## **Polish Research in 2017**

Listed in this section is the fieldwork organized and funded, in full or in part, by the Polish Centre of Mediterranean Archaeology University of Warsaw (PCMA UW), as well as associated grant projects awarded by the National Science Center of the Republic of Poland, conducted in 2017 and in the archaeological season overlapping into 2018. Sites are presented in alphabetical order by country, the sequence of presentation of the latter arbitrary, reflectig the traditional scope of current involvement. Brief summaries of the most important results and relevant publications, including fieldwork dates and teams, appear for projects not reported in full in this volume.

The Syrian projects: Hawarte, Palmyra, Tell Arbid and Tell Qaramel, remain suspended due to the political situation in the region and are not included below. Some of the Egyptian projects were cancelled and others seriously delayed, resulting in decisions to reschedule work.

#### **EGYPT**

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

Ongoing research grant: Dr. Katarzyna Lach, "Studies on the character of social contacts in Roman Alexandria based on numismatics research. Analysis of coin finds from Kom el-Dikka in the archaeological context" (NCN Fuga 3: 2014/12/S/HS3/00088)

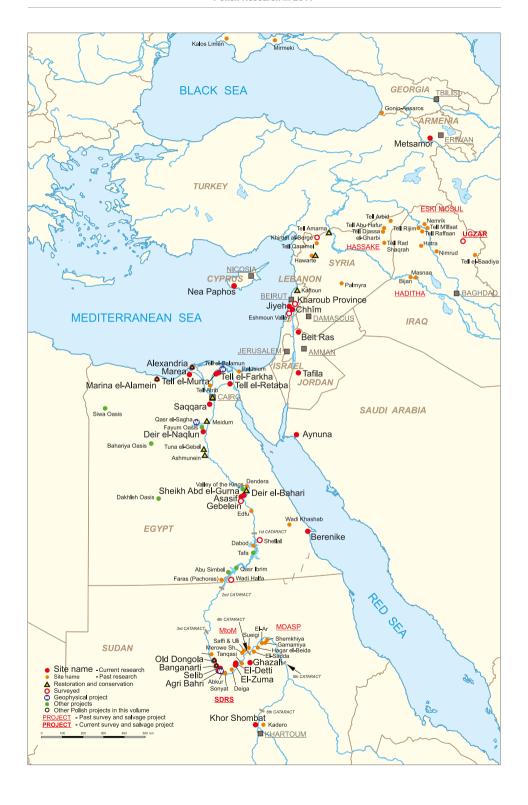
#### **BERENIKE**

The January–February season in 2017 had to be cancelled due to a delayed permit issue. A study season was organized at the site in the fall. A core team comprised grant holders completing grant-related research on finds stored on-site, the team's glass specialist and a surveyor preparing a hypsometric map of the site.

Dates of work: 16 September–16 October 2017
Director: Iwona Zych, archaeologist, small finds specialist (PCMA UW)
SCA representative: Mahmud Ahmed Husein (Red Sea Inspectorate)
Archaeologists and specialists: Renata Kucharczyk (ancient glass specialist), Joanna
Rądkowska (Harbor Temple study), and Marek Woźniak (all PCMA UW)
Surveyor: Andrzej Szeszko (freelance)

Three research grants funded by the National Science Center of the Republic of Poland, two from Berenike and one from Aynuna, Saudi Arabia (see below):

Ongoing research grants: Iwona Zych, MA "Religious practices and beliefs in the "Red Land": religious building complexes and cult objects from the port of Berenike



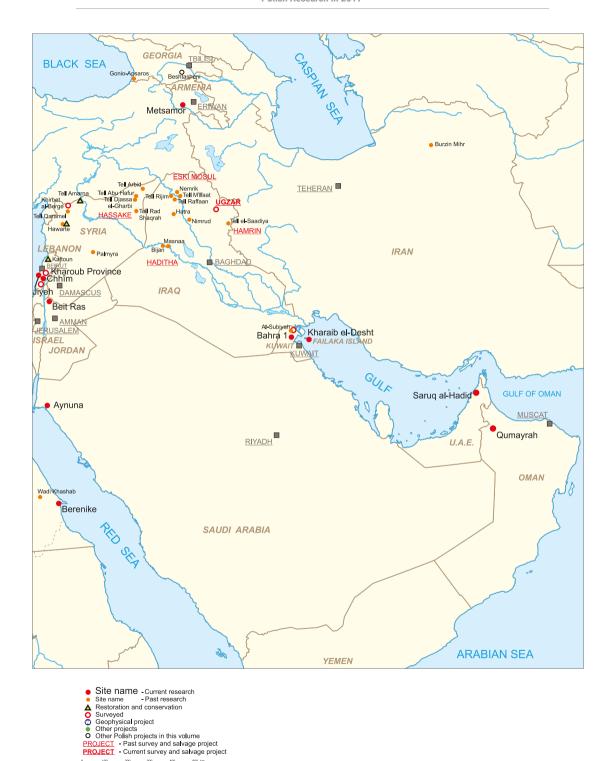
as a manifestation of the religiousness of the population of the Egyptian Red Sea coast and Eastern Desert from the mid 3rd century BC to the early 6th century AD" (NCN Preludium 7: UMO-2014/13/N/HS3/04400)

Marek Woźniak, MA "From military base to international emporium: the nature and functioning of the Hellenistic port of Berenike on the Red Sea" (NCN Grant Preludium 9: 2015/17/N/HS3/00163)

Prof. Michał Gawlikowski "Infrastructure of the international trade in the Red Sea area in the Roman period" (NCN Harmonia 6: UMO-2014/14/M/HS3/00795)

#### **OVERVIEW WITH INDEX**

[LP] List of projects	[R] Reports	[S] Studies
Alexandria, Kom el-Dikka (Egypt)		[R] 35
Asasif (Egypt)		[R] 183, 195
Berenike (Egypt)		[LP] 15 [R] 203
Chhîm (Lebanon)		[LP] 26
Deir el-Bahari, Temple of Hatshepsut (Egy	pt)	[LP] 19
Deir el-Bahari, Temple of Tuthmosis III (Eg	ypt)	[LP] 21
Dongola (Old) (Sudan)		[LP] 23 [S] 599, 617
Faysaliyya, al-Tafila (Jordan)		[R] 379
Gebelein (Egypt)		[R] 235
Ghazali (Sudan)		[R] 245
Gonio/Apsaros (Georgia)		[S] 485
Khirbat al[as]-Sar (Sara) (Jordan)		[R] 341
Marea (Egypt)		[LP] 21
Marina el-Alamein (Egypt)		[R] 57, 67, 85
Munqata'a (al-Tafila) (Jordan)		[R] 379
Nea Paphos (Cyprus)		[LP] 25 [S] 527
Saqqara (Egypt)		[R] 169
Tanqasi (Early Makuria Research Project)	(Sudan)	[LP] 24 [R] 273, 289, 303, 317
Tell el-Farkha (Egypt)		[R] 123
Tell el-Murra (Egypt)		[R] 149
Tell el-Retaba (Egypt)		[R] 93
Valley of The Kings (Ramesses VI) (Egypt)		[LP] 23



See also: Selected papers of the 2016 conference in Cairo in a Special Studies volume Research on the Red Sea, PAM 26/2 (2017): D. Eguiluz Maestro "Conservation interventions at the site of Berenike (Egypt): challenges and solutions in an ancient city of the Eastern Desert" (pp. 211–223); M. Hense "The Great Temple of Berenike: new findings of the Berenike Temple Project (pp. 133–146); A.M. Kotarba-Morley "Port town and its harbors: sedimentary proxies for landscape and seascape reconstruction of the Greco-Roman site of Berenike Trogodytica on the Red Sea coast of Egypt" (pp. 61–92); R. Kucharczyk "Come and dine with me... Early Roman luxury glass tableware from Berenike – new evidence from the harbor area and the trash dumps" (pp. 147–166); M. Osypińska and P. Osypiński "New evidence for the emergence of the human-pet relation in early Roman Berenike (first–second century AD)" (pp. 167–192); J. Then-Obłuska "Beads and pendants from the late Harbor Temple and harbor temenos in the Red Sea port of Berenike (seasons 2010–2013): materials, techniques, functions and cultural" (pp. 193–210); M. Woźniak "Shaping a city and its defenses: fortifications of Hellenistic Berenike Trogodytica" (pp. 43–60); I. Zych "The harbor of early Roman "Imperial" Berenike: overview of excavations from 2009 to 2015" (pp. 93–132)

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

The conservation effort in the Complex of the Royal Cult on the Upper Terrace of the Temple of Hatshepsut was continued, coupled with documentation and requisite digging. Various ongoing projects were continued, nearing in many cases completion:

- conservation and restoration of the Complex of the Sun Cult and the Main Sanctuary of Amun-Re; the two parts of the temple have now been opened to the public;
- restoration of the Osiride statues of Hatshepsut in the façade of the Upper (Coronation) Portico and the queen's sandstone sphinxes; the North Colossus and the upper part of the Southern Colossus at the edges of the Lower Portico of the Hatshepsut temple (ongoing);
- $_{\diamond}$  reconstruction of the sandstone painted statue of Amenhotep I in the form of a mummiform figure of the god Osiris, found in Asasif.

#### **OVERVIEW WITH INDEX**

[LP] List of projects	[R] Reports	[S] Studies
Aynuna (Saudi Arabia)		[LP] 28
Bahra 1 (al-Subiyah) (Kuwait)		[LP] 29
Iraqi Kurdistan (Iraq)		[R] 417
Kharaib el-Desht (Failaka, Kuwait)		[LP] 30
Metsamor (Armenia)		[R] 429
Qumayrah Ayn (Oman)		[LP] 31, [R] 445
Saruq al-Hadid (UAE Dubai Emirate)		[LP] 32

Documentation in the Ptolemaic Portico and in the Upper Courtyard as well as by the south wall of the Chapel of Hatshepsut, in the Lower Courtyard and by the Hathor Ramp Gate required additional testing. A Third Intermediate Period cemetery was unearthed in the Upper Terrace. Coffins from the Tomb of Montu Priests were documented and studied and an X-ray examination of the mummies carried out (for the results, see selected articles in the Special Studies volume *PAM 27/2: Deir el-Bahari Studies II*).

Documentation and study on decoration in the Main Sanctuary of Amun-Re, the South Chamber of Amun, and the Punt and Birth Porticoes were carried on in preparation for a monographic publication. The same was concluded for the Chapel of Tuthmosis I. Building *dipinti* and graffiti were documented. The results of 3D scanning as well as Ground Penetrating Radar (GPR) surveys were applied in studies of the temple.

The following projects were continued as part of the larger Deir el-Bahari Project:

- 1) Temple of Tuthmosis III storeroom project, directed by Monika Dolińska (see below in this section);
- 2) Temple of Tuthmosis I storeroom project, catalogue of block fragments by Jadwiga Iwaszczuk;
- 3) Asasif Necropolis Project, directed by Patryk Chudzik (see the report in this volume).

Acknowledgments: The project benefited from the generous assistance of Dr. Mohamed Ismail, Director General of Sector for Foreign Missions Affairs, Dr. Mohamed Abdel Aziz, Director General of Upper Egypt, Mr. Talat Abdel Aziz, Director General of the West Bank in Luxor, Mr. Ezz el-Din, Chief Inspector of the West Bank Central Sector, Mr. Ibrahim Souleyman (former director of Karnak) and Dr. Hisham Elleithy, Director of Scientific Publication and Documentation Department.

Dates of work: 12 March-9 April 2017

Director: Dr. Zbigniew E. Szafrański, egyptologist (PCMA UW)

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

SCA representatives: Omar Fathi Hassan Hasan and Elazab Ragab Ahmed Abd Rabu Egyptologists: Katarzyna Kapiec (PhD candidate, Antiquity of Southeastern Europe Research Center, University of Warsaw), Dr. Edyta Kopp (Faculty of Oriental Studies, University of Warsaw), Adrianna Madej (IKSiO PAN), Dr. Franciszek Pawlicki (PCMA UW), Cynthia May-Sheikholeslami (independent) and Patryk Chudzik (independent), Dr. Filip Taterka (Adam Mickiewicz University in Poznań) Architects: Dr Teresa Dziedzic (Wrocław University of Technology), Sergio Alarcón Robledo (independent)

Conservators: Rajmund Gazda, Dr. Maria Lulkiewicz, Dorota Rudzińska (all freelance)

Engineer: Mieczysław Michiewicz (freelance) Photographer: Maciej Jawornicki (freelance)

Documentalists: Sarah Fortune, registrar (student, University of Manchester), Marek Puszkarski (PCMA UW)

Student-trainees: Katarzyna Kasprzycka (Institute of Archaeology, University of Warsaw)

Volunteer: G. Katarzyna Szafrańska (Poland)

Rais: Ragab Ahmed Yassin

**DEIR EL-BAHARI: ASASIF** (research program), see in this volume.

## DEIR EL-BAHARI: TEMPLE OF TUTHMOSIS III (research program)

Branch of the Polish-Egyptian Archaeological and Conservation Mission to the Hatshepsut Temple at Deir el-Bahari

Ongoing work on the theoretical reconstruction of various temple chambers based on a reconstruction of the painted relief wall decoration. The team proceeded with a program of checking reconstruction drawings against surviving block fragments, coupled with a complementary project of high quality professional photography supporting a series of photomontages of selected parts of the decoration. The reconstruction of the Hypostyle Hall, Sanctuary, and Rooms D, G and H is nearing completion, in preparation for the final publication.

Dates of work: November 2017

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

SCA representative: Abla Abd el-Haq

Egyptologists: Janina Wiercińska (National Museum in Warsaw), Nathalie Beaux (IFAO)

Photographer: Zbigniew Doliński (National Museum in Warsaw)

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

## GEBELEIN ARCHAEOLOGICAL PROJECT (Egypt), see in this volume.

## MAREA (Egypt)

Basilica project and late antiquity building in Marea and its inhabitants

Continued exploration of the great Basilica concentrated on the north entrance and staircase in the northwest corner of the church. A few marble pavement slabs still remained from the original interior decoration, whereas the inner walls of the staircase revealed impressions of wooden beams from the steps. Excavations revealed another section of the stylobate supporting the columns separating the northern aisle from the nave; the negative impressions of four columns were noted 230 cm apart. Further fieldwork was also undertaken in the building (H1) located east of the basilica, focusing on completing the exploration of the installation in room T1, the documentation of the architectural stratigraphy of walls and floors, additional orthophotographs and 3D models, and recording of small finds.

The ceramic material consisted mainly of amphorae: local LRA 5/6 (produced in Abu Mena) dated to the 6th–7th century, types Kellia 187–190, Kellia 167 and LRA 7 (types 173–177) from the 6th–8th centuries, LRA 7, AE 3 and AE 4 from earlier phases at the site, as well as imported LRA 1. The largest assemblage came from the staircase. The material also included ERSW A tableware, fragments of bowls, plates, water jugs (gullas) and scarce fragments of kitchenware ("pans", lids, cooking pots), storage pots and lids. The pottery assemblage recovered from building H1 in seasons 2014 and 2016 was fully documented. The collection of coins from recent excavations was also cleaned and studied.

A field survey was conducted to evaluate the effectiveness of geophysical methods for locating archaeological features preserved in the vicinity of the basilica. A total of 7600 m $^2$  were surveyed using the magnetic method, and the resistivity survey was conducted in a sector of 1200 m $^2$ . The survey areas were positioned in geographical coordinate grid WGS 84 projection UTM (zone 35N: EPSG32635) based on a satellite image downloaded from the Google Earth website.

Dates of work: 1–25 November 2017

Director: Krzysztof Babraj, archaeologist (Archaeological Museum in Kraków)

Deputy Director: Prof. Tomasz Derda, papyrologist, epigrapher (Institute of Archaeology, University of Warsaw)

*SCA representative*: Mai Ibrahim Abed El Monem (archaeology), Amr Ibrahim Ali Noah, Director of the Fawzy el Fakhrany Storage Museum in Marea, Ashref Mohammed Abed El Samea (conservation), Mohamed Abdelbaset Ahmed (conservation), Sherif Ayman Saad Ahmad (survey)

Archaeologists: Anna Drzymuchowska, ceramologist (Archaeological Museum in Kraków), Dr. Mariusz Gwiazda (independent), Aleksandra Pawlikowska (independent)

Architect: Daria Tarara, chief architect (freelance)

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

Glass expert: Renata Kucharczyk (PCMA UW)

Conservator: Tomasz Skrzypiec (freelance)

Geophysical survey: Prof. Krzysztof Misiewicz (Institute of Archaeology, University of Warsaw)

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

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

NAQLUN (Deir el-Nekloni), season cancelled.

**SAQQARA**, see in this volume.

SHEIKH ABD EL-GURNA: THE PHARAONIC PROJECT, season cancelled.

SHEIKH ABD EL-GURNA MANUSCRIPTS CONSERVATION MISSION, project suspended.

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

TELL EL-MURRA (NORTHEASTERN NILE DELTA SURVEY), see in this volume.

TELL EL-RETABA, see in this volume.

#### VALLEY OF THE KINGS: TOMB OF RAMESSES VI

The team continued documentation of Roman-age inscriptions from the rock-cut walls, covering sections A to E of the royal tomb. The work still needs to be continued.

Dates of work: December 2017

*Director*: Adam Łukaszewicz, archaeologist and epigrapher (Institute of Archaeology, University of Warsaw)

Archaeologists/documentalists: Kamila Braulińska, photographer (PhD candidate, Faculty of History, University of Warsaw), Anastazja Golijewskaja, draftsperson (Institute of Archaeology, University of Warsaw)

#### SUDAN

#### DONGOLA (OLD)

Two programs supported by the Qatar–Sudan Archaeological Project (QSAP#10 and QSAP#31), implemented by the PCMA team.

Monastery on Kom H: program of excavations in the courtyard, the Central building in the northern part of the monastery, the Northeastern Building and the northern complex: NC.1 Circular building, NB.2 Church with preserved paintings and inscriptions from the early 14th century, NB.4 storied monastic building from the early 7th century. Wall painting conservation program on newly discovered representations and documentation of inscriptions from the Northwest Building and Church NB.2. Anthropological examination of four 14th-century tombs in the southwestern cemetery and infant pot burials from the monastery courtyard (and the Citadel as well). Pottery studies. Shelter roof constructed over the remains of the NB.2 church with wall paintings.

Citadel. Excavation at the SWN site covered the southwestern part of the palace (SWN.B.I) and inside the Church of the Archangel Raphael (SWN.B.V). Conservation of the late 8th century wall paintings found inside the church. Study program encompassing the Funj-period basketry and textiles uncovered in the previous season at the SWN site.

*Mosque (Throne Hall).* Protection of the porch area, including secure access for tourists. Mounting of the new roof structure, which will have to be continued.

Rock-cut tombs. Shelter constructed over two tombs from the 5th/6th century AD, making them accessible to tourists. The work was necessitated by the rapidly growing village of El Ghaddar, which has encroached on the cemetery from the 3rd–5th century AD.

Deserted village south of the Citadel (18th–20th century): program of drone photography to record the surviving architecture from the air.

Dates of work: 5 November-13 December 2017; 10 January-28 February 2018

Co-Directors: Prof. Włodzimierz Godlewski, archaeologist (both seasons); Prof.

Adam Łajtar, epigraphist (Institute of Archaeology, University of Warsaw)

NCAM representative: Hanna Mirgahani Osman (first season), Sajada Ahmed (second season)

Archaeologists: Dr. Dorota Dzierzbicka, archaeologist (Institute of Archaeology, University of Warsaw); Vincent Van Greven (independent)

Anthropologist: Robert Mahler (PCMA UW)

Ceramologist: Katarzyna Danys (independent; both seasons)

Basketry specialist: Dr. Anetta Łyżwa-Piber (Institute of Mediterranean and Oriental Cultures, Polish Academy of Sciences)

Textile specialist and restorer: Barbara Czaja (Museum of King Jan III's Palace at Wilnaów)

*Epigraphist*: Agata Deptuła (PhD candidate, Institute of Archaeology, University of Warsaw; second season)

Architects: Dr. Romuald Tarczewski, construction engineer and Monika Drab (Wrocław University of Science and Technology; second season)

Restorers (wall painting): Urszula Kusz, Ewa Parandowska, Aleksandra Stachowicz (freelance)

Archaeologist/surveyor: Szymon Lenarczyk (PhD candidate, Institute of Archaeology, University of Warsaw; both seasons)

## EARLY MAKURIA RESEARCH PROJECT: Tanqasi, see in this volume.

The Early Makuria research project focuses on the beginnings of the Kingdom of Makuria in the region between the Third and Fourth Nile Cataracts. The program sets its scope on identifying the nature of social changes occurring in the area in the 4th and 5th centuries. A core issue under study is the manner and circumstances of the transformation of Meroitic into Makurian society. The social, political and religious changes taking place in the Nile Valley in the 4th and 5th century should be analyzed and interpreted based on regional evidence limited to the territory occupied in the 6th century by the three separate kingdoms of Nobadia, Makuria and Alodia. The project, now directed by Assist. Prof. Mahmoud El-Tayeb, was co-directed until 2007 by Prof. Włodzimierz Godlewski. The list of explored sites, surveyed in 2005, include

el-Zuma (since 2004), el-Detti (since 2014), Merowe Shariq (2006) and Tanqasi (since 2006). The work is reported regularly in *PAM*.

Ongoing research grant: Dr. Urszula Iwaszczuk "Opportunities for research on the economy of the el-Zuma/el-Detti and Tanqasi microregions on the basis of animal bone remains from a funerary context" (NCN Preludium 7, Grant 2014/13/N/HS3/04620)

# GHAZALI ARCHAEOLOGICAL SITE PRESETATION PROJECT (G.A.S.P.), see in this volume.

#### Ongoing research grants related to Nubia:

Dr. Artur Obłuski "Nubian Monasticism. The role of religious institutions in the peripheries of the Byzantine World" (NCN Sonata 7, Grant 2014/13/D/HS3/03829)

Dr. Joanna Then-Obłuska "A reconstruction of trade contacts in Northeast Africa: an interdisciplinary analysis of Nubian personal adornment" (NCN Sonata 5, Grant 2013/09/D/HS3/04508)

#### **CYPRUS**

#### **NEA PAPHOS**

Team members participated in a program of studies of the pottery and small finds from more than 50 years of excavations by the PCMA UW project (in alphabetical order):

Dr. Dobiesława Bagińska (Archaeological Museum in Poznań): Roman amphora studies, material from the 2011–2013 excavations;

Dr. Aleksandra Brzozowska-Jawornicka (Wrocław University of Science and Technology): Nabatean-style architectural decoration from the 2011–2013 excavations;

Dr. Agata Dobosz (Paphos Agora Project, Jagiellonian University Kraków): amphora stamps;

Michalina Dzwoniarek-Konieczna\* (PhD candidate, Adam Mickiewicz University in Poznań): stone artifacts and stone use in architecture;

Jacek Hamburg (independent): metal artifacts;

Prof. Elżbieta Jastrzębowska\*: painted wall decoration from the House of Aion;

Prof. Barbara Lichocka\*: coin studies;

Dominika Majchrzak\*: lead weights;

Edyta Marzec (Post-Doc, Fitch Laboratory, British School at Athens): Hellenistic Colour Coated Ware, archaeometric studies;

Dr. Henryk Meyza\*: pottery and stratigraphy of the Villa of Theseus in Nea Paphos; Julia Mikocka\* (PhD candidate, NCN Preludium grant 2015/19/N/HS3/00907): architecture of the House of Aion;

Marcin Romaniuk\* (PhD candidate): water-supply installations;

Monika Więch\* (PhD candidate, NCN Preludium 2017/25/N/HS3/02910): cooking wares;

(\* Institute of Mediterranean and Oriental Cultures, Polish Academy of Sciences)

The Institute of Mediterranean and Oriental Cultures, Polish Academy of Sciences, and the PCMA UW co-organized an international conference "Decoration of Hellenistic and Roman buildings in Cyprus. Residences at Nea Paphos and other cities of the region", held in Warsaw on 10–11 March 2017. Participants in the PAPHOS II: "Nea Paphos and Western Cyprus" conference on 11–15 October 2017 in Paphos included team members Henryk Meyza, Wiktor Andrzej Daszewski, Barbara Lichocka, Aleksandra Brzozowska, Monika Więch, Marcin Romaniuk and Anna Kubicka. Jolanta Młynarczyk sat on the conference's Scientific Committee.

See also: papers in the volume *PAM 26/1 (2017)*: H. Meyza, M. Romaniuk, M. Więch, "Nea Paphos. Seasons 2014 and 2016" (appendices D. Mazanek-Somerlik, "Glass from the HH Courtyard" and M. Więch, "Note on the Pottery from the Circular Basin S:1/16"), 397–426; M. Romaniuk, "A circular pool in the main courtyard of the "Hellenistic" House in Nea Paphos. Preliminary remarks", 427–438; M. Więch, "Cooking Ware pottery from the "Hellenistic" House at Nea Paphos. Seasons 2014 and 2016", 439–450. Also: E. Marzec, E. Kiriatzi, N.S. Müller, A. Hein, "Provenance and technology of a group of Hellenistic Colour-Coated ware pottery from the excavations at Nea Paphos in Cyprus", *Journal of Archaeological Science Reports* (https://doi.org/10.2016/j. jasrep.2017,10.006); A. Brzozowska-Jawornicka, "In search of a Paphian lost circular building", *SAAC* 22 (2018): 41–64

#### **LEBANON**

#### **CHHÎM**

Study seasons in 2017 and 2018 were dedicated primarily to a full catalog and documentation of the pottery finds from excavations in 1996–2016. Common ware and amphoras, more than 8000 fragments, mainly local and regional production, were studied by Urszula Wicenciak. Tableware from all periods: Hellenistic, Roman, late antique and early Byzantine (3rd century BC–7th century AD, mainly terra sigillata and red slip wares), was examined by Krzysztof Domżalski. Francisco J. Núñez concluded a typological and chronological description of ceramics from the Late Bronze to the Persian periods. Lamp studies by Małgorzata Kajzer on the assemblages from Chhîm and Jiyeh distinguished macroscopic groups in reference to specific lamp types and a concrete chronology.

See also: M. Krueger, U. Wicenciak, Z. Kowarska, P. Niedzielski, L. Kozak, M. Krueger, K. Jakubowski, J. Proch, M. Mleczek, A. Waśkiewicz, "First results of organic residue analysis on ceramic vessels (Jiyeh and Chhîm, Lebanon) by high perfomance liquid chromatography with tandem mass spectrometry", *Mediterranean Archaeology and Archaeometry* 18/1 (2018): 209–220. DOI: 10.5281/zenodo.1165358

Dates of work: 31 July-27 August/3 September 2017; 2-13 July 2018

*Director*: Assoc. Prof. Tomasz Waliszewski, archaeologist (Institute of Archaeology, University of Warsaw) (2017, 2018)

Ceramologists: Dr. Urszula Wicenciak (PCMA UW; 2017, 1018); Dr. Krzysztof Domżalski (Institute of Archaeology and Ethnology, Polish Academy of Sciences; 2018); Francisco J. Núñez (independent; 2017)

Pottery lamp studies: Małgorzata Kajzer (PhD candidate, Institute of Archaeology, Jagiellonian University, Kraków; 2017)

Archaeologist: Ingrid Perisé-Valero (Université Paris Sorbonne Abu Dhabi) (2017, 2018),

Documentalist: Marek Puszkarski (PCMA UW) (2017, 2018)

Student-trainee: Jerzy Oleksiak (Institute of Archaeology, University of Warsaw, 2018)

#### Khalde

The project aimed to record the architecture uncovered by Lebanese archaeologists at the site of Khalde (33°48'32.63"N, 35°28'53.36"E) in the 1970s. Both masonry and rock-cut structures were cleared from sand backfill and vegetation, at least three complexes of wine presses of Roman date were identified, one of these at least two-phased, featuring mosaic floors from the younger phase. Khalde also comprised limestone quarries. One of the quarries took advantage of a Roman-age tomb; some pieces of Roman clay coffins were found. Poorly preserved remains of a bath with semicircular pool and hypocaust were traced next to a mysterious rock-cut building with four pillars. A ceramic survey of the site was also carried out.

Dates of work: 13–17 August 2017

Director: Dr. Mariusz Gwiazda (freelance)

Topographer: Stanisław Rzeźnik (Archeomap Stanisław Rzeźnik)

Archaeologist: Karolina Jurczyk (freelance)

Ceramologist: Dr. Urszula Wicenciak (PCMA UW)

Acknowledgments: The Polish-Lebanese Archaeological Project is greatly indebted to the Minister of Culture Gaby Layoun, for permission to work, as well to Myriam Ziadé for making the work possible.

## **JORDAN**

KHIRBET EL-SAR/SARA, see in this volume.

## **IRAQI KURDISTAN**

IRAQI KURDISTAN SURVEY PROJECT: NEWCOMERS AND AUTOCHTHONS, see in this volume.

#### **ARMENIA**

METSAMOR, see in this volume.

#### SAUDI ARABIA

#### **AYNUNA**

The Project, which is carried out in collaboration with the Saudi Commission of Tourism and National Heritage, completed five seasons of explorations between 2016 and 2018, determining the presence of two contemporary sites: the upper city on an inaccessible plateau 50 m above the bed of the Wadi Aynuna, and a complex of units at the wadi edge, interpreted as storage for goods brought by sea to be repacked for transporting north via camel caravan. Study of the written sources have led to the assumption that the site is ancient Leuke Kome, described as an important harbor and Roman customs house from the 1st century AD in the northern part of the eastern Red Sea. The site lies about 3 km from the bay of Aynuna, which is a safe haven protected from the open sea by a coral reef. In the 1st century AD it was in the hands of the Nabatean kingdom and was the last convenient harbor on the sea route from Yemen and India. A caravan route led from here to Petra and then to Gaza on the Mediterranean coast. The Roman Empire imported exotic goods, such as frankincense, pepper and other spices, Indian muslin and silk from China, but the trade also had a cultural significance, constituting a basis for Rome's contacts with India and the Far East.

The project has cleared 27 units from five buildings (one cleared in its entirety) constituting inns located on the caravan route out of Aynuna. Earlier buildings of the same nature were recorded in lower-lying levels. Radiocarbon dating of samples verified site chronology based on a study of ceramics and coins. There were two principal phases of occupation: in the Nabatean period (1st century BC/1st century AD) and in Roman and early Islamic times (4th century and later). The first phase comprised characteristic Nabatean painted pottery, a Nabatean inscription, unfortunately undated, and 14 coins of which the latest is from AD 16. The intervening period in the 2nd and 3rd century was a time of stagnation, until the 330s marked by a clustering of coins of Constantine and his direct successors. The latest presence at the site is a coin from AD 667 (so-called Arab-Sasanid series), supported by a series of radiocarbon dates.

The archaeological evidence for the functioning of the port and trading center of Aynuna over 700 years from the 1st century BC/1st century AD through the 7th century is the first such evidence available from the northern Hidjaz coast. It brings light to bear on the sea contacts of the Nabateans known from very few ancient written sources and on the completely unknown history of this region in the 4th–7th centuries AD.

Dates of work: 12 November–15 December 2016/10 January–18 February and 11 October–15 December 2017/17 January–27 February 2018

Co-Directors: Prof. Michał Gawlikowski (PCMA University of Warsaw), Dr. Abdullah al-Zahrani and Waleed al Badaywi (Saudi Commission for Tourism and National Heritage)

Deputy Director: Dr. Karol Juchniewicz (PCMA University of Warsaw)

SCTH representative: Abdel Basset al-Sadeq (Tabuk office)

Archaeologists: Marek Truszkowski (PCMA University of Warsaw), Karol Ochnio (independent), Saud al-Amari (Saudi Commission for Tourism and National Heritage)

Geologist: Hubert Kiersnowski (independent)

Glass specialist: Krystyna Gawlikowska, art historian (independent)

Documentalist: Marcin Wagner (Institute of Archaeology, University of Warsaw) Funding body: National Science Center, grant Harmonia 6: UMO-2014/14/M/HS3/00795 "Infrastructure of the international trade in the Red Sea area in the Roman period".

#### **KUWAIT**

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

After seven seasons of fieldwork by the Kuwaiti-Polish Archaeological Mission (KPAM) at the Ubaid-period site of Bahra 1, in the Al-Subiyah region of northern Kuwait, the project implemented a study season to process the finds, prepare the results for publication and set out the most effective plans for future fieldwork. The pottery documentation was brought up to date and the whole collection was re-studied with hindsight, searching for joining pieces and technological marks. The shell specialist continued with a study of the assemblage from House 1, the most fully excavated architectural unit at the site. Archaeologists worked with the topographer, photographer and documentalists on preparing studies of their parts of the fieldwork record. The documentation team advanced preparations towards the publication of a report in book form on the first three seasons of work at the site, since the publication of volumes devoted to the more current seasons preceded it. The Secretary General of the National Council of Culture, Arts and Letters, Dr. Eng. Ali Youha, and the staff of the NCCAL are gratefully acknowledged for their support in the project. Thanks are due also to the Polish Embassy in Kuwait for their hospitality and help in promoting the results of KPAM work in both Kuwait and Poland.

Dates of work: 2 October-4 November 2017

Co-Directors: Prof. Piotr Bieliński, archaeologist (Institute of Archaeology, University of Warsaw); Dr. Sultan Al-Duwaish, archaeologist (Director, Department of Antiquities and Museums of the State of Kuwait)

NCCAL representatives: Hamid al-Mutairi (Department of Antiquities and Museums of the State of Kuwait, Jahra branch)

Archaeologists: Dorota Bielińska (Institute of Mediterranean and Oriental Cultures, Polish Academy of Sciences); Andrzej Reiche, small finds specialist (National Museum in Warsaw)

Ceramologist: Dr. Anna Smogorzewska (Institute of Archaeology, University of Warsaw)

Malacologist: Victoria Maria Morgan (independent)

Surveyor: Piotr Zakrzewski (PhD candidate, Institute of Archaeology, University of Warsaw)

Documentalists: Ewa Hander (Archaeological Museum of Chełm); Marta Momot and Agnieszka Szymczak, archaeologists, Dr. Urszula Wicenciak, ceramologist (all Polish Center of Mediterranean Archaeology University of Warsaw University of Warsaw)

Photographer: Adam Oleksiak (freelance)

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

Dates of work: 15 March 2018–26 April 2018

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

Field director: Dr. Agnieszka Pieńkowska

Archaeologists: Dominika Majchrzak (Institute of Mediterranean and Oriental Cultures, Polish Academy of Sciences), Mateusz Iskra, Paweł Lech, Magdalena Nowakowski, Dr. Szymon Lenarczyk (Institute of Archaeology, University of Warsaw), Marek Truszkowski, Piotr Zakrzewski (Polish Center of Mediterranean Archaeology, University of Warsaw)

Ceramologist: Marta Mierzejewska (Polish Center of Mediterranean Archaeology, University of Warsaw)

Student-trainees: Anna Graczyk (Institute of Archaeology, University of Warsaw) Volunteers: Joanna Reiche, Radosław Tusznio (both Warsaw, Poland)

**FAILAKA ISLAND:** "Waterfront and Underwater Archaeology of Kuwait. Archeorisk on the Coastal Zone around Failaka Island, Kuwait" Project

The project, which is part of the Kuwaiti–Polish Failaka Archaeological Mission and was launched in 2013, is the first archaeological research project concerning the underwater cultural heritage of Kuwait and Failaka Island. Altogether 33 littoral structures were located, most of them interpreted as stone tidal weirs (fish traps), of circular and long linear shape. A third harbor with breakwater was added to the two already recorded. In 2017, the Project documented features 1, 9, 10, and 13 in Kharaib el-Desht Bay and the neighboring Quranyah Bay, mapping them in the KTM system and following standard project criteria of description. Bathymetric maps provided the base for a reconstruction of the historical natural shoreline. The team also documented the maritime landscape and maritime cultural heritage of Failaka Island, focusing on all human activity connected with the sea now and in the past.

Dates of work: 13 April-24 May 2017

General Director: Prof. Piotr Bieliński (Institute of Archaeology, University of Warsaw); Dr. Hamid Al-Mutairi (Department of Antiquities and Museums of the State of Kuwait)

Project Leader: Magdalena Nowakowska, archaeologist, scuba diver CMAS P2, Commercial Diver 2nd class (Institute of Archaeology, University of Warsaw) Archaeologist/surveyor: Dr. Szymon Lenarczyk, archaeological graphics and geodesy measurement, scuba diver ("Wykop na Poziomie")

Conservator: Radosław Tusznio, conservator of stone sculpture and architectural elements, graphic designer (Inter-Academy Institute of Conservation and Restoration of Works of Art, Academy of Fine Arts in Warsaw)

#### **OMAN**

QUMAYRAH VALLEY ARCHAEOLOGICAL PROJECT: QUMAYRAH-AYN 2 (QA 2), see in this volume.

# QUMAYRAH VALLEY ARCHAEOLOGICAL PROJECT: QUMAYRAH-AYN 1 (QA 1) and QUMAYRAH-AYN 2 (QA 2)

The team from the Polish Centre of Mediterranean Archaeology, University of Warsaw, continued research on sites QA 1 (Umm an-Nar cemetery), QA 2 (Neolithic encampment) and QA 3 (Bronze/Iron Age settlement), located in the vicinity of the village of Al-Ayn Bani Saida in the southern part of Qumayrah valley. An extensive survey of a spacious Iron Age rural settlement (site QA 21 south of QA 3) was initiated. Another prehistoric campsite (QA 12) was tested (the results of Neolithic site exploration, see in this volume).

At least three main phases of occupation were identified at the settlement of QA 3. The presence of Early Bronze Age (Umm an-Nar period) structures was recorded under Iron Age buildings in the middle of the site and a late Islamic hamlet of scattered stone cubicles. The Umm an-Nar period structures are apparently related to a huge stone tower that is still visible today on the northern fringes of the site. At the burial site, the team continued exploration of the northwestern quarter of tomb QA 1-1 (Locus 1), that is, one of the four chambers of the collective sepulcher, and started investigation of the southeastern quarter (Locus 3). This year a layer containing remains of human skeletons was reached and excavated in both chambers. The exploration of this burial layer yielded a fairly rich collection of vessels made of steatite/chlorite.

Dates of work: 4 November-16 December 2017

Director: Prof. Piotr Bieliński (Institute of Archaeology, University of Warsaw) MHC representative: Sulaiman al-Jabri (Department of Excavations and Archaeological Studies, Ministry of Heritage and Culture, Sultanate of Oman) Sub-Project Director: Dr. Marcin Białowarczuk (Institute of Archaeology, University of Warsaw)

Archaeologists: Dorota Bielińska (Institute of Mediterranean and Oriental Cultures, Polish Academy of Sciences), Marta Momot, archaeologist (PCMA University of Warsaw), Aleksandra Oleksiak (independent), Dr. Agnieszka Pieńkowska (PCMA University of Warsaw), Andrzej Reiche (independent), Dr. Łukasz Rutkowski (PCMA University of Warsaw), Agnieszka Szymczak (PCMA University of Warsaw)

Documentalist: Marek Puszkarski (PCMA University of Warsaw)

Photographer: Adam Oleksiak (freelance)

Surveyor: Magdalena Antos and Otto Bagi (both freelance)

Student-trainee: Anna Graczyk (Institute of Archaeology, University of Warsaw)

## **UNITED ARAB EMIRATES, EMIRATE OF DUBAI**

#### SARUQ AL-HADID

The PMSaruq Archaeological Research Project carried out a second season (and last) of excavations as part of an international effort organized by the Dubai Municipality (UAE) to study the site of Saruq al-Hadid. The area assigned to the team was extended in order to safely explore four squares (T7, T8, U8 and V8) down to bedrock level, thus establishing a complete stratigraphic record for the Area F sector. The team also took over three squares, U7, V7 and W7, from the German sector, exploring them down to bedrock level from a level left by the German team. A side outcome was the tracing of the extent of modern disturbance in the excavation area, both horizontally and vertically, recreating in a sense the modern archaeological history of the site.

Working with extensive orthophotographic documentation of top plans and sections through the sand fill column, the Project recorded seven phases:

- 1. first occupational phase corresponding to the Wadi Suq cultural horizon (2000–1800 BC);
  - 2. sand layer blanketing the entire area, culturally sterile;
- 3. first industrial phase encompassing copper-smelting and potential copper-working (artifacts, half-products, ashes and waste) (1000–800 BC);
- 4. sand layer corresponding to the desertification of the climate, more varied dune landscape, tentative habitation or workshop location and a local episode of ditch-digging and ultimate ritual offering activity, including the first iron artifacts in the form of a sword and evidence of objects from distant regions, like Luristan across the Gulf (corresponding to the late Iron Age II);
- 5. first (older) slag coat, representing the second copper-smelting and copperworking industrial phase at the site: ingots, slag and crafts-related artifacts, but demonstrating the changed functionality of this part of the site, which was now used as a waste dump;
- 6. sand layer engulfing the first slag waste heap, leveling the area, rather sterile culturally, not dateable either in absolute dates or duration;

7. second (younger) slag coat and possible subsidiary layers of slag waste, the last episode of industrial copper-smelting and metal-working, evidencing extensive scavenging of the ancient mound for metal artifacts for remelting (100 BC–AD 800);

8. modern sand dune deposition and modern disturbance.

The results were presented in a paper at the 47th Arab Seminar conference in London in August 2018 (I. Zych, Z. Wygnańska, Ł. Rutkowski, Mansour Boraik, Yaaqoub Youssif Al Ali and J.K. Rądkowska "The site of Saruq al-Hadid (Dubai, UAE): reconstructing an anthropogenic landscape").

See also in this volume: L. Zieliński and W. Weker, Conservation of metal artifacts from the Polish Mission excavation at Saruq al-Hadid, PAM 26/1: 465–481.

Dates of work: 11 November 2017–29 March 2018

Co-directors: Prof. Piotr Bieliński, archaeologist (Institute of Archaeology, University of Warsaw) (until 31 December 2017) and Iwona Zych, archaeologist (PCMA University of Warsaw)

Field Directors: Dr. Zuzanna Wygnańska (PCMA University of Warsaw), Dr. Łukasz Rutkowski (PCMA UW)

Dubai Municipality representatives: Dr. Mansour Boraik, Yaaqoub Yousif Al Ali and Mahra

Archaeologists: Björn Briewig (independent), Mariusz Kowalewski (Institute of Archaeology, University of Warsaw), Magdalena Ostrowska (PCMA University of Warsaw), Joanna K. Rądkowska (PCMA University of Warsaw), Sidney A. Rempel (independent), Marek Woźniak (PhD Candidate, PCMA University of Warsaw) Metal expert: Łukasz Zieliński (PhD Candidate, Institute of Archaeology, University of Warsaw)

Personal adornment expert: Dr. Zuzanna Wygnańska, archaeologist (PCMA University of Warsaw)

Lithics expert: Mariusz Kowalewski (Institute of Archaeology, University of Warsaw) Surveyors/archaeologists: Otto Bagi, 3D documentation (Institute of Archaeology, University of Warsaw), Bartosz Wojciechowski (Antiquity of Southeastern Europe Research Center, University of Warsaw)

Metal conservator: Władysław Weker (State Archaeological Museum, Warsaw) Registrar: Marta Bajtler and Katarzyna Pawłowska, archaeologists (both independent)

Photographers: Mariusz Kowalewski, archaeologist (Institute of Archaeology, University of Warsaw), Jan Kurzawa (freelance)

Documentalists: Marta Momot and Magdalena Ostrowska (both PCMA University of Warsaw)

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