both Adam Mickiewicz University, Poznań; 2014/1, 2015/1)

**KHOR SHAMBAT 1**, see in this volume.

## CYPRUS

### NEA PAPHOS

The area of the main courtyard (1) of the “Hellenistic” House was excavated below its ancient surface, establishing the stratigraphy of this architecture with late Classical and incipient Hellenistic strata below the courtyard and early 2nd century AD fill above the basin and surrounding floors; thus, the construction of the main courtyard of the “Hellenistic” House turned out to be later than believed to date. The exploration of the cistern under the southeastern part of the courtyard was continued and another water supply, a well, was found in the northeastern corner of the corridor. The building sequence of the porticoes of the courtyard was also studied in a test trench in the southwestern corner of the unit. Another test in street B at the southwestern corner of the House of Aion uncovered a sequence of floors and the southern elevation of a building under a late Roman street.

Fifty years of excavations by the Polish Centre of Mediterranean Archaeology at the site of Nea Paphos was celebrated in 2015 with an exhibition at the Cyprus Museum in Nicosia.

*Dates of work:* 24 August–22 September 2014

*Director:* Dr. Henryk Meyza (Institute of Mediterranean and Oriental Cultures, Polish Academy of Sciences)

*Archaeologists:* Prof. Jolanta Młynarczyk (Institute of Archaeology, University of Warsaw), Prof. Wiktor A. Daszewski (*emeritus*, University of Warsaw), Rozalia Tybulewicz (Institute of Mediterranean and Oriental Cultures, Polish Academy of Sciences), Edyta Marzec (PhD candidate, Institute of Archeology, Jagiellonian University, Kraków), Dorota Mazanek, Julia Mikocka, Monika Więch (all PhD candidates, Center for Research on the Antiquity of Southeastern Europe, University of Warsaw), Agnieszka Kaliszewska (PhD candidate, Faculty of History, University of Warsaw)

*Architects:* Dr. Aleksandra Brzozowska (Faculty of Architecture, Wrocław University of Science and Technology), Anna Kubicka (PhD candidate, Faculty of Architecture, Wrocław University of Science and Technology)

*Photographer:* Maciej Jawornicki (freelance)

*Archaeologist-trainee:* Łukasz Sokołowski (PhD candidate, Center for Research on the Antiquity of Southeastern Europe, University of Warsaw)

*Student-trainees:* Rafał Bieńkowski, Mateusz Ambroziak, Łukasz Karol, Weronika Karpińska, Łukasz Klima, Natalia Kotyńska, Marek Makola, Jędrzej Szczypiła, Agata Śmieja, Martyna Tyczyńska, Marcin Romaniuk, Anna Zydler (all Institute of Archaeology, University of Warsaw)

## LEBANON

### CHHÎM

The season in 2015 was dedicated to studies of the collected finds for the purpose of the final publication of the site: local pottery of the Persian, Hellenistic and early Roman periods, glass vessels, metal artifacts (about 600 objects of iron, copper alloy and lead), oil lamps (more than 1000 fragments), bone objects and miscellanea, coins (more than 340), and stone architectural elements, as well as animal bones and archaeobotanical remains (for the lattermost, see Badura et al. 2016, in this volume). Site stratigraphy was verified in some limited tests in street E XXII in the habitation

quarter and an extension of the trench from 2001 in room E VIII and street E XXV. A detailed documentation and stratigraphic analysis of the residential architecture involved mapping of particular occupational layers, orthophotographic recording of walls and processing with advanced computer software for a chronological and functional reconstruction. The project's restorers completed state-of-the-art conservation of the wall painting and mosaic floors from the Christian basilica in sector B, which had been protected provisionally after the initial discovery.

*Dates of work:* 8 June–14 August 2015

*Director:* Assoc. Prof. Tomasz Waliszewski, archaeologist (Institute of Archaeology, University of Warsaw)

*Archaeologists:* Magdalena Antos (independent), Dr. Michał Dzik (Institute of Archaeology, University of Rzeszów), Ingrid Perisé-Valero (Université Paris Sorbonne Abu Dhabi), Agnieszka Szymczak (PCMA UW), Maciej Wyzgoł (independent)

*Ceramologists:* Małgorzata Kajzer, lamp studies (PhD candidate, Institute of Archaeology, Jagiellonian University, Kraków), Zofia Kowarska (independent), Francisco J. Núñez (independent), Dr. Urszula Wicenciak (PCMA UW)

*Architectural elements specialist:* Marzena Łuszczewska (Institute of Archaeology, University of Warsaw)

*Glass specialist:* Marcin Wagner (Institute of Archaeology, University of Warsaw)

*Metal specialist:* Agnieszka Szulc-Kajak (PhD candidate, Institute of Archaeology and Ethnology, Polish Academy of Sciences)

*Bone artifacts specialist:* Mariusz Gwiazda (PhD candidate, Center for Research on the Antiquity of Southeastern Europe, University of Warsaw)

*Numismatist:* Piotr Jaworski (Institute of Archaeology, University of Warsaw)

*Archaeozoologist:* Joanna Piątkowska-Małecka (Institute of Archaeology, University of Warsaw)

*Archaeobotanist:* Assoc. Prof. Monika Badura (Laboratory of Palaeoecology and Archaeobotany, Department of Plant Ecology, University of Gdańsk)

*Special project* (collecting historical travel sources on the discovery of Lebanese antiquities): Monika Rekowski (Institute of Archaeology, University of Warsaw)

*Restorers:* Julia Burdajewicz, Anna Tomkowska (Department of Artworks Conservation and Restoration, Academy of Fine Arts, Warsaw)

*Documentalists:* Magdalena Makowska (independent), Marek Puskarski (PCMA UW)

*Photographer:* Adam Oleksiak (freelance)

*Student-trainees:* Aleksandra Pawlikowska (Institute of Archaeology, University of Warsaw), Maciej Sobczak (Adam Mickiewicz University, Poznań), Justyna Włoch (Academy of Fine Arts, Warsaw)

## JIYEH (PORPHYREON)

Excavation focused on establishing local chronology through a reconstruction of the stratigraphy of the central part of the site (the Roman and Byzantine residential quarter in Sector D), where work has been continued since 2012. Three main phases in the history of Jiyeh: Iron Age II, Persian–Hellenistic with possible continuation into the Roman and Byzantine periods, found full confirmation in the new trenches. Such a clear stratigraphy extending from Iron Age II to Byzantine times is an exception on the Lebanese coast. The relatively late date of the residential units (4th and even 5th century) excavated in 1975 by the Lebanese team was established. Of added interest was a small mosaic of Byzantine date depicting a lion and with parallels in the region.

*Dates of work:* 9 June–19 July 2014

*Co-directors:* Dr. Tomasz Waliszewski, archaeologist (Institute of Archaeology, University of Warsaw), Myriam Ziadé, archaeologist (Directorate General of Antiquities)

*Archaeologists:* Magdalena Antos (PCMA UW), Dr. Mikayel Badalyan (Metsamor Museum, Armenia), Dr. Michał Dzik (Institute of Archaeology, University of Rzeszów), Szymon Lenarczyk (Institute of Archaeology, University of Warsaw), Dr. Rafał Solecki (Institute of Archaeology, Cardinal Stefan Wyszyński University, Warsaw), Agnieszka Szymczak (PCMA UW), Artavazd Zakyan (Metsamor Museum, Armenia)



*Ceramologists:* Dr. Krzysztof Domżałski (Institute of Archaeology and Ethnology, Polish Academy of Sciences), Zofia Kowarska (PhD candidate, Center for Research on the Antiquity of Southeastern Europe, University of Warsaw), Dr. Urszula Wicenciak (PCMA UW)

*Archaeobotanist:* Assoc. Prof. Monika Badura (Laboratory of Palaeoecology and Archaeobotany, Department of Plant Ecology, University of Gdańsk)

*Architect:* Andrzej Bruno Kutiak, post graduate student: architecture and art history (Faculty of Art History, Jagiellonian University; 2014)

*Documentalists:* Magdalena Makowska (independent), Marek PuszkarSKI (PCMA UW)

*Restorers:* Julia Burdajewicz, Anna Tomkowska (both Department of Artworks Conservation and Restoration, Academy of Fine Arts in Warsaw)

*Student-trainees:* Wioleta Hypiak, Alicja Jurkiewicz, Amadeusz Kusibab, Antoni Mrozowski, Aleksandra Pawlikowska, Andrzej Rokoszewski, Zuzanna Szymczak, Barbara Ślżak, Maciej Wyżgoł (Institutes of Archaeology, University of Warsaw and Jagiellonian University, Kraków)

*Acknowledgments:* The Polish–Lebanese Archaeological Project is greatly indebted to the Minister of Culture Gaby Layoun, for permission to excavate, as well as to Asaad Seif, Anne-Marie Afeiche and Myriam Ziadé for making the work possible.

## JORDAN

### BEIT RAS

Fieldwork at Beit Ras in the Irbid region of northern Jordan, the site of ancient Kapitoliás (one of the Dekapolis towns), established the nature of the architecture once present on the northern slope of the city mound, neighboring on the well-preserved remains of a 2nd century AD theater. An electric resistivity survey detected an alignment of walls apparently in agreement with that of the streets of the Roman-period town. The surface pottery collection provided a date range from the 2nd to the 12th/13th century. Surface finds included lumps of “raw” glass, pieces of slag and production wasters suggestive of glass-making operations in the area during the Byzantine–Umayyad period (6th to mid-8th century). Pottery workshops may have also been active here.

Testing (three trenches) in November 2014 uncovered a sequence of floors from the late Roman (4th/5th century AD) through the Umayyad (later 7th to mid-8th century AD) period. The architecture and installations were mostly of domestic nature, constructed on terraces, dating to the 4th–5th century AD. A mosaic-paved basin (6th century AD) and fragmentary wine amphorae attested to a flourishing wine-making industry between the 6th and 8th century. The buildings in this part of the town appear to have been destroyed during the great earthquake of AD 749. Agricultural activity apparently was resumed in the area probably in Fatimid/Ayyubid times as attested by a rock-cut cistern from late Roman/Byzantine times, reused (after a period of abandonment) in the 11th century.

*Dates of work:* 9–27 November 2014; 3–27 May 2015

*Director:* Prof. Jolanta Młynarczyk, archaeologist (Institute of Archaeology, University of Warsaw; 2014, 2015)

*Deputy director:* Mariusz Burdajewicz (Institute of Mediterranean and Oriental Cultures, Polish Academy of Sciences; 2014, 2015)

*DOA representative (Irbid branch):* Eng. Amjad Batayneh (2014, 2015)

*Archaeologists:* Mariusz Drzewiecki (Adam Mickiewicz University, Poznań; 2015), Iwona Laskowska, archaeologist and arabist (independent; 2014, 2015), Dorota Mazanek (PhD candidate, Center for Research on the Antiquity of Southeastern Europe, University of Warsaw; 2015)

*Geophysicist:* Jakub Ordutowski (Marie Curie-Skłodowska University, Lublin; 2014)

*Student-trainee:* Rafał Bieńkowski (Institute of Archaeology, University of Warsaw; 2015)

*Acknowledgments:* The team benefited in both seasons from the cooperation and support of Prof. Nabil Bader, Dean of the Faculty of Archaeology and Anthropology, Yarmuk University (Irbid). The support of Polish Ambassador in Amman, Dr. Krzysztof Bojko, is most gratefully acknowledged.

## IRAQI KURDISTAN

“NEWCOMERS AND AUTOCHTHONS” SURVEY IN THE UPPER GREATER ZAB AREA, see in this volume.

## GEORGIA

GONIO/APSAROS, see in this volume.

## ARMENIA

METSAMOR, see in this volume.

## SAUDI ARABIA

### AYNUNA

The Aynuna Project is a new initiative of the Polish Centre of Mediterranean Archaeology in collaboration with the Saudi Commission of Tourism and National Heritage. The site is located in the province of Tabuk in northwestern Saudi Arabia, on the Red Sea coast. The fieldwork, carried out over the course of 2015, concerned an inland site, located on a rocky terrace overlooking the dry bed of Wadi Aynuna, about 3 km away from the coastline. A large rectangular structure, most probably a *khan*, was excavated and three other similar structures, interpreted as *caravanserais*, were tested. The excavations uncovered storage facilities as well as other buildings connected with trade, dated from the 1st century AD through the 8th century AD.

Aynuna is regarded by some scholars as the site of the Nabatean port of Leuke Kome, known from the historical record. The Nabatean Kingdom, with its capital in Petra, lasted from the 3rd century BC until AD 106 and its merchants were intermediaries in the trade exchange between Southern Arabia (present-day Yemen) and the Mediterranean basin. The Aynuna Project, which is dedicated to the study of the infrastructure of international trade in the Red Sea area in the Roman period, is financed from a Harmonia 6 grant from the Polish National Science Centre (UMO-2014/14/M/HS3/00795).

*Dates of work:* 12 November–15 December 2014; 5 November–15 December 2015

*Co-directors:* Prof. Michał Gawlikowski (PCMA UW; 2014, 2015), Dr. Abdullah al-Zahrani (Saudi Commission for Tourism and National Heritage; 2014, 2015)

*Deputy director:* Dr. Karol Juchniewicz (PCMA UW; 2014, 2015)

*Archaeologists:* Abdullah al-Mutairi (Saudi Commission of Tourism and National Heritage; 2014, 2015), Dr. Tomasz Scholl (Institute of Archaeology, University of Warsaw; 2015), Marek Truszkowski (PCMA UW; 2015), Walid al Badaywi (National Museum, Riyadh; 2014, 2015)

*Topographers:* Fahd al Dhofari (Saudi Commission of Tourism and National Heritage; 2015), Jakub Kaniszewski (freelance; 2014, 2015), Wiesław Małkowski (Institute of Archaeology, University of Warsaw; 2015)

*Glass specialist:* Krystyna Gawlikowska, art historian (independent; 2014, 2015)

*Documentalist:* Marcin Wagner (Institute of Archaeology, University of Warsaw; 2015)

*Driver:* Selim Hawayti (Saudi Commission of Tourism and National Heritage; 2015)

## KUWAIT

### BAHRA 1, AL-SUBIYAH (AS-SABBIYA)

Six building units were excavated during two seasons of fieldwork at this large Ubaid-period site which combines Ubaid and Arabian Neolithic characteristics, proving intensive contacts with Mesopotamia in the second half of the 6th millennium BC. Of particular interest was Unit 6 with an oval courtyard surrounded by a stone enclosure and fireplaces and fire-pits in two occupation phases. Several fireplaces were found also in an older level, apparently of a distinctly different character. Unit 14 showed the first case of a shelter being built into natural rock feature, while the remains under Unit 3, presenting a different spatial layout than later structures, indicated a period of abandonment of some duration between successive phases. The rich pottery collection of over 6200 fragments was broken down into nearly equal shares of Ubaid ware and Coarse Red Ware. The lithic material (over 30,000 tool fragments and debitage) formed a specialized assemblage dedicated to the production of tubular shell beads, adding to the evidence already collected for the existence of bead workshops at the site. An exceptional find was a copper object from one of the older layers of the settlement.

See also: Bieliński, P., Białowarczuk, M., Kiersnowski, H., Piątkowska-Malecka, J., Reiche, A., Smogorzewska, A., Szymczak, A. (2015). *Bahra 1. Excavations in 2013. Preliminary report on the fifth season of Kuwaiti–Polish archaeological explorations* [=KPAM Publications]. Kuwait–Warsaw: National Council for Culture, Arts and Letters, Kuwait; PCMA UW

*Dates of work:* 20 October–4 December 2014; 19 October–28 November 2015

*Co-directors:* Prof. Piotr Bieliński, archaeologist (Institute of Archaeology, University of Warsaw; 2014, 2015), Dr. Hamid Al-Mutairi (Department of Antiquities and Museums of the State of Kuwait; 2014, 2015)

*NCCAL representatives:* Mustafa Al-Ansari, Talal Al-Shimery (both 2014, 2015)

*Archaeologists:* Dr. Marcin Białowarczuk, lithic material specialist (Institute of Archaeology, University of Warsaw; 2014, 2015), Dorota Bielińska (Institute of Mediterranean and Oriental Cultures, Polish Academy of Sciences; 2014, 2015), Mateusz Iskra (PCMA UW scholarship holder; 2014, 2015), Ewelina Mizak (PhD candidate, Faculty of Oriental Studies, University of Warsaw; 2014), Dr. Agnieszka Pieńkowska (PCMA UW; 2014, 2015), Andrzej Reiche, small finds specialist/photographer (National Museum in Warsaw; 2014, 2015), Dr. Łukasz Rutkowski (PCMA UW; 2014), Marek Truszkowski (independent; 2014), Dr. Urszula Wicenciak (PCMA UW; 2015), Dr. Zuzanna Wygnańska (PCMA UW; 2014)

*Ceramologist:* Dr. Anna Smogorzewska (Institute of Archaeology, University of Warsaw; 2014, 2015)

*Archaeobotanist:* Agata Bebel (PhD candidate, W. Szafer Institute of Botany, Polish Academy of Sciences, Kraków branch; 2015)

*Registrar:* Agnieszka Szymczak, archaeologist (PCMA UW; 2015)

*Surveyor:* Piotr Zakrzewski (PhD candidate, Institute of Archaeology, University of Warsaw; 2014, 2015)  
*Documentalists:* Ewa Hander (Archaeological Museum of Chełm; 2014), Marta Momot, archaeologist (PCMA UW; 2014, 2015)  
*Photographer:* Adam Oleksiak, archaeologist (freelance; 2014)  
*Volunteer:* Hubert Kiersnowski, geologist

### **FAILAKA ISLAND: KHARAIB EL-DESHT ARCHAEOLOGICAL PROJECT**

Two stone-built structures were explored in the densely settled residential quarter of southeastern Kharaiib el-Desht, a site on the northern coast of Failaka Island in Kuwait. Bulky internal buttresses were a typical feature of this architecture, suggesting a link with the military forts at Zor and Quraniya on the coast (watchtower?). The waterfront project identified many stone structures interpreted as fish traps in the bays of Kharaiib el-Desht and Al-Khidr.

*Dates of work:* 8 March–26 April 2015

*General director:* Prof. Piotr Bieliński (Institute of Archaeology, University of Warsaw)

*Field director (Kharaiib el-Desht):* Dr. Agnieszka Pieńkowska (PCMA UW)

*Project field director (“Waterfront and Underwater Archaeology of Kuwait. Archeorisk on the Coastal Zone around Failaka Island, Kuwait”):* Magdalena Nowakowska (Institute of Archaeology, University of Warsaw)

*Archaeologists:* Katarzyna Cieślak (independent), Mateusz Iskra (PhD candidate, Institute of Archaeology, University of Warsaw), Dr. Łukasz Miechowicz (Institute of Archaeology and Ethnology, Polish Academy of Sciences), Ewelina Mizak, Anika Kamińska, Karol Ochnio, Marek Truszkowski (all four independent)

*Ceramologist:* Marta Mierzejewska (PCMA UW)

*Photographer:* Adam Oleksiak (freelance)

*Documentalist:* Marek Puskarski (PCMA UW)

*Topographers/documentalists:* Jakub Kaniszewski, Szymon Lenarczyk (both freelance), Piotr Zakrzewski (PhD candidate, Institute of Archaeology, University of Warsaw)

## **OMAN**

### **QUMAYRAH**

Brief reconnaissance in the microregion of Qumayrah prior to the inception of a joint PCMA and Department of Archaeological Excavation and Study of Oman project. The survey covered an L-shaped depression between hill massifs, extending from the village of al-Ayn in the south to Bilt in the east. Near al-Ayn a small burial ground of 10 circular tombs was noted, most probably of the Umm al-Nar period (2700–2000 BC). There was also a prehistoric site; three tower structures built of roughly dressed ashlar, the best preserved being about 3 m high and 20 m in diameter. A second concentration of sites lay about 10 km out of Qumayrah in the direction of Bilt; at its core was a single tomb of Umm an-Nar date with a facade of well dressed and fitted blocks (“sugar lumps”), now scattered around the base. The ruins of an extensive village, still undated, were observed near the tomb.

*Dates of work:* 19 September–4 October 2015

*Director:* Prof. Piotr Bieliński, archaeologist (Institute of Archaeology, University of Warsaw)

*Omani representative:* Sulaiman Al-Jabri

*Archaeologists:* Dr. Agnieszka Pieńkowska, Dr. Łukasz Rutkowski (both PCMA UW), Dr. Marcin Białowarczuk, lithics specialist (Institute of Archaeology, University of Warsaw), Dorota Bielińska (Institute of Mediterranean and Oriental Cultures, Polish Academy of Sciences)

*Topographer:* Roman Łopaciuk (freelance)