

Title: **Alexandria Kom el-Dikka: excavations and preservation work. Preliminary report 2008/2009**

with appendix: **Auditorium E: exploration in season 2009**

Author(s): Grzegorz Majcherek

Appendix by: Karol Juchniewicz, Katarzyna Lach

Journal: *Polish Archaeology in the Mediterranean* 21 (Research 2009)

Year: 2012

Pages: 27-48

ISSN 1234-5415 (Print), ISSN 2083-537X (Online)

ISBN 978-83-235-1144-1

Publishers: Polish Centre of Mediterranean Archaeology, University of Warsaw (PCMA UW),  
Wydawnictwa Uniwersytetu Warszawskiego (WUW)

[www.pcma.uw.edu.pl](http://www.pcma.uw.edu.pl) – [www.wuw.pl](http://www.wuw.pl)

---

**ALEXANDRIA KOM EL-DIKKA EXCAVATIONS AND PRESERVATION WORK  
PRELIMINARY REPORT 2008/2009**

**Grzegorz Majcherek<sup>1</sup>**

**with appendix by Karol Juchniewicz<sup>2</sup> and Katarzyna Lach<sup>3</sup>**

<sup>1</sup> Polish Centre of Mediterranean Archaeology UW, <sup>2</sup> Institute of Archaeology,  
University of Warsaw, <sup>3</sup> Institute of Archaeology, Jagiellonian University

**Abstract:** The report gives an overview of digging in the 2008/2009 season, concentrating on discoveries that have substantial bearing on studies of the urban setting of ancient Alexandria. Excavations were continued in the central area of the site where a large dump of urban refuse is under exploration, uncovering more remains of Early Roman houses with ornamental mosaic floors. Clearing yet another auditorium of Late Roman date brought the total number of halls up to 22, making for an extensive academic complex in the center of the ancient city and testifying to the unrivalled position of Alexandria in the intellectual life of Late Antiquity. The appendix contributes information on a rich set of broken wall plastering with painted decoration found discarded in the ruins of one of the auditoria. The conservation project was continued in different parts of the site: the bath complex, residential quarter and auditoria.

**Keywords:** late antiquity, urban dump, amphorae, Roman house, mosaic, auditoria, conservation

# ALEXANDRIA KOM EL-DIKKA

## EXCAVATIONS AND PRESERVATION WORK

### PRELIMINARY REPORT 2008/2009

Grzegorz Majcherek<sup>1</sup>

with appendix by Karol Juchniewicz<sup>2</sup> and Katarzyna Lach<sup>3</sup>

<sup>1</sup>Polish Centre of Mediterranean Archaeology UW, <sup>2</sup>Institute of Archaeology, University of Warsaw,

<sup>3</sup>Institute of Archaeology, Jagiellonian University

**Abstract:** The report gives an overview of digging in the 2008/2009 season, concentrating on discoveries that have substantial bearing on studies of the urban setting of ancient Alexandria. Excavations were continued in the central area of the site where a large dump of urban refuse is under exploration, uncovering more remains of Early Roman houses with ornamental mosaic floors. Clearing yet another auditorium of Late Roman date brought the total number of halls up to 22, making for an extensive academic complex in the center of the ancient city and testifying to the unrivalled position of Alexandria in the intellectual life of Late Antiquity. The appendix contributes information on a rich set of broken wall plastering with painted decoration found discarded in the ruins of one of the auditoria. The conservation project was continued in different parts of the site: the bath complex, residential quarter and auditoria.

**Keywords:** late antiquity, urban dump, amphorae, Roman house, mosaic, auditoria, conservation

Archaeological fieldwork in the 2008/2009 season continued to be integrated with a program of joint conservation work carried out by a Polish–Egyptian team from the PCMA. Work intensity in different sectors of the site depended on a previously

approved schedule, flexibly adapted to take advantage of available materials, manpower and specialist know-how. The work proceeded with varied intensity from September 2008 until June 2009, breaking off as usual for the summer months.

## ARCHAEOLOGICAL EXCAVATIONS

Digging was concentrated in three different trenches between the Cisterns and the Baths (areas G and F): Area F with House FB, and Areas G and H, and the last of the lecture halls, Auditorium E.

### AREA F

Previous campaigns, which had been focused on the exploration of a large urban dump, identified the core deposits as principally ashes and architectural

debris from the nearby Late Antique bath with urban refuse mixed in. Expanding the main trench to the east by another 8 m allowed more of the rubbish dump layers to be removed, uncovering the Early Roman strata below. The usual abundant array of artefactual material was recorded, producing a sound basis for the periodization of the dump.

The pottery assemblage from the dump layers covered a period from the early 4th to the 7th century AD and revealed a typical range of wares [*Fig. 1*]. Quantification

of the material revealed a majority of amphorae and other coarse wares, domestic wares being recorded sporadically. The ratio clearly indicates a non-domestic provenience for the deposits. The largest group in terms of numbers of vessels was formed by common Mediterranean amphorae. Gazan amphorae predominated as usual, represented by at least three forms illustrating morphological development of the type [*Fig. 1:1–2*]. Different forms of LRA 1 were likewise abundant [*Fig. 1:3*]. Earlier (4th–5th century AD) deposits

#### Team

*Dates of work:* September 2008–June 2009

*Director:* Dr. Grzegorz Majcherek, archaeologist (PCMA)

*SCA representative:* Naglaa Mohammed Abbas, Khaled Ali Abu el-Hamed, Ihab Abdel Aziz Khater and Mohsen es-Sayegh Halafallah

*Archaeologists:* Karol Juchniewicz (PhD candidate, Institute of Archaeology, University of Warsaw), Emanuela Kulicka (freelance), Katarzyna Lach (PhD candidate, Jagiellonian University, Kraków), Urszula Wicenciak (PhD candidate, Center for Research on the Antiquity of Southeastern Europe, University of Warsaw), Łukasz Wojnarowicz (freelance), Iwona Zych (PCMA)

*Epigraphist:* Assoc. Prof. Adam Łukaszewicz (Institute of Archaeology, University of Warsaw)

*Numismatist:* Adam Jegliński (PCMA)

*Anthropologist:* Robert Mahler (PCMA)

*Conservators:* Szymon Gąsienica-Sieczka (freelance), Aleksandra Rowińska (State Archaeological Museum, Warsaw)

*Architects:* Grażyna Karpińska, Aureliusz Pisarzewski, Marta Sołtys (all freelance)

*Documentalist:* Ewa Czyżewska (PCMA)

*Trainees:* Basic field training for a group of eight junior SCA staff members throughout the season.

#### Acknowledgments

The Kom el-Dikka Project is funded jointly by the Supreme Council of Antiquities (conservation work) and the Polish Centre of Mediterranean Archaeology of the University of Warsaw (archaeological research). We would also like to acknowledge a generous contribution from Dr. Roger Bagnall (Columbia University) with funds provided by the Andrew H. Mellon Foundation, to whom we wish to express our heartfelt thanks.

The Mission would like to acknowledge its deep gratitude to all the SCA authorities, both in Cairo and Alexandria, and particularly to Dr. Zahi Hawass, Secretary General of the SCA, for his support extended toward the Mission during its work. Special thanks go also to Messrs Alaa Shahat and Ahmed Mousa for their invaluable, friendly help.

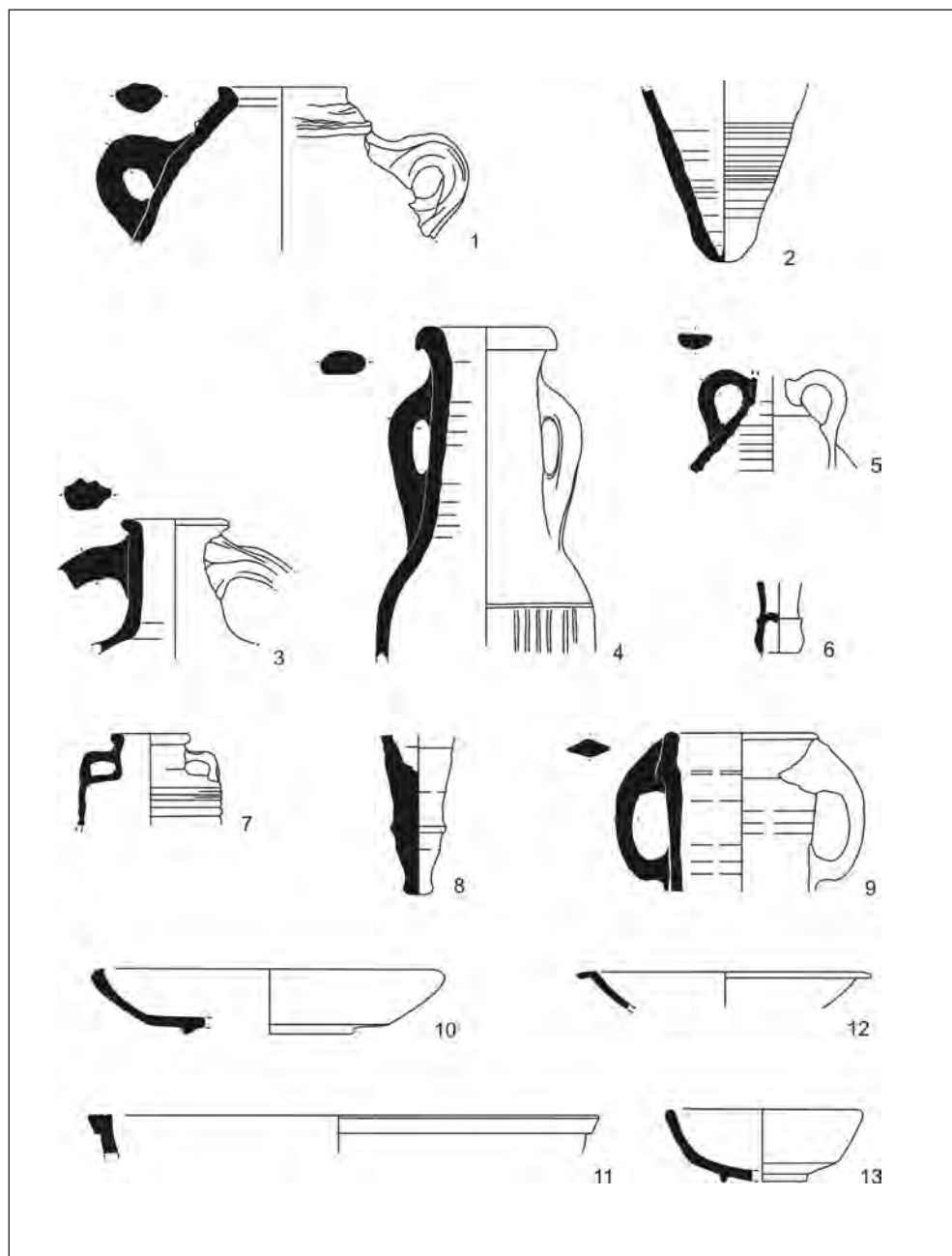


Fig. 1. Selection of pottery from the urban dump  
(Drawing E. Czyżewska, Ł. Wojnarowicz)



included mostly Tunisian amphorae: *Africana Piccolo* and *Grande*, as well as earlier forms of the *spatheion* [Fig. 1:4]. Surprisingly enough, the frequency of micaceous LRA 3 amphorae was also relatively high [Fig. 1:5–6]. It is noteworthy that the bulk of them represented forms indicative of the 4th–early 5th century (with open tubular foot). In contrast, later 5th–6th century forms (with closed foot) were apparently imported to Alexandria on a much smaller scale. Of particular interest was a fairly large group of small, heavily ribbed *Agora M239* type vessels (white-washed red fabric), recorded in Alexandria for the first time in such number [Fig. 1:7]. Nile silt amphorae were represented by two basic forms: LRA 7 and Egloff 172 [Fig. 1:8–9]. Recorded fine wares included several examples of Cypriot Red Slip [Fig. 1:10–11], African Red Slip [Fig. 1:12] and their Egyptian counterparts, both A (Aswan) and B (Nile silt ware) groups spanning the entire period [Fig. 1:13].

The excavations were continued well below the deposits associated with the lime kilns (C–D) previously explored in this area. Thick deposits were almost entirely composed of lime refuse, ashes, broken marble veneer and architectural debris. Marble detritus revealed a fairly wide range of imported stones ranging from grey Proconessian marble, through white Thasian, Phrygian *pavonazetto* and *greco scritto*. The presence of green *lapis lacedaemonius* and red Iassos marble was also noted. The amount of Egyptian stone, mostly porphyry and travertine, was likewise substantial. Directly to the north of the kilns there was a wall preserved to a height of three courses a wall, some 6.50 m long and 0.45 m thick. It had served

apparently as an enclosure wall for the whole lime-burning complex.

### HOUSE FB

Further exploration of Early Roman domestic architecture in area F was the main task of the season. The western section of house FB was cleared. A heavy concentration of architectural tumble, including blocks retaining faint colored plastering, was removed to uncover two large rooms, loci 18 and 19, the two covering some 50 m<sup>2</sup> [Figs 2, 3]. A long wall some 0.40 m wide, now standing two courses high, closed the two rooms from the west. The masonry resembles that of other walls in the house: isodomic courses of soft limestone blocks. The wall is not homogenous and may be indicative of two successive building phases, but the absence of doors speaks strongly in favour of it being the outer wall of House FB.

Room 18 was accessible from the east, from room 14, via a tripartite entrance emphasizing its significance. A large fragment of floor mosaic was cleared in the southeastern part of the room [Fig. 4]. Although only about a quarter of its original surface has been preserved. The ample space along the eastern and northern edge was paved with small, irregular stones with no inherent pattern. The mosaic proper featured a geometric design with some floral elements. Simple border decoration consisted of a schematized astragal pattern in white on a black background. The central field (originally 2.70 m square) was framed by a narrow black band. A shield of bichrome, interchanging scales was inscribed in a square field (for a similar mosaic featuring a shield of interchanging black-and-white scales, discovered in the 1990s in House

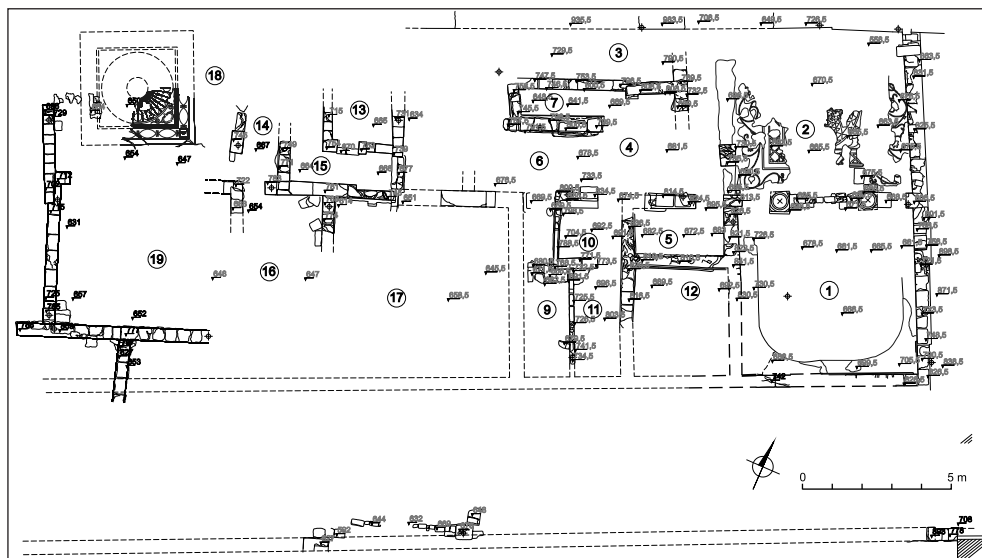


Fig. 2. Plan of house FB after the 2009 season  
(Drawing A. Brzozowska, G. Karpińska, M. Soltys)



Fig. 3. House FB. Western wing, looking east  
(Photo G. Majcherek)

MA, see Majcherek 2001: 29–32). The corners of the square were filled with ivy scroll and *hederae*. There is little doubt that the shield must have enclosed a rounded emblema (now lost). The size and location of the mosaic implies that room 18 must have originally extended well to the north (beyond the limits of the trench), and it must have originally measured some 6 m by 6 m. The overall layout of the mosaic floor, positioned centrally in the square room, is typical of an *oikos* rather than a *triclinium*.

The character of the adjoining spacious room 19 (approximately 6 m by 4.50 m) is difficult to assess. The wall dividing it from room 18 (now entirely dismantled) ran apparently just south of the mosaic; its

position can be deduced from what appears to be a pier, but is in fact a juncture stump preserved in the middle of the western wall. It is not clear how room 19 communicated with the rest of the building. Its floor was made of packed earth, although some loose marble tiles found in the fill may indicate a more durable and decorative original surface.

#### AREA G

The excavation area was located immediately south of the row of auditoria (A–B) excavated in 1986 (Kiss *et alii* 2000: 15–23). The present trench (some 13 m by 10 m) extended trial pit H-II, excavated in the 1990s, to the east and north

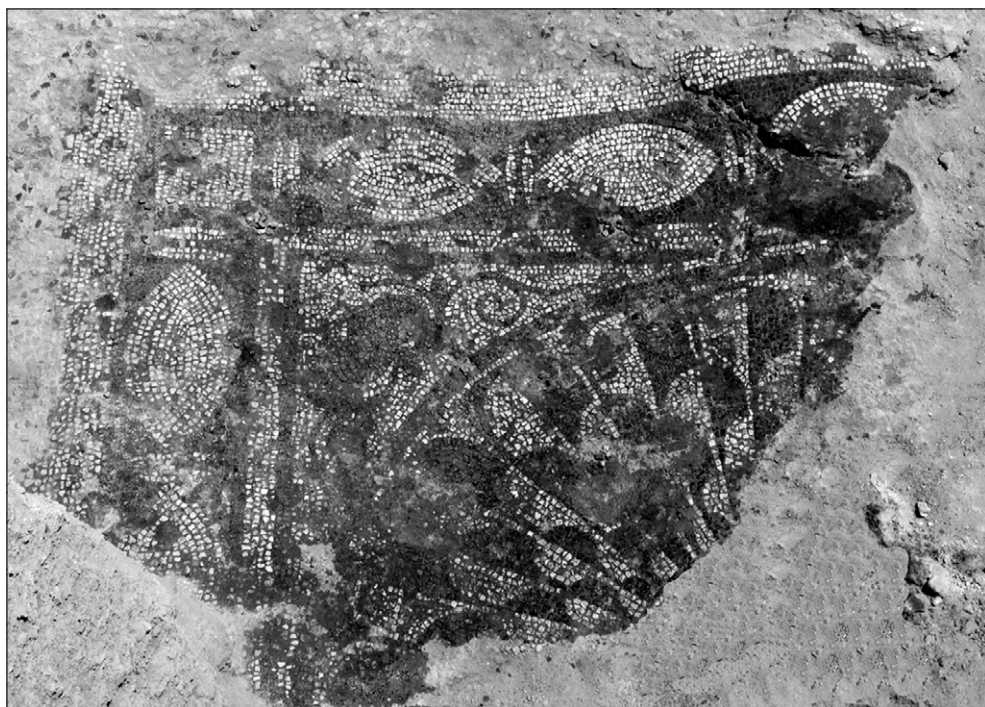


Fig. 4. Mosaic found in room 18 of house FB  
(Photo G. Majcherek)



(Majcherek 1998: 34–36, Fig. 6). Finds in the form of unassuming architectural features confirmed the secondary service character of the entire area. These features included a large wall running north–south and a small room located to the east of it.

Past archaeological work had indicated that the introduction of auditorium A entailed the blocking of a wide passage in what had been the south wall of a structure preceding the building of the lecture hall. Excavations this season on the south side of the south wall of the later auditorium cleared a stone threshold and a projecting platform. The level of the threshold (9.92 m above sea level) corresponded with the pavement of the southern passage of the baths. Therefore, the threshold can be said to be related most probably with the first phase of bath construction, which is dated to the late 4th century AD.

Several structures were cleared in the area [Fig. 5, top]. The largest and most important is a north–south wall. Apparently it continues a similar wall previously discovered in the southern section of area H (Majcherek 2010: 35). It runs for a distance of some 9 m (within the confines of the trench) and in the north abuts the massive west wall of auditorium A, implying its later date [Fig. 5, bottom]. In its earliest form the wall was built of large limestone ashlars set in isodomic courses. Some 5.30 m south of auditorium A, there was a door 1.30 m wide. Both the door jambs and the threshold have been preserved. The original height of the wall is unknown. The locus to the east of this wall seems to have been abandoned relatively quickly (whatever its original function was) and used as a dump for a thick layer of ashes, apparently from the baths. In the 6th century (judging by the dating

of pottery finds), locus function changed again; the door in the north–south wall was blocked and the wall raised, using large blocks cut from brick walls, obviously salvaged from some standing ruins. Some of these brick-wall blocks had been placed directly on top of the ash layers. In its new function the structure appears to have served as a long retaining wall to contain the quickly growing urban dump behind it to the east. This retaining attempt proved largely futile because the entire area was engulfed in thick rubbish deposits reaching as far as the Theatre Portico already in the 6th century.

A parallel wall, built of the brick-wall segments and poorly plastered with lime render, was discovered some 3 m to the east of the retaining wall described above. It had a small passage, 0.85 m wide, pierced in it. The two walls formed a kind of long passage with a dirt floor.

The stratigraphic sequence within the trench revealed a curious feature: a wide U-shaped depression in the middle of the trench, bordered on both sides by rising ash deposits. This peculiar formation appears to reflect the process of evacuation of ashes from the underground service area of the baths. Indeed, the axis of the depression is aligned with the presumed entrance to the underground service area, identified at the northern edge of the trench. The structural collapse from the vaulted entrance was cleared, but further exploration necessitates substantial trench extension.

Regardless of the need for further research to clarify the stratigraphic and architectural relations in this area, it seems that all the architectural features discovered here, together with a structure later transformed into auditorium A, originally served as an entrance vestibule



to the underground service area. Further work should verify this idea.

#### AUDITORIUM E

The last of the lecture halls located along the southern passage of the bath, Auditorium E, is roughly the same in size as neighboring auditorium D (12.30 m by 4 m). It shared lateral walls, structured in regular ashlar laid in isodomic courses, with adjacent auditoria D and F. No vestiges of the benches were preserved [Fig. 6], but their position can be deduced from the imprints visible on lateral walls. At least two levels of the benches can be inferred. There is no indication as to how the head of the auditorium was structured.

The most plausible idea is of a similar pattern as that preserved in auditorium D: rectangular, with a slightly raised platform accommodating a seat of honour on the south.

Auditorium E, like the adjacent hall D, appears to have been rebuilt substantially in the early 7th century. The benches were dismantled, completely as it turned out in the case of hall E, and the northern parts of the halls were transformed into something entirely different. The original entrances from the north were retained, but a new wall was installed at the southern end, shortening the available space to just 4.40 m [Fig. 7]. The new wall was built in



Fig. 6. Auditorium E, looking south  
(Photo G. Majcherek)

the pillar technique and some sections of lateral walls were also rebuilt in a similar technique. This would suggest substantial damage to the structure of the auditoria at some point predating the rebuilding. As a result of this operation, two separate, roughly square rooms were created; they were accessible from the southern passage of the baths and most probably used as shops. By the same token, the auditoria D and E were no longer in functional. While the nature of this transformation is obvious, its purpose remains unclear. It might be taken as a sign of a gradual decline of the academic complex as a whole, most probably linked to the Persian occupation.

Apart from the usual array of Late Roman pottery (for the most part amphorae and coarseware sherds), the fill of the abandoned, southern end of auditorium E yielded a large deposit of multicolored

plaster fragments (see below, appendix). The sheer number of fragments, over 500 assorted pieces, and their often considerable size point to a single-deposition operation. All of the recorded fragments reveal multi-layered plastering, their origin however is but a guess. They must have come either from refurbishment or dismantling of a large public building situated nearby. It is noteworthy that a similar deposit of multicoloured plaster was identified also next to auditorium P, which is located west of the bath caldarium.

The floor in auditorium E was about 1.20 m higher than the level of the Theatre Portico. This coincided with a significant rise in the level of the passage leading to the baths. The best illustration of this phenomenon is provided by the threshold level in auditorium C, where a fragment of granite basin (*labrum*) had been placed as a step in the entrance. Thus it seemed that auditoria D–G were built on top of pre-existing structures. In auditoria E and D, a latrine channel built along the façade wall was cleared. The channel is some 0.45–0.50 m wide, built of large solid blocks [Fig. 8]. It is apparently a prolongation of a similar channel, previously discovered in auditorium F. Its connection with the drainage system recorded on the site is still unclear, although it is to be expected that it must have been somehow fed with water from the nearby Imperial bath. The latrine was abandoned sometime in the early 5th century and industrial installations were installed in the ruins. Two brick-made kilns were discovered below the auditorium E floor [see Fig. 8]. As evidenced by other kilns and furnaces previously discovered nearby, the entire area must have been ruined for quite a long time in the 5th century.

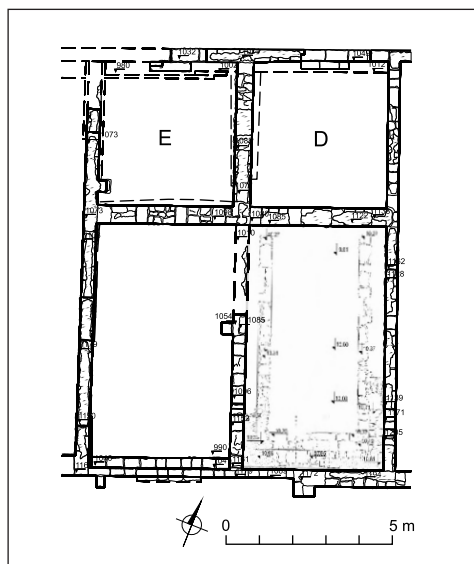


Fig. 7. Plan of lecture halls D and E, final phase from the early 7th century (Drawing D. Tarara, M. Soltys)



### AREA H

In the area immediately west of the southern set of auditoria (G–M), two trial pits were laid out in order to clarify the stratigraphic and chronological sequence. Both trenches were dug down to the footings of respective walls enclosing the auditoria from the east.

Trench J-east (east of auditorium J) reached a depth of 4.50 m (i.e., the footing of the east wall of auditorium J) before it became necessary to abandon it. It appeared that the east wall, structured in typical pillar technique, was built in a deep trench cutting across the various deposits

accumulated there. Several dirt or packed lime floor levels were recorded, although due to the limited size of the trench their architectural or functional context could not be precisely identified.

The trench K-east to the east of auditorium K revealed that the east wall of this hall was rather curious in its construction [Fig. 9]. The foundation, some 1.40 m below the floor level of the auditorium, was structured of small assorted stones. The inner facing (that is, inside the hall) and the upper section of the wall were built in isodomic masonry (standard blocks measuring 0.40 x 0.50



Fig. 8. Latrine channel and lime kiln predating auditorium E (north facade wall of the hall at left) (Photo G. Majcherek)

x 0.40 m). The outer facing on the other hand was made of stone rubble set in ash-lime mortar. The wall was apparently built in a narrow trench tightly filled with rubble. As a result its outer face is pitched substantially eastward. This is particularly clear in its upper section, where the rubble filling sits approximately 1 m off the line of the foundations. The reason for this curious construction appears to lie in an effort to counterbalance the heavy load of the rubbish dump accumulating behind this wall.

Finds from the explored layers were rather restricted in range. They

included mostly amphorae sherds and a limited quantity of kitchen and fine wares, illustrating well the chronological sequence of dump deposition. Egyptian-made pottery constituted most of the recorded finds. Included in this group were sherds of AE 3 and LRA 7 amphorae, as well as a dozen or so examples of Egyptian Red Slip Ware B. Imported vessels were represented chiefly by Gazan (LRA 4) and some examples of North African amphorae. Overall, the pottery evidence points to the late 5th century as the most plausible date for the building of the wall.

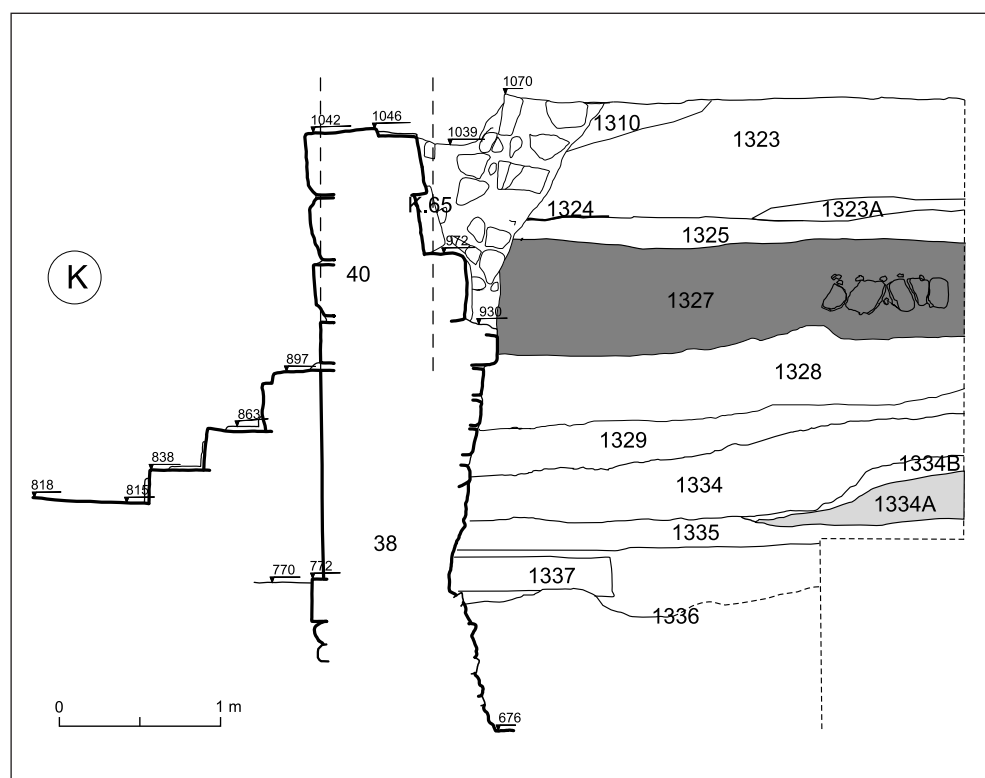


Fig. 9. Trial pit K-east, cross-section looking north  
(Drawing G. Karpińska, K. Lach)

## PRESERVATION WORK

In keeping with the work schedule, the Mission continued the already advanced Preservation Project aimed at turning the site into an open-air exhibition.

### BATH COMPLEX (AREA K)

The restoration work in this area focused on the preservation of the underground vaulted structure used as a bath service area. As stipulated in the Site Development Proposal submitted to the SCA in March 2007, this area will be made accessible to visitors, hence the urgent need not

only for conservation and consolidation of the extant structure, but also for proper development in view of future display.

Previous work in this area resulted in the conservation and preservation of two vaulted, brick-made entrances to the *prae-furnia*, as well as consolidation of the adjacent stretch of bath façade.<sup>1</sup> This season the work was geared to the conservation of the furnaces. A brick-made floor in furnaces 1 and 2 was repaired. Adjacent badly damaged *pilae* were likewise restored, using original bricks found in the vicinity.

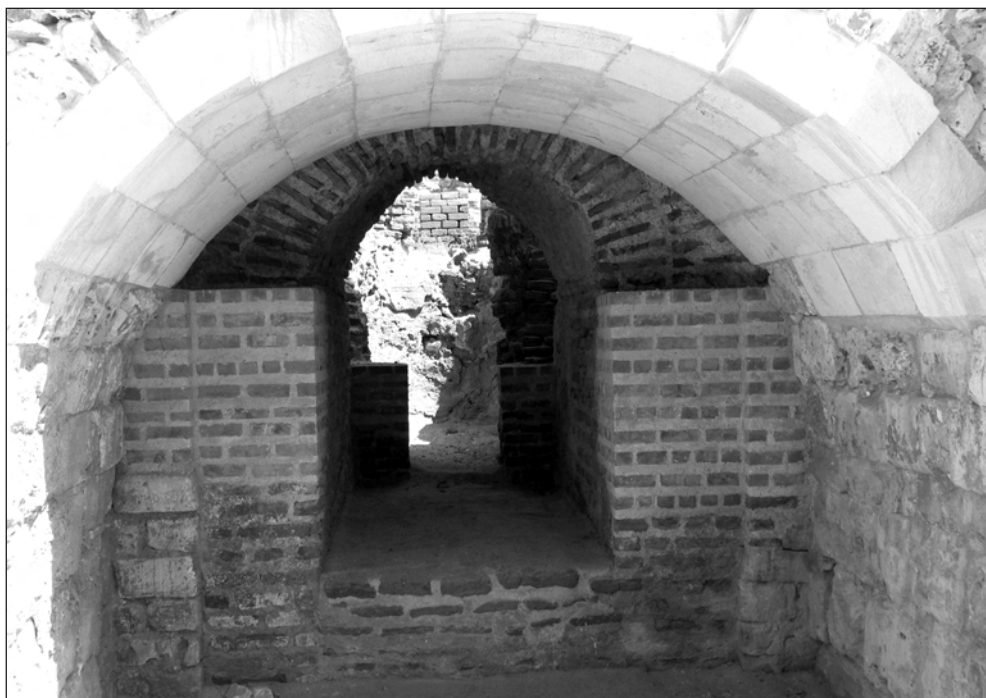


Fig. 10. Bath complex. Underground service area during the 2009 season conservation work (Photo A. Pisarzewski)

<sup>1</sup> Work in this area was supervised by Aureliusz Pisarzewski.

To prevent further deterioration a new coping was added.

To provide a safe and serviceable means of access for future visitors, it was decided to build a modern stairway leading down to the bath cellar. Restoration of the lateral walls of the underground chamber were a prerequisite for this operation. The south wall survived as the lowermost course, while the north one had to be built from scratch, having been dismantled almost entirely already in late antiquity (Kołątaj 1992: 56–62). Walls were reconstituted in modern limestone blocks cut to proper size (50 x 40 x 30 cm) and set in isodomic courses, matching extant ancient walls. Both walls were restored for a distance of 6 m and to a height of 1.30 m. Higher up, slightly sloping retaining walls made of smaller assorted stones (10 courses) were

built. Their height reached ground level, thus creating a sort of casing, into which a stairway was subsequently introduced [Fig. 10].

The design of this staircase had to take into consideration the vertical distance, more than 3 m, between the floor of the frigidarium and the cellar, as well as modern construction requirements. It was planned as an unobtrusive structure, separated from the ancient substance, but integrated visually with neighbouring monuments. The straight flight of stairs (approximately 5.70 m long and 1.60 m wide) has 15 rises with a wide landing halfway down. As stipulated by modern building standards, the pitch was set at 30 degrees [Fig. 11].

One of the most demanding operations undertaken this season was the



*Fig. 11. Modern staircase leading to the underground service area of the baths  
(Photo A. Pisarzewski)*



conservation of a large open-air pool located in the southwestern part of the frigidarium. The structure was excavated in the 1960s and provisionally secured (Kubiak 1967: Pl. VIB). The pool measuring approximately 4 m by 3.80 m (internal dimensions) was constructed combining two different techniques and materials. The walls and foundations (some 0.80 m wide) were built of bricks, while the *pluteus* was made of large green *cippolino* blocks. These blocks were apparently reused, most probably cut from large column shafts as evidenced by the spherical surface clearly visible in their bottom parts.

The outer brick facing of the pool having been treated in the previous season, work now proceeded on the conservation from within. The whole structure appeared to be in rather poor condition; some of the bricks were totally disintegrated, large patches of waterproof plaster were found detached from the walls and large cracks in the walls and floor added to the danger of water penetration. Several blocks of the *pluteus* had either subsided or been displaced.

Upon assessing all theoretical and practical considerations,<sup>2</sup> work started with an initial mechanical cleaning of all surfaces, followed by removal of old cement mortar patches and badly corroded steel rods introduced in the 1960s. The vertical cracks in the walls were filled with new lime mortar and damaged sections of walls were completed with new bricks. Edges of extant plastering were protected with lime mortar and their surfaces additionally treated with a 25% solution of polyvinyl alcohol. Missing fragments were completed with new mortar. Blocks of

the marble *pluteus* were dismantled where necessary and reassembled. Loose marble fragments were put together using epoxy resin (ARALDITE PY 1092) with brass rod reinforcements (ø 6 mm). The outlet of the pool located in its east wall was also cleaned and repaired in order to allow unimpeded evacuation of rainwater. Finally, missing fragments of the floor bedding (sunk some 0.60 m below ground level) were completed with new mortar, with some crushed bricks added [Fig. 12].

Preservation work in the frigidarium of the bath also included the restoration of a rectangular brick-made bathtub located in the northern end of the area [Fig. 13]. Loose bricks were fixed with new mortar; missing fragments of walls were completed. A coping of new bricks was laid with an additional insulation layer. Several patches of marble and limestone flooring were consolidated and new protective edges installed.

## DOMESTIC QUARTER

### (AREA W<sub>1</sub>N)

The residential area (houses G–H) excavated in the 1990s, was also included in the current conservation program, the work being limited to standard conservation procedures aimed at consolidation and partial restoration of extant structures. Exposure to high temperatures and periodic but intensive rainfall has caused some unavoidable damage to the walls. Local Pleistocene calcarenite limestone, which was the standard building material in antiquity, is friable and highly porous, therefore particularly prone to long-term exposure. Some of the most threatened and unstable structures were now duly

<sup>2</sup> Pool restoration completed by Szymon Gąsienica-Sieczka.



*Fig. 12. Marble-lined pool in the frigidarium of the Imperial bath, state following restoration in 2009  
(Photo G. Majcherek)*



*Fig. 13. Small bathtub in the frigidarium of the bath, state following restoration In 2009  
(Photo G. Majcherek)]*

consolidated and stabilized. A large well located next to the south elevation of house H (locus H10), was reinforced. Some missing or badly eroded stones were replaced with new ones. Ancient, well seasoned blocks, found during the excavations were used for this purpose. The work also included replacement or repointing of mortar joints, using slaked lime-based mortar reinforced with some white Portland cement. Similar procedures were also applied to various fragments of walls in the adjacent house G (northern walls of loci G12–G18).

In some cases, the state of preservation of extant structures or ground relief warranted limited restoration in order to stabilize wall foundations. Such interventions were deemed particularly necessary wherever sections of walls have been preserved only in the lowermost courses or found entirely dismantled in antiquity (below present ground level). Again, blocks found in the vicinity and most probably originating from these structures were used. A long stretch (some 8 m) of the southern elevation of house H (along rooms H7–H8) was rebuilt accordingly. Similar work was also

undertaken on the seriously deteriorated façade wall of House D.

### THEATRE AND PORTICO

Minor conservation work was also performed in the Theatre, which has inevitably suffered from the rising numbers of visitors. The Late Roman pavement mosaics in the theatre vestibule are especially prone to damages. The edges of the mosaics were repaired and adjacent sections of walls were likewise protected. Some stones were replaced with new ones and missing joints refilled with mortar. The surface of the entire area accessible to visitors was covered with a new protective layer of gravel.

The stylobate of the portico was also treated. Restoration of several column pedestals was completed. Missing stones and gaps in the structure of the exposed length of the stylobate (some 70 m) were replaced or completed, thus creating a physical barrier preventing water in-seepage. A gutter formed on the western side of the portico should facilitate evacuation of rainwater flowing from adjacent slopes.

## APPENDIX

### AUDITORIUM E: EXPLORATION IN SEASON 2009

Karol Juchniewicz,<sup>1</sup> Katarzyna Lach<sup>2</sup>

<sup>1</sup> Institute of Archaeology, University of Warsaw

<sup>2</sup> Institute of Archaeology, Jagiellonian University

Auditorium E in Area G, the last of the lecture halls unexplored in the academic complex, could not be excavated until 2009 because of the need for an evacuation road that passed over it from the center

of the excavated area. Its excavation was now completed, revealing in the upper layers of fill a transverse wall installed in the extant hall, dividing the space of the hall in two. The rectangular chamber



created in the northern part, accessed from the side street, evidently remained in use, while the southern compartment was cut off and conveniently filled with rubbish from some neighboring structure (see also above, 38).

The fill in this southern compartment consisted, generally speaking, of layers of brown and black soil, ashes and large quantities of crushed plaster with painted decoration. The deposit evidently accumulated in stages. The lowermost layer in this southern unit, a thin deposit of yellowish-brown earth on the occupational level (there was no pavement apparent in the auditorium), must have

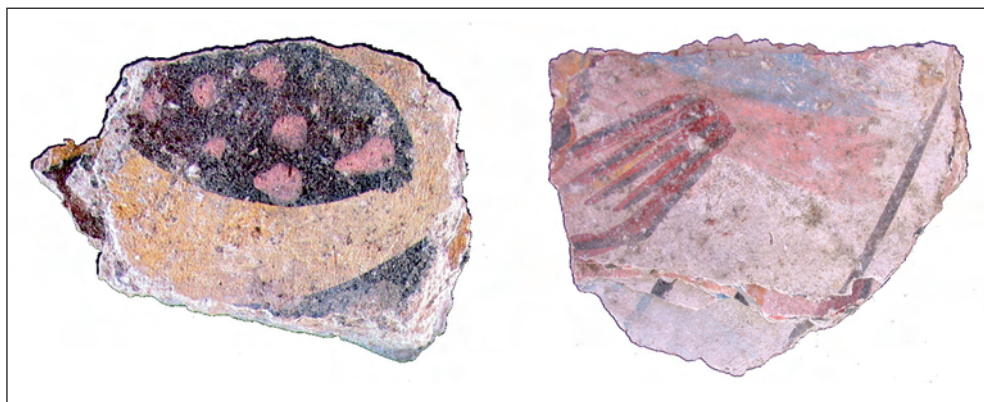
accrued when this part of the building stood empty. Next came a fairly thick layer, almost half a meter thick, comprising crushed wall plaster. This layer was partly leveled and the northern part of the unit covered with two levels of tamped clay pugging, which formed a floor extending approximately 3.50 m from the southern face of the partition. Another thick layer of wall plaster covered the northern end of this pugging, this time together with ashes, which were observed as an isolated deposit (clearly visible in the south trench wall). The ashes must have come from the same source as the fill of auditorium E in general, because they also contained fragments of wall plaster.



*Fig. 14. Superimposed coats of painted decoration on a piece of plaster from the fill of auditorium E (All photos by K. Lach)*

The stratigraphy of layers in the southern part of the section indicates that the pugging was used simultaneously with the filling of the compartment. Perhaps this floor was accessible from auditorium

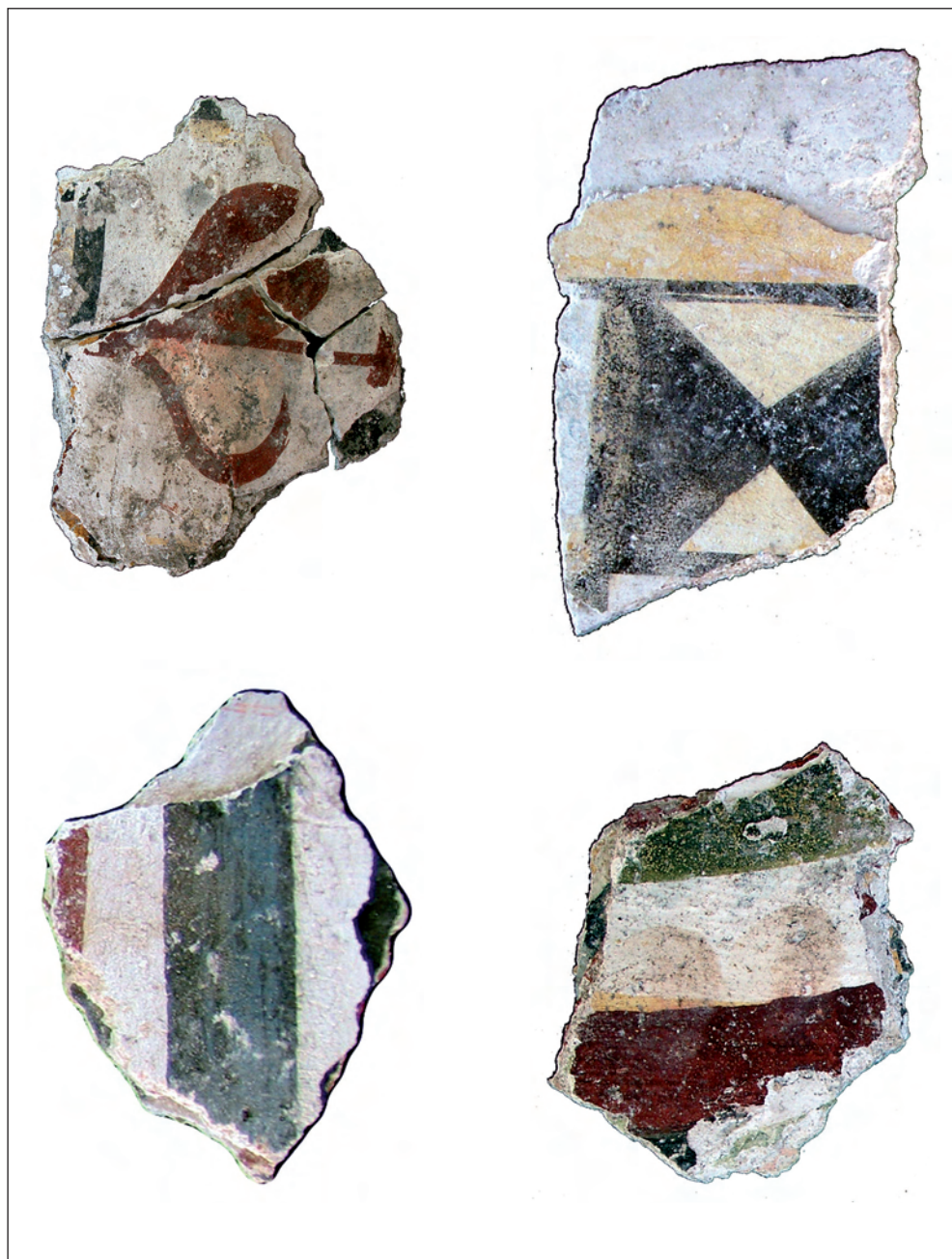
D, because the dividing wall between the two halls was damaged along the length of this pugging and some of the blocks from this wall were discovered on and partly under this pugging. The next layer,



*Fig. 15. Fragments of wall plaster with decoration possibly from figural compositions*



*Fig. 16. Fragments of wall plaster with uniform color background covered with irregular brushstrokes (left) or contrasting splashes*



*Fig. 17. Fragments of wall plaster with vegetal (top left) and geometric motifs (top right) and color lines and bands (bottom row)*

now covering the pugging, consisted of brown soil mixed with rubble and some wall plaster. Successive layers contained less and less plaster.

The wall plaster fragments were meticulously lifted and preserved. In most cases they represented several superimposed coats of painted decoration [Fig. 14]. The chief colors in use were white, yellow, shades of pink and black, as well as to a lesser extent red, blue and green. Most of the discovered fragments were no more than 10 cm across. The number of coats of painted decoration ranged from one to several.

The most frequent motifs of painted decoration consisted of irregular elements, which could have been part of figural compositions [Fig. 15]. The next group in terms of quantity were pieces of wall plaster with a uniform color background,

covered with irregular brushstrokes or contrasting splashes [Fig. 16]. Vegetal motifs were suggested on some fragments, as well as geometric patterns [Fig. 17, top row]. Part of the assemblage bore lines and bands of different width and color [Fig. 17, bottom row].

The biggest quantity of decorated plaster fragments came from layers comprising excavation contexts 115 and 125, slightly less numerous from those explored as excavation contexts 119 and 123.

The lifted plaster fragments were cleaned mechanically from accumulated depositional dirt and adhering crumbs of lime mortar. A full photographic and in most cases also drawing documentation was prepared. The painted surfaces were preserved and placed in containers with no access of light to prevent discoloration of the pigments.

Dr. Grzegorz Majcherek

Polish Centre of Mediterranean Archaeology, University of Warsaw

00-497 Warsaw, Poland

ul. Nowy Świat 4

grzegorz.majcherek@uw.edu.pl

Karol Juchniewicz

karol.juchniewicz@gmail.com

Katarzyna Lach

lach.k2@gmail.com

## REFERENCES

- Kiss, Z., Majcherek, G., Meyza, H., Rysiewski, H., Tkaczow, B. [=Kiss, Z. *et alii*]  
 2000 *Fouilles polonaises à Kom el-Dikka (1986–1987)* [=Alexandrie 7], Warsaw: ZAŚ PAN
- Kołataj, W.  
 1992 *Imperial Baths at Kom el-Dikka* [=Alexandrie 6], Bielsko-Biała: ZAŚ PAN
- Kubiak, W.  
 1967 Les fouilles polonaises à Kom el-Dikka en 1963 et 1964, *BSAA* 42, 47–80



Majcherek, G.

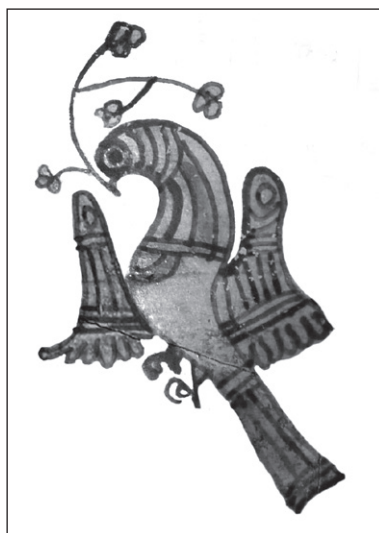
- 1998 Alexandria. Kom el-Dikka excavations 1997, *PAM* 9 (*Reports 1997*), 23–36
- 2001 Kom el-Dikka excavations, 1999/2000, *PAM* 12 (*Reports 2000*), 23–34
- 2010 Alexandria. Excavations and preservation work. Preliminary report 2006/2007, *PAM* 19 (*Reports 2007*), 31–48

POLISH CENTRE OF MEDITERRANEAN ARCHAEOLOGY  
UNIVERSITY OF WARSAW

# POLISH ARCHAEOLOGY IN THE MEDITERRANEAN

## XXI

RESEARCH 2009



---

## CONTENTS

---

## CONTENTS

ACKNOWLEDGMENTS .....	11
OBITUARIES	
<i>Aleksandra Krzyżanowska</i> .....	13
ABBREVIATIONS AND STANDARD REFERENCES .....	15

## PAM REPORTS

PCMA FIELD MISSIONS AND PROJECTS IN 2009 (WITH MAP) .....	19
---	----

## EGYPT

### ALEXANDRIA

ALEXANDRIA KOM EL-DIKKA: EXCAVATIONS AND PRESERVATION WORK.	
PRELIMINARY REPORT 2008/2009	
<i>Grzegorz Majcherek</i> .....	27
APPENDIX: AUDITORIUM E: EXPLORATION IN SEASON 2009	
<i>Karol Juchniewicz, Katarzyna Lach</i> ... ..	43
KOM EL-DIKKA 2005–2009: SELECTED ANTHROPOLOGICAL RESEARCH	
<i>Robert Mahler</i> .....	49

### MAREA

MAREA. REPORT 2009	
<i>Hanna Szymańska, Krzysztof Babraj</i> .....	59
MAREA 2009: POTTERY FROM THE EXCAVATIONS	
<i>Anna Drzymuchowska</i> .....	72

### MARINA EL-ALAMEIN

MARINA EL-ALAMEIN. CONSERVATION WORK IN THE 2009 SEASON	
<i>Stanisław Medeksza, Rafał Czerner, Grażyna Bąkowska with contributions by I. Fuks-Rembisz, W. Grzegorek, G. Majcherek, M. Mrozek-Wysocka, P. Zambrzycki</i> .....	79



## CONTENTS

---

### TELL EL-RETABA

#### TELL EL-RETABA: SEASON 2009

*Stawomir Rzepka, Jozef Hudec* ..... 107

#### APPENDIX: TELL EL-RETABA: ARCHAEOBOTANICAL STUDIES

*Claire Malleson* ..... 118

#### TELL EL-RETABA 2009: THE POTTERY

*Anna Wodzińska* ..... 124

### TELL EL-FARKHA

#### TELL EL-FARKHA (GHAZALA). SEASON 2009

*Marek Chłodnicki, Krzysztof M. Ciałowicz* ..... 135

### SAQQARA

#### SAQQARA 2008–2009

*Karol Mysliwiec* ..... 157

#### APPENDIX: CONSERVATION WORK IN SAQQARA (2008–2009)

*Zbigniew Godziejewski* ..... 167

#### SAQQARA 2008–2009: THE POTTERY

*Teodozja I. Rzeuska* ..... 175

### NAQLUN

#### NAQLUN (NEKLONI) EXCAVATIONS IN 2008–2009

*Włodzimierz Godlewski* ..... 193

#### APPENDIX: NAQLUN 2008: ARCHAEOBOTANICAL STUDIES

*Jarosław Zieliński* ..... 210

#### REFUSE DUMP IN SECTOR B IN NAQLUN: EXCAVATION REPORT 2008–2009

*Tomasz Derda, Dorota Dzierzbicka* ..... 212

#### POTTERY FROM THE REFUSE DUMP UNDER UNIT B.26 IN NAQLUN

*Katarzyna Danys-Lasek* ..... 222

#### TWO BURIALS FROM CEMETERY A IN NAQLUN: ARCHAEOLOGICAL AND ANTHROPOLOGICAL REMARKS

*Dorota Dzierzbicka, Marzena Ożarek* ..... 233

#### ON THE COLLECTION OF WOODEN FINDS FROM NAQLUN AGAIN

*Jarosław Zieliński, Iwona Zych* ..... 244

### DEIR EL-BAHARI

#### CONSERVATION WORK IN THE HATSHEPSUT TEMPLE IN DEIR EL-BAHARI (2009)

*Rajmund Gazda* ..... 251

#### SANDSTONE SPHINXES OF QUEEN HATSHEPSUT FROM DEIR EL-BAHARI: PRELIMINARY REMARKS

*Agata Smilgin* ..... 255

## CONTENTS

---

TEMPLE OF TUTHMOSIS III IN DEIR EL-BAHARI IN 2008 AND 2009: WORK IN THE STORES AND FIELD <i>Monika Dolńska</i> .....	261
THE TEMPLE OF TUTHMOSIS I REDISCOVERED <i>Jadwiga Iwaszczuk</i> .....	269
DAKHLEH OASIS	
DAKHLEH OASIS PROJECT. PETROGLYPH UNIT: ROCK ART RESEARCH, 2009 <i>Ewa Kuciewicz, Michał Kobusiewicz</i> .....	279
SUDAN	
OLD DONGOLA	
DONGOLA 2008–2009 <i>Włodzimierz Godlewski</i> .....	289
APPENDIX: CONSERVATION OF WALL PAINTINGS INSIDE THE FORMER THRONE HALL OF THE MAKURIAN KINGS IN DONGOLA (2009 SEASON) <i>Cristobal Calaforna-Rzepka</i> .....	312
DONGOLA 2009: POTTERY FROM BUILDING I (KOM A) <i>Katarzyna Danyś-Lasek</i> .....	315
WALL INSCRIPTIONS IN A BURIAL VAULT UNDER THE NORTHWEST ANNEX OF THE MONASTERY ON KOM H (DONGOLA 2009) <i>Adam Łajtar, Jacques van der Vliet</i> .....	330
CRYPTS 1 AND 2 IN THE NORTHWEST ANNEX OF THE MONASTERY ON KOM H IN DONGOLA: REPORT ON THE EXPLORATION IN 2009 <i>Włodzimierz Godlewski, Robert Mahler, Barbara Czaja-Szewczak</i> .....	338
EL-ZUMA	
THE POTTERY FROM FOUR TUMULI GRAVES IN EL-ZUMA (2009) <i>Edyta Klimaszewska-Drabot, Ewa Czyżewska</i> .....	361
FOURTH CATARACT	
RESEARCH IN THE PCMA UW CONCESSION ON THE FOURTH CATARACT (HAMDAB DAM RESCUE PROJECT). INTERIM REPORT 2009 <i>Marek Chłodziński</i> .....	377
ROCK ART RESEARCH IN THE FOURTH CATARACT REGION, SEASON 2009 <i>Ewa Kuciewicz, Andrzej Rozwadowski</i> .....	387
EXCAVATIONS IN 2009 IN THE ENVIRONS OF EL-AR VILLAGE (FOURTH CATARACT REGION, SUDAN) <i>Anna Longa</i> .....	393
EL-AR 31: EXCAVATIONS OF LATE/POST-MEROITIC TUMULI. PRELIMINARY REPORT <i>Artur Buszek, Michał Kurzyk</i> .....	399

## CYPRUS

### NEA PAPHOS

NEA PAPHOS. SEASON 2009

*Henryk Meyza in cooperation with Wiktor Andrzej Daszewski, Aleksandra Brzozowska, Joanna Michalska, Joanna K. Rądkowska, and Monika Więch*..... 407

## LEBANON

### JIYEH

PRELIMINARY REPORT ON THE 2008 AND 2009 EXCAVATION SEASONS AT JIYEH (PORPHYREON)

*Tomasz Waliszewski, Karol Juchniewicz, Mariusz Gwiazda* ..... 423

APPENDIX 1. SUNKEN VESSELS IN LATE ROMAN AND BYZANTINE HOUSES IN AREA D

*Mariusz Gwiazda* ..... 439

APPENDIX 2. PRELIMINARY REMARKS ON THRESHOLDS FROM PRIVATE HOUSES IN JIYEH (PORPHYREON)

*Mariusz Gwiazda* ..... 441

LOCAL HELLENISTIC 'PHOENICIAN'-TYPE AMPHORA AND OTHER POTTERY VESSELS FROM EXCAVATIONS IN JIYEH (PORPHYREON) (SEASONS 2008–2009)

*Urszula Wicenciak* ..... 446

GROUND AND AERIAL PHOTOGRAMMETRIC DOCUMENTATION IN JIYEH (PORPHYREON)

*Miron Bogacki* ..... 454

## SYRIA

### PALMYRA

POLISH ARCHAEOLOGICAL MISSION TO PALMYRA. SEASONS 2008 AND 2009

*Grzegorz Majcherek* ..... 459

### HAWARTE

EXCAVATIONS IN HAWARTE 2008–2009

*Michał Gawlikowski* ..... 481

GLASS FINDS FROM THE MITHRAEUM IN HAWARTE

*Krzyszyna Gawlikowska* ..... 496

### TELL ARBID

TELL ARBID 2008–2009. PRELIMINARY REPORT ON THE RESULTS OF THE THIRTEENTH AND FOURTEENTH SEASONS OF POLISH-SYRIAN EXCAVATIONS

*Piotr Bieliński* ..... 511

---

## CONTENTS

---

ADAM MICKIEWICZ UNIVERSITY EXCAVATIONS IN SECTOR P AT TELL ARBID  
(SPRING 2009)

*Rafał Koliński* ..... 537

### TELL QARAMEL

TELL QARAMEL: EXCAVATIONS 2009

*Ryszard F. Mazurowski* ..... 559

## PAM STUDIES

ADULT BURIALS OF NINEVITE 5 DATE ON TELL ARBID (2007–2008)

*Dariusz Szela* ..... 585

CHARIOT TERRACOTTA MODELS FROM TELL ARBID

*Mattia Raccidi* ..... 605

NEW PROTODYNASTIC *SEREKHS* FROM THE NILE DELTA: THE CASE OF FINDS  
FROM TELL EL-FARKHA

*Mariusz A. Jucha* ..... 625

*PITHOS*-TYPE VESSELS FROM CHHÎM: PRELIMINARY ASSESSMENT OF FINDS  
FROM 1996–2009

*Zofia Kowarska, Szymon Lenarczyk* ..... 643

BUILDINGS ON SITE B AT NAQLUN (NEKLONI)

*Szymon Maślak* ..... 653

ZOOARCHAEOLOGICAL ANALYSIS OF MATERIAL FROM CISTERNS STR 1/96–97  
AND HA/NEH 2.16.3 IN NEA PAPHOS

*Ewelina Tepe* ..... 677

ANIMAL BONE REMAINS FROM SHEIKH ABD EL-GURNA:  
ISSUES AND OPPORTUNITIES

*Urszula Iwaszczuk* ..... 691

ANIMALS IN ROCK ART. RESULTS OF ARCHAEOZOOLOGICAL RESEARCH  
AT THE SITE OF EL-GAMAMIYA 67 (FOURTH CATARACT, SUDAN)

*Marta Osypińska* ..... 703

INDEX OF SITES ..... 715

GUIDELINES FOR AUTHORS ..... 716