# 'PUT THE LIGHTS ON': EARLY BYZANTINE STEMMED GOBLETS AND LAMPS FROM THE ACROPOLIS CENTRE-SOUTH SECTOR IN HISTRIA (I)

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***Abstract**: This paper is intended to be the first in a short series presenting the glass goblets and lamps found in the Acropolis Centre-South Sector (ACS) from Histria/Istros (Romania). The items presented here were found during the 2013-2016 archaeological campaigns and belong to the category of goblets on folded stemmed foot (Isings form 111), being mainly dated, based on type, context and associations, to the 6th century – beginning of the 7th century AD.*

***Rezumat**: Acest articol este primul dintr-o scurtă serie dedicată publicării cupelor cu picior şi lămpilor descoperite pe sectorul Acropolă Centru-Sud (ACS) de la Histria/Istros (România). Piesele prezentate aici au fost descoperite în cursul campaniilor 2013-2016 şi aparţin categoriei cupelor cu picior gol (Isings form 111), fiind datate în general, pe baza tipului, contextului şi asocierilor cu alte categorii de materiale, în sec. VI şi începutul sec. VII d.Chr.*

***Keywords**: Early Byzantine; Histria; stemmed goblets.*

***Cuvinte cheie:** perioada bizantină timpurie; Histria; cupe cu picior.*

## INTRODUCTION

The archaeological research in the Acropolis Centre-South (ACS) Sector started in 2013, as a project of the University of Bucharest, with the main objective of bringing to light the Late Roman/Early Byzantine district between the *Cetate* Sector and *Domus* Sector, followed by uncovering what is left of the Early Roman district underneath and the Greek one further down. The ACS Sector covers a surface of approximately 50×40 m (2000 m$^2$) just south of the centre of the acropolis of Histria, having to the north the Episcopal Basilica, to the east the *Domus* sector, with its concentration of large buildings dating to the same period as the Episcopal Basilica, to the south the Late Roman defence wall, to the south-west another Christian basilica (*Basilica Pârvan* Sector), and to the west the *Cetate* Sector, probably a residential area during the Late Roman/Early Byzantine period.[1]

The excavations conducted so far brought to light a large structure, conventionally named **Roman building no. 1 (CR01)**, probably a residence similar to those unearthed previously in the *Domus* Sector, flanked to the east and west by two streets (**ST01** and **ST02**), dated based on the archaeological material to the 6th century

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1 Bottez *et alii* 2015, 157-158; Bottez *et alii* 2018, 282-283.

– the beginning of the 7th century AD, and representing the last inhabitation phase in this area of the city[2] (Fig. 1).

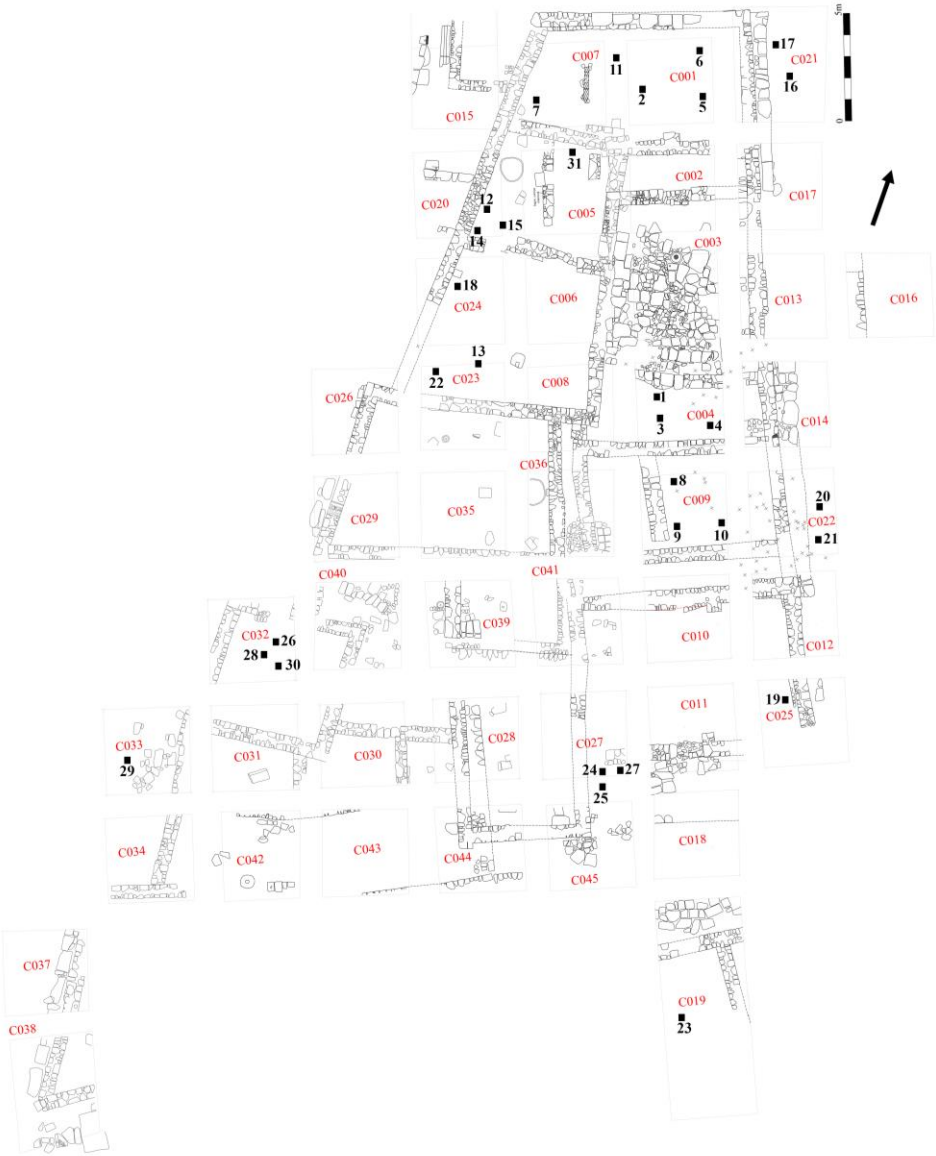


Fig. 1. Plan of the Acropolis Centre-South Sector (Histria) with the indication of the find place of the fragmentary stemmed goblets.

2 Bottez *et alii* 2015; Bottez *et alii* 2018, 285.

## STRATIGRAPHY AND METHODOLOGY

The excavation units used for the ACS Sector are 4 × 4 m trenches, numbered from **C001** onwards; each trench is divided into 1 × 1 m squares, numbered A-D on a south-north direction and 1-4 on a west-east direction. The uncovered layers and complexes are registered as contexts on sheets developed by MOLAS. Each context receives a name that contains the number of the trench (maximum of three digits) and that of the context (three digits). All depths are taken with the optical level from the same point (conventionally called **point 0**), identified in the terrain by a nail set between two large slabs in **street c**, with the Romanian national topographic coordinates (STEREO70) 799964.3467,345599.9315. Under the vegetal layer of variable thickness there was identified a grey layer of debris (generally registered as context **001** in all trenches), under which in most cases appeared a yellow layer of debris (generally registered as context **002** in all trenches). Under these massive layers of debris, marking the destruction of the last Early Byzantine dwelling level, it was identified the living surface of **Roman Building no. 1** (**CR01**), consisting of pavements and highly solidified yellow silt layers.[3]

## THE GLASS FINDS

Various categories of glass items are present in the archaeological record of the sector so far, including window or door glass panes, glass vessels, glass beads, and even a lead frame mirror still preserving rests of its reflective glass surface. The present article focuses on a number of 31 fragments belonging to stemmed goblets, found during the first four archaeological campaigns on the ACS Sector (2013-2016)[4].

## STATE OF PRESERVATION

All the glass items found in the last inhabitation level of the sector have one thing in common, that is, their advanced state of fragmentation, situation which makes difficult the process of attributing the fragments to specific types of vessels or of reconstituting complete window or door panes. Also, the conditions of preservation led to the presence of iridescence, pitting, and deposition of dark weathering crusts, in various degrees. This situation is very similar to that noticed in the case of other glass finds from Histria, such as those from the Episcopal Basilica[5] and the Centre-North Sector[6].

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3 Bottez *et alii* 2015, 158-160; Bottez *et alii* 2018, 284.

4 The presentation of this category will be continued during the folloowing years, the series being intended to close with a paper focusing on their use and function, their context, and their association with other categories of finds inside the 6th century AD building.

5 Băjenaru, Bâltâc 2000-2001, 471.

Given this situation, it is important at this point to emphasise that the number of finds taken into consideration for the present paper, as well as those to be discussed in future papers, may not be as expressive from a statistical perspective as it could be, as long as it cannot be completely excluded the possibility that different fragments belonged initially to the same vessel.

## TYPOLOGY

All the glass fragments discussed in the present paper belong to the category of stemmed goblets (Isings form 111).[7] Their degree of fragmentation allowed mainly the identification of feet belonging to this type of vessels in the case of the finds recovered during the 2013-2016 archaeological excavations. The fact that this situation is far from being new or exceptional in any way was already shortly discussed in a previous paper[8], with the mention that even the first published item belonging to this type, found in Karanis (Egypt), was identified as a specific type of stemmed goblet only based on the surviving foot – a fragment of the folded base and hollow stem[9].

The wall fragments are in general quite difficult to identify[10], as they may belong to several different types of vessels. A possible exception is the variant of stemmed goblet which presents on the body, below the rim, three small vertical handles with "rat-tails", disposed at equal distance from each other, allowing the use of the vessel as a suspended lamp if necessary or preferred, possibly in parallel with its use placed on a horizontal surface. Several such vessels were identified for example among other variants at the Episcopal Basilica[11]; also several wall fragments luckily still preserving a handle were recovered from the ACS Sector during more recent excavations and will be discussed in another paper.

Although complete stemmed goblets are seldom found, exceptions do occur, especially in the case of deposits including lamps of various types found mainly inside churches and synagogues or in connection to them.[12] As such, enough items were either found completely preserved or in a state allowing the reconstruction of their profile as to show that they could have U-, poppy- or bell-shaped bodies, usually

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6 Cliante, Țârlea 2019, 237.

7 Isings 1957, 139-140.

8 Cliante, Țârlea 2019, 237.

9 Harden 1936, class VIIA, variant III, Cat. No. 489, Pl. XVI/489; Isings 1957, 140 – presented as a third variant of stemmed goblets.

10 Khruškova 2009, 343.

11 Băjenaru, Bâltâc 2000-2001; Băjenaru, Bâltâc 2006.

12 Băjenaru, Bâltâc 2000-2001; Băjenaru, Bâltâc 2006; Golofast 2009, 315; Israeli 2003, 194; Khruškova 2009, 343.

with a fire-rounded thickened rim, either vertical or slightly in- or outcurved. As such rims could characterise also other types of lamps, bell-shaped beakers or even bowls, in themselves they do not represent enough guarantee for the type of vessel they belonged to.[13] This situation led to the creation of various typologies based mainly on the features of the foot[14], which in their turn present several variants[15], as it is the easiest part to recognise as characteristic for the type and the degree of confidence in a correct attribution is the highest. Still, it should be also emphasised that it is possible for a certain degree of incertitude to linger in many cases if the bottom of the vessel's body is not preserved, thus offering the chance to indicate its general shape, since feet with short hollow stems and folded tubular bases were sometimes associated during this time span with other types of vessels, such as flasks.[16]

## FABRIC

The items can be described as a rule as being made of medium quality glass, transparent but characterised by bubbles usually less than one millimetre in diameter, mostly spherical, and only in a few cases both spherical and elongated (Cat. Nos. 1 and 30). The presence of various amounts of bubbles in composition seems to be characteristic for this type of vessel, a fact often mentioned in publications.[17] Most of the fragments have a medium amount of bubbles, but they cover the whole range from very rare bubbles (Cat. Nos. 9-10) to large amounts of bubbles (Cat. Nos. 6-7, 14, and 21).

In a previous paper discussing glass goblets found in the Centre-North Sector from Histria, the authors decided to begin assigning the material from the point of view of colour to only four groups, in an attempt to simplify the matter and the ulterior discussions: green, greenish tinge, olive oil and bluish tinge.[18] As it was the case with those items, also the fragments discussed here are characterised in reality by a vast range of hues. The green group has in common a strong deep colour, but in different shades, and consists here of only 3 representatives. The largest group is the one gathering glass fragments in various greenish tinges, ranging from very pale, almost colourless, examples to almost green, and consists of 17 representatives. Equally varied

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13 Golofast 2009, 305, 315.

14 Isings 1957, 139-140; Çakmakçi 2009; Golofast 2009, 305-319.

15 The stem may vary in shape (hollow or solid) and thickness (cylindrical, conical, bi-conical or globular/beaded), and the foot may end in a hollow ring base or a solid one (Gorin-Rosen, Winter 2010, 167).

16 See for example Stern 2001, 268-269, Cat. Nos. 160-161.

17 Băjenaru, Bâltâc 2000-2001, 471. 476; Golofast 2009, 302; Stern 2001, 309-311, Cat. Nos. 172-174; Cliante, Ţârlea 2019, 238 and catalogue.

18 Cliante, Ţârlea 2019, 238.

is the group characterised by a bluish tinge, consisting of 5 items, some of which bordering the greenish tinge group in such a measure that their attribution to this group was quite a difficult task. All the fragments covering the whole range of yellows and browns and everything in-between have been assigned to the olive oil colour group, in this case 6 items; as in the case of the items from the Centre-North Sector, most of the items can be best described as having the colour of the olive oil, but again there are fragments in shades bringing them quite close to the greenish tinge group.

Also, it should be kept in mind that the variation in shade could also characterise in many cases the different parts of the same vessel, due to variations in the thickness of the glass.[19] It is quite clear that the thinness of the glass plays an important role in this matter; the thinner the glass the paler the shade, as it can be noticed when compared the shade of the base to that of the stem and to that of the wall in the case of more completely preserved items from Centre-North Sector[20] and ACS Sector (for example Cat. No. 30).

Although the general image could radically change as more stemmed goblets from the ACS Sector will be studied and published, at this point there seems to exist a clear predominance of items characterised by a greenish tinge. In fact, these represent 54% of the total, followed far behind by the olive oil group (20%), bluish tinge group (16%) and green group (10%). This situation, although somewhat weakened by the risk previously mentioned (that some fragments could have belonged originally to the same goblet), matches quite well with those known from the neighbouring sectors. Out of the admittedly very small number of items published until now from the Centre-North Sector 50% of the fragments cover the range of green and greenish tinges[21]. Also in the case of the goblets which were part of the deposit found in the Episcopal Basilica from Histria it was noticed that green and yellow, both presenting various shades, are the predominant colours.[22] The fact that the majority of the cases is characterised by shades of green was considered as an indication that natural-coloured glass was used for fabrication in their case.[23]

## DIMENSIONS

As all the discussed items are in an advanced state of fragmentation, this situation impedes even on the estimation of the initial height of the goblets or of the diameter of their rim, the dimensions most often indicated when completely preserved vessels of

[19] Golofast 2009, 302.
[20] Cliante, Țârlea 2019, Cat. No. 4.
[21] Cliante, Țârlea 2019, 239.
[22] Băjenaru, Bâltâc 2000-2001, 476.
[23] Golofast 2009, 302.

this type are published.[24] As in the case of the items published from the Centre-North Sector, given the fact that the vast majority of the published goblets is usually in a similar state of fragmentation, it was decided to offer all the accessible information. As a result, the dimensions indicated in the catalogue comprise the preserved height of the item, the diameter of the respective fragments (in general stem and/or base[25], and also of the pontil mark when present), and the thickness of the glass. The diameter of the base, measured or estimated, falls between 3.8 and 5.5 cm, with most cases between 4 and 4.8 cm, and the diameter of the stem falls between 0.75 and 1.3 cm (both the smooth and the knobbed stems). The thickness of the glass wall, in the few cases when it was available, is between 0.1 and 0.2 cm, and for the base between 0.15 and 0.4 cm. The diameter of the pontil mark is between 1 and 1.2 cm, with the majority of the identified pontil marks of 1.1 cm. These dimensions are comparable to those known for similar items found in other sectors in Histria. In the case of the Centre-North Sector the diameter of the base ranges between 3.3/3.5 and 4.1 cm, the diameter of the stem between 0.8 and 1 cm, the thickness of the glass is between 0.25 and 0.4 cm for the base, and around 0.15 cm for the body wall, the diameter of the pontil mark between 0.9 and 1.2 cm.[26] It is interesting to notice that the variation in diameter is wider both in the case of the base and of the stem for the items from the ACS Sector, possibly due to the fact that the analysed batch is much larger in this case. From this perspective, the dimensions of these items match well also those given for the goblets from the Episcopal Basilica in Histria, with stem diameters between 0.8 and 1.5 cm and diameters of the base between 2.9 and 5.8 cm, with the majority included between 3.5 and 4.5 cm.[27]

It should be emphasised that the thickness of the base sometimes varies in different points, due to the fact that the process of folding the glass led to irregularities (see especially Cat. Nos. 4, 6, 7 – possibly even faulty products, with stability issues). Also, it is most probable that the rim of the goblet, especially if fire-rounded, was slightly thicker than the rest of the body wall.[28]

## TECHNOLOGY

The goblets with a folded stemmed foot represent one of the most characteristic shapes of the Late Roman/Early Byzantine period. At least a part of their success

[24] Israeli 2003, Cat. Nos. 236-237; Stern 2001, Cat. Nos. 172-174.

[25] In many cases the fragmentary condition of the base made necessary the estimation of its original diameter.

[26] Cliante, Țârlea 2019, 238.

[27] Băjenaru, Bâltâc 2000-2001, 477

[28] See for example Stern 2001, Cat. No. 172

could be a consequence of the technological innovation which allowed the fabrication of the entire vessel from one glass bubble by folding the base and the stem out of the lower half of the bubble, while the part nearest the pipe became the bowl, and as a result speeding up the production considerably.[29] This manufacturing technique led to the creation of the characteristic foot: the stem was a hollow tube open towards the bowl, from this tube the base being widened into a bulb which was pushed-in to a point at the base of the stem until the opposite sides of the bulb were contiguous, with the exception of the edge which took in general the shape of a tubular ring.[30] The stem itself could be either cylindrical or slightly conical in shape or expand in the shape of a bead/knob in its central area.[31]

In the case of the goblets found in the Episcopal basilica deposit it was determined that the relatively short hollow stems are either cylindrical or conical in shape, or are beaded/knobbed. Based on the area where the air column closes inside the stem, the authors identified several techniques and resulting groups: goblets with the stem blocked at the point of transition between stem and body; goblets with the stem blocked at half its height; goblets with the stem blocked at the point of transition between base and stem.[32]

In the case of the items recovered from the Centre-North Sector the first variant, with a cylindrical/conical stem, is better represented (3 items), only one item belonging to the knobbed variant; as the remaining two items represent base fragments, it was impossible to determine in their case to which variant they belonged originally.[33] As a result, it can be stated that from the total of 4 items with stem still preserved, 75% is represented by various types of cylindrical/conical stems.

Out of the total of 31 items discussed in this paper, only 10 preserved enough of their stems to allow identification: 7 are cylindrical stems (70%), while 3 are knobbed stems (30%). From this perspective, the situation at this moment matches quite well that determined for the Centre-North Sector and mentioned above, with a clear predominance of the cylindrical/conical hollow stems.

The feet in themselves cannot offer more details regarding the technological process, but in the most cases when part of the bowl's bottom was still preserved it seems to indicate that the vessels were free-blown. The only clear exception so far is the bottom of a bowl belonging to a stemmed goblet, presenting oblique ribs, more prominent around the stem and becoming more discreet on the curve towards the wall

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29 Stern 2001, 270

30 Harden 1936, 170, no. 489; Isings 1957, 140; Israeli 2003, 197-198, Cat. Nos. 236-237.

31 Çakmakçi 2009; Golofast 2009, 315.

32 Băjenaru, Bâltâc 2000-2001, 476.

33 Cliante, Ţârlea 2019, 240-241.

(Cat. No. 14). The presence of the ribs indicates that the vessel was produced by being blown in a dip mould, a technique which implied that the parison was inflated in the mould, withdrawn, and blown in the desired size and shape.[34] The clear identification of this specific type of goblet in Histria is a first, at least to our present knowledge, and it was possible only thanks to the preservation of the bottom of the bowl belonging to a stemmed goblet, as long as the preserved feet cannot offer information on this matter. Dip mould blown goblets, dated in general to the 4th-6th centuries AD like the bulk of the stemmed goblets Isings form 111, are known from various collections. Two such items belonging to the collections of the Corning Museum could represent quite good analogies for our fragment in that they have straight walls, almost vertical or tapering slightly and curving quite sharply at the bottom, which is rather flat, not rounded.[35] The main difference is that in their case the ribs are vertical, while on the fragment discussed here the ribs are twisted. From this perspective, it could resemble more to the well preserved goblets dated to the 6th-7th centuries AD, found in the Armenian monastery in the Morasha neighbourhood of Jerusalem and the Jerusalem International Convention Center, and seen as a reflecting a local fashion.[36]

## CHRONOLOGY

Although the stemmed goblets belonging to Isings form 111 were in general considered to date from the 4th century AD and later[37], the finds from well-dated contexts seem to indicate that this shape does not predate in fact the mid of the 5th century AD, reaching a peak in use during the 6th and 7th centuries AD.[38] The archaeological record available so far concurs in placing the last phase of inhabitation of the building during the second half of the 6th and the beginning of the 7th centuries AD[39], and it can be reasonably presumed that most of the glass finds discussed in the present paper also belong to this phase, being in use during this time span.

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34 Whitehouse 2001, 117.

35 Whitehouse 2001, 117-118, nos. 616-617, with unknown/uncertain provenance (especially no. 616 for the flatness of the bottom and also the way in which the ribs are prominent only around the stem; no. 617 for the general appearance).

36 Gorin-Rosen, Winter 2010, 169, fig. 3/1 (although this item has a rounder bottom than our fragment; it also has a beaded stem, while in our case the stem seems rather to have been solid); the main characteristic of these items is the combination between the ribbed body and the horizontal trails applied on and below the rim, a characteristic impossible to be either presumed or rejected in the case of our item.

37 Isings 1957, 139.

38 Stern 2001, 271; Gorin-Rosen, Winter 2010, 168-169.

39 Bottez *et alii* 2015; Bottez *et alii* 2018.

## CATALOGUE

**1. Code:** HIS 13 ACS
**ID:** 103/2013
**Trench:** C004
**Depth:** + 0.80/0.63 – +0.72/0.41 m
**Context:** 4000
**Preservation:** fragment
**Description:** knobbed stem with spherical knob; small "bubble" formed in the upper part of the stem; very small parts of the base and of the bottom of the body also preserved; slightly iridescent
**Transparency:** transparent
**Colour:** bluish tinge
**Bubbles:** spherical and elongated (< 1mm)
**Quality:** medium
**Height:** preserved 1.75 cm
**Diameter:**

- **Base:** not preserved
- **Stem:** 1.2 cm (knob); 0.9 cm (constrictions); 0.7 x 0.6 cm ("bubble")
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** not noticed

**Thickness:** 0.3 cm (base); 0.1 cm (wall)
**Analogies:** Cat. No. 2 (with less well-defined rounder knob); Cat. No. 12; Gorin-Rosen 1999, 211, Fig. 2/26; Gorin-Rosen, Winter 2010, fig. 3.2; Czurda-Ruth 2007, Taf. 19, 686, 688, 738

**2. Code:** HIS 13 ACS
**ID:** 115/2013
**Trench:** C001 (A1-4/B1-4)
**Depth:** 0.00 – -0.61 m
**Context:** 1002
**Preservation:** fragment
**Description:** knobbed stem with spherical knob; hollow stem, small "bubble" formed in the upper part of the stem; iridescent
**Transparency:** transparent
**Colour:** bluish tinge
**Bubbles:** spherical (< 1 mm)
**Quality:** medium
**Height:** preserved 1.9 cm
**Diameter:**

- **Base:** not preserved
- **Stem:** 1.15 cm (knob); 1.05 cm (upper constriction); 0.95 cm (lower constriction)

- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** not noticed

**Thickness:**
**Analogies:** Cat. No. 1 (with better-defined flatter knob); Gorin-Rosen 1999, 211, Fig. 2, 26; Gorin-Rosen, Winter 2010, fig. 3.2; Czurda-Ruth 2007, Taf. 19, 686, 688, 738

**3. Code:** HIS 13 ACS
**ID:** 118/2013
**Trench:** C004
**Depth:** +0.63 – +0.10/-0.10 m
**Context:** 4001
**Preservation:** fragment
**Description:** small fragment of a base encircled by tubular ring; slightly iridescent
**Transparency:** transparent
**Colour:** bluish tinge
**Bubbles:** spherical (< 1 mm)
**Quality:** medium
**Height:** preserved 0.6 cm
**Diameter:**

- **Base:** estimated 4.8 cm
- **Stem:** not preserved
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** not preserved

**Thickness:** 0.3 (ring); 0.15-0.3 cm (base)
**Analogies:** Cat. No. 22; similar to: Cat. No. 8; Băjenaru, Bâltâc 2000-2001, pl. IX 6; Băjenaru, Bâltâc 2006, fig. 3, 26

**4. Code:** HIS 13 ACS
**ID:** 118/2013
**Trench:** C004
**Depth:** +0.63 – +0.10/-0.10 m
**Context:** 4001
**Preservation:** fragment
**Description:** completely preserved, hollow funnel-shaped stem; very small parts of the bottom of the base and of the body also preserved; pontil mark; iridescent; showing signs of deformation
**Transparency:** transparent
**Colour:** green
**Bubbles:** spherical (< 1mm)
**Quality:** medium
**Height:** preserved 2.9 cm

**Diameter:**

- **Base:** not preserved
- **Stem:** 0.85 – 1.1 cm
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** estimated

**Thickness:** 0.3 cm (base); 0.2 cm (wall)
**Analogies:** Cat. No. 15; similar to: Cliante, Țârlea 2019, Cat. No. 5 (more slender – the minimum diameter in the middle); similar to: Băjenaru, Bâltâc 2006, cat. nos. 23, 87; Gorin-Rosen, Winter 2010, fig. 2.7; Golofast 2009, 317-318, fig. 16.12-13; Fünfschilling, Lafli 2013, Abb. 14, 78; Atik 2009, fig. 58; Czurda-Ruth 2007, Taf. 19, 652; Israeli 2003, 198, no. 237; Khruškova 2009, 343, fig. 24, 56-59.

**5. Code:** HIS 13 ACS
**ID:** 127/2013
**Trench:** C001
**Depth:** 0 – -0.61 m
**Context:** 1002
**Preservation:** fragment
**Description:** almost completely preserved hollow stem, blocked only at the point where it splays to form the base by means of pontil; small part of the base also preserved; pontil mark; iridescent
**Transparency:** transparent
**Colour:** olive oil
**Bubbles:** spherical (< 1 mm)
**Quality:** medium
**Height:** preserved 2.2 cm
**Diameter:**

- **Base:** not preserved
- **Stem:** 0.95 – 0.9 – 0.95 cm
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** 1 cm

**Thickness:** 0.3 (base); 0.2 cm (wall)
**Analogies:** Cat. Nos. 9, 11, 13, 18, 20; Băjenaru, Bâltâc 2006, fig. 2/3, 5, 7, 8; Gorin-Rosen, Winter 2010, fig. 2.8; Czurda-Ruth 2007, Taf. 19, 631; Atik 2009, fig. 59

**6. Code:** HIS 13 ACS
**ID:** 127/2013
**Trench:** C001
**Depth:** 0 – -0.61 m
**Context:** 1002
**Preservation:** fragment

**Description:** fragment of a base with very narrow tubular ring (almost completely disappearing on a part of the item); possibly traces of pontil; iridescent; showing signs of deformation, presumably a faulty product.
**Transparency:** transparent
**Colour:** green
**Bubbles:** large amounts; spherical (<1 mm)
**Quality:** medium
**Height:** preserved 1 cm
**Diameter:**

- **Base:** estimated 3.8 cm
- **Stem:** not preserved
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** not preserved

**Thickness:** 0.4 cm (base)
**Analogies: Cat. No. 16-17;** similar to: Cliante, Țârlea 2019, Cat. No. 6; Băjenaru, Bâltâc 2006, cat. nos. 24-26; Băjenaru, Bâltâc 2000-2001, pl. 9, no. 3

**7. Code:** HIS 13 ACS
**ID:** 350/2013
**Trench:** C007
**Depth:** +0.46/+0.24 – -0.55 m
**Context:** 7001
**Preservation:** fragmentary
**Description:** completely preserved stem and base; hollow stem, blocked only at the point where it splays to form the base by means of pontil; base encircled by tubular ring; pontil mark; slightly deformed base, presumably a faulty product
**Transparency:** transparent
**Colour:** greenish tinge
**Bubbles:** large amounts; spherical (< 1 mm)
**Quality:** medium
**Height:** preserved 2.9 cm
**Diameter:**

- **Base:** 4.6 cm
- **Stem:** 0.9 – 1.2 cm
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** 1 cm

**Thickness:** 0.3 cm (ring); 0.2 cm (stem)
**Analogies:** Cliante, Țârlea 2019, Cat. No. 4 (without tubular ring); Băjenaru, Bâltâc 2006, cat. no. 25; Schwarzer 2009, Taf. 2, 33 ASKL; similar to: Gorin-Rosen 1999, RAM25, fig. 2, no. 25; Israeli 2003, 197, no. 236; Whitehouse 1997, 103-105, nos. 154, 156; Shalikadze, Kakhidze 2009, 370, fig. 3.

**8. Code:** HIS 14 ACS
**ID:** 20/2014
**Trench:** C009
**Depth:** + 0.75 m
**Context:** 9000
**Preservation:** fragment
**Description:** fragment of a base encircled by tubular ring; iridescent; chipped on the inferior side; rough surface
**Transparency:** transparent
**Colour:** greenish tinge
**Bubbles:** spherical (< 1 mm)
**Quality:** medium
**Height:** preserved 0.8 cm
**Diameter:**

- **Base:** estimated 5.5 cm
- **Stem:** not preserved
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** not preserved

**Thickness:** 0.4 (ring and base)
**Analogies:** similar to: Cat. No. 3; Băjenaru, Bâltâc 2000-2001, pl. IX 6; Băjenaru, Bâltâc 2006, fig. 3, 26

**9. Code:** HIS 14 ACS
**ID:** 85/2014
**Trench:** C009
**Depth:** +0.67 – +0.18 m
**Context:** 9001
**Preservation:** fragment
**Description:** completely preserved base encircled by tubular ring; beginning of stem also preserved; base incompletely folded; pontil mark; slightly iridescent; smooth surface, relatively well preserved; slightly affected at the moment of discovery (cracked and margin chipped)
**Transparency:** transparent
**Colour:** olive oil
**Bubbles:** rare; spherical (< 1 mm)
**Quality:** medium
**Height:** preserved 1.4 cm
**Diameter:**

- **Base:** 4.1 cm
- **Stem:** 0.9 cm (lower end)
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** 1 cm

**Thickness:** 0.3 cm (base)

**Analogies:** Cat. Nos. 5, 9, 11, 13, 18, 20; Băjenaru, Bâltâc 2006, fig. 2/3, 5, 7, 8; Gorin-Rosen, Winter 2010, fig. 2.8; Czurda-Ruth 2007, Taf. 19, 631; Atik 2009, fig. 59

**10. Code:** HIS 14 ACS
**ID:** 103/2014
**Trench:** C009
**Depth:** + 0.12 m
**Context:** 9001
**Preservation:** fragment
**Description:** fragment of a base encircled by tubular ring; smooth surface
**Transparency:** transparent
**Colour:** olive oil
**Bubbles:** rare; spherical (< 1 mm)
**Quality:** medium
**Height:** preserved 0.9 cm
**Diameter:**

- **Base:** estimated 4 cm
- **Stem:** not preserved
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** not preserved

**Thickness:** 0.3 cm (ring); 0.25 cm (base)
**Analogies:** similar to: Băjenaru, Bâltâc 2006, cat. no. 26; Milavec, Šmit 2018, pl. 2, fig. 2; Buljević 2001, cat. no. 25, fig. 25; Fünfschilling, Lafli 2013, Taf. 2, VR1/48; Taf. 5, VR5/7; Czurda-Ruth 2007, Taf. 19, 634

**11. Code:** HIS 14 ACS
**ID:** 477/2014
**Trench:** C001/C007 (baulk)
**Depth:** -0.55 m
**Context:** Z 014/7001 (wall and clay floor)
**Preservation:** fragment
**Description:** fragment of a base encircled by tubular ring; the beginning of the stem also preserved; uneven thickness of the base; pontil mark; iridescent; dark persistent weathering crust on the inferior side
**Transparency:** transparent
**Colour:** greenish tinge
**Bubbles:** spherical (< 1 mm)
**Quality:** medium
**Height:** preserved 2.2 cm
**Diameter:**

- **Base:** estimated 4 cm
- **Stem:** 0.8 cm

- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:**

**Thickness:** 0.35 cm (ring); 0.3 – 0.45 cm (base)
**Analogies:** Cat. Nos. 5, 9, 13, 18, 20; Băjenaru, Bâltâc 2006, fig. 2/3, 5, 7, 8; Gorin-Rosen, Winter 2010, fig. 2.8; Czurda-Ruth 2007, Taf. 19, 631; Atik 2009, fig. 59.

**12. Code:** HIS 15 ACS
**ID:** 91/2015
**Trench:** C020
**Depth:** +0.55 m
**Context:** 20001
**Preservation:** fragment
**Description:** small part of a knobbed stem with spherical knob; "bubble" formed in the upper end of the stem; iridescent
**Transparency:** transparent
**Colour:** bluish tinge
**Bubbles:** spherical (< 1 mm)
**Quality:** medium
**Height:** preserved 1.1 cm
**Diameter:**

- **Base:** not preserved
- **Stem:** 1.1 cm; 1 cm (constriction); 0.6 cm ("bubble")
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** not preserved

**Thickness:** 0.2 cm
**Analogies:** Cat. No. 1; Cat. No. 2 (with less well-defined rounder knob); Gorin-Rosen 1999, 211, Fig. 2/26; Gorin-Rosen, Winter 2010, fig. 3.2; Czurda-Ruth 2007, Taf. 19, 686, 688, 738

**13. Code:** HIS 15 ACS
**ID:** 147/2015
**Trench:** C023
**Depth:** +0.88 – +0.71 m
**Context:** 23000
**Preservation:** fragment
**Description:** fragment of a base encircled by tubular ring; beginning of the stem also preserved; stem blocked at the inferior end by blob of glass; iridescent
**Transparency:** transparent
**Colour:** olive oil
**Bubbles:** spherical (< 1 mm)
**Quality:** medium
**Height:** preserved 1.6 cm

**Diameter:**

- **Base:** estimated 4.2 cm;
- **Stem:** estimated 0.85 cm
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** ?

**Thickness:** 0.3 cm; 0.4 cm (ring)
**Analogies: Cat. Nos. 5, 9, 11, 18, 20;** Băjenaru, Bâltâc 2006, fig. 2/3, 5, 7, 8; Gorin-Rosen, Winter 2010, fig. 2.8; Czurda-Ruth 2007, Taf. 19, 631; Atik 2009, fig. 59

**14. Code:** HIS 15 ACS
**ID:** 294/2015
**Trench:** C020
**Depth:** +0.11 – -0.01 m
**Context:** 20003
**Preservation:** fragment
**Description:** the bottom part of the body, presenting oblique channelling; print of the stem could indicate that it was a solid stem; iridescent; relatively smooth surface
**Transparency:** transparent
**Colour:** greenish tinge
**Bubbles:** large amounts; spherical (< 1 mm)
**Quality:** medium
**Height:** preserved 1.2 cm
**Diameter:**

- **Base:** not preserved
- **Stem:** estimated
- **Body:** preserved 5.2 cm
- **Rim:** not preserved
- **Pontil:** not preserved

**Thickness:** 0.2 cm (bottom); 0.1 cm (wall)
**Analogies:** Gorin-Rosen, Winter 2010, 169, fig. 3/1

**15. Code:** HIS 15 ACS
**ID:** 323/2015
**Trench:** C020
**Depth:** -0.011 – -0.11 m
**Context:** 20003
**Preservation:** fragmentary
**Description:** completely preserved base and stem; small part of the bottom of the body also preserved; base encircled by tubular ring; slightly conical stem; pontil mark; iridescent
**Transparency:** transparent
**Colour:** greenish tinge
**Bubbles:** spherical (< 1 mm)

**Quality:** medium
**Height:** preserved 4 cm
**Diameter:**

- **Base:** 4.4 cm; 0.4 cm (ring on the exterior)
- **Stem:** 1.1 cm (base); 0.8 (upper part)
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** 1.2 cm

**Thickness:** 0.4 cm (base); 0.1 cm (wall)
**Analogies:** Cat. No. 4 (absence of pontil mark); similar to: Cliante, Țârlea 2019, Cat. No. 5 (slightly more slender – the minimum diameter in the middle); similar to: Băjenaru, Bâltâc 2006, cat. nos. 23, 87; Gorin-Rosen, Winter 2010, fig. 2.7; Golofast 2009, 317-318, fig. 16.12-13; Fünfschilling, Lafli 2013, Abb. 14, 78; Atik 2009, fig. 58; Czurda-Ruth 2007, Taf. 19, 652; Israeli 2003, 198, no. 237; Khruškova 2009, 343, fig. 24, 56-59

**16. Code:** HIS 15 ACS
**ID:** 324/2015
**Trench:** C021
**Depth:**
**Context:** 21001
**Preservation:** fragment; rough surface
**Description:** fragment of a base encircled by very narrow tubular ring; pontil mark; iridescent
**Transparency:** transparent
**Colour:** greenish tinge
**Bubbles:** spherical (< 1 mm)
**Quality:** medium
**Height:** preserved 1.1 cm
**Diameter:**

- **Base:** estimated 4.8 cm
- **Stem:** not preserved
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** estimated 1.2 cm

**Thickness:** 0.3-0.4 cm (base); 0.3 cm (ring)
**Analogies: Cat. No. 6; Cat. No. 17;** similar to: Cliante, Țârlea 2019, Cat. No. 6; Băjenaru, Bâltâc 2006, cat. nos. 24-26; Băjenaru, Bâltâc 2000-2001, pl. 9, no. 3

**17. Code:** HIS 15 ACS
**ID:** 423/2015
**Trench:** C021
**Depth:** +0.16 – +0.03 m
**Context:** 21004
**Preservation:** fragment

**Description:** fragment of a base encircled by tubular ring; iridescent
**Transparency:** transparent
**Colour:** greenish tinge
**Bubbles:** spherical (< 1 mm)
**Quality:** medium
**Height:** preserved 0.6 cm
**Diameter:**

- **Base:** estimated 4 cm
- **Stem:** not preserved
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** not preserved

**Thickness:** 0.35-0.4 cm; 0.4 cm (ring)
**Analogies: Cat. No. 6; Cat. No. 16;** similar to: Cliante, Țârlea 2019, Cat. No. 6; Băjenaru, Bâltâc 2006, cat. nos. 24-26; Băjenaru, Bâltâc 2000-2001, pl. 9, no. 3

**18. Code:** HIS 15 ACS
**ID:** 425/2015
**Trench:** C024
**Depth:** +0.56 – +0.53 m
**Context:** 24000
**Preservation:** fragment; rough surface
**Description:** fragment of a base encircled by tubular ring; iridescent
**Transparency:** transparent
**Colour:** greenish tinge
**Bubbles:** spherical (< 1 mm)
**Quality:** medium
**Height:** preserved 1.2 cm
**Diameter:**

- **Base:** estimated 4 cm
- **Stem:** not preserved
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** not preserved

**Thickness:** 0.25-0.3 cm; 0.3 cm (ring)
**Analogies: Cat. No. 5, 9, 11, 13, 20;** Băjenaru, Bâltâc 2006, fig. 2/3, 5, 7, 8; Gorin-Rosen, Winter 2010, fig. 2.8; Czurda-Ruth 2007, Taf. 19, 631; Atik 2009, fig. 59

**19. Code:** HIS 15 ACS
**ID:** 462/2015
**Trench:** C025
**Depth:**
**Context:** 25000

**Preservation:** fragmentary
**Description:** completely preserved stem and base; short thick conical hollow stem with "bubble" in the upper part; solid thick base encircled by tubular ring; pontil mark; strongly iridescent; small areas with dark weathering crust
**Transparency:** transparent
**Colour:** greenish tinge/green
**Bubbles:** spherical (< 1 mm)
**Quality:** medium
**Height:** preserved 2.7 cm (stem 1.1 cm)
**Diameter:**

- **Base:** 4.8 cm
- **Stem:** 0.95 cm; 0.75 cm ("bubble")
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** 1.1 cm

**Thickness:** 0.6 cm (base); 0.65 cm (ring); 0.2 cm (wall)
**Analogies:** Czurda-Ruth 2007, 303, pl. 19/644; Dussart 1998, 267, pl. 27/41; similar to Băjenaru, Bâltâc 2000-2001, 33-34, pl. IV/3

**20. Code:** HIS 15 ACS
**ID:** 534/2015
**Trench:** C022
**Depth:** +0.37 – +0.34 m
**Context:** 22000
**Preservation:** fragment
**Description:** fragment of a base encircled by tubular ring; slightly iridescent; relatively smooth surface
**Transparency:** transparent
**Colour:** greenish tinge
**Bubbles:** spherical (< 1 mm)
**Quality:** medium
**Height:** preserved 1.1 cm
**Diameter:**

- **Base:** estimated 4 cm
- **Stem:** not preserved
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** not preserved

**Thickness:** 0.2-0.3 cm; 0.35 cm (ring)
**Analogies: Cat. No. 5, 9, 11, 13, 18;** Băjenaru, Bâltâc 2006, fig. 2/3, 5, 7, 8; Gorin-Rosen, Winter 2010, fig. 2.8; Czurda-Ruth 2007, Taf. 19, 631; Atik 2009, fig. 59

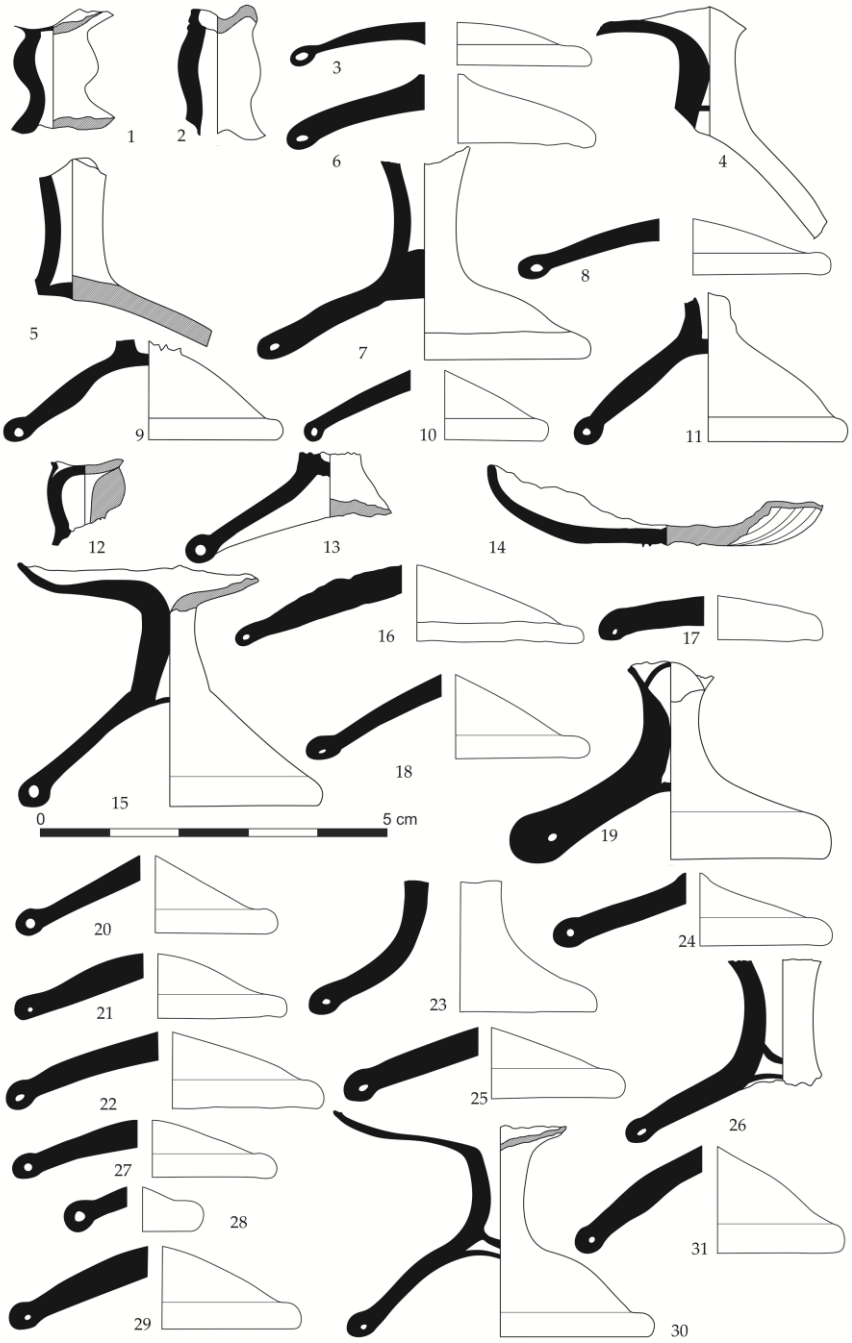


Fig. 2. Fragmentary stemmed goblets from the Acropolis Centre-South Sector (Histria).

**21. Code:** HIS 15 ACS
**ID:** 534/2015
**Trench:** C022
**Depth:** +0.37 – +0.34 m
**Context:** 22000
**Preservation:** fragment
**Description:** fragment of a base encircled by tubular ring; iridescent; rough surface; heavy pitting
**Transparency:** transparent
**Colour:** greenish tinge
**Bubbles:** large amounts; spherical (< 1 mm)
**Quality:** low
**Height:** preserved 0.9 cm
**Diameter:**

- **Base:** estimated 4 cm
- **Stem:** not preserved
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** not preserved

**Thickness:** 0.3-0.4 cm; 0.3 cm (ring)
**Analogies:** Băjenaru, Bâltâc 2006, Fig. 2/7, 8

**22. Code:** HIS 15 ACS
**ID:** 668/2015
**Trench:** C023
**Depth:** +0.71 – +0.63 m
**Context:** 23000
**Preservation:** fragment
**Description:** fragment of a base encircled by tubular ring; iridescent
**Transparency:** transparent
**Colour:** greenish tinge
**Bubbles:** spherical (< 1 mm)
**Quality:** medium
**Height:** preserved 1.1 cm
**Diameter:**

- **Base:** estimated 4.6 cm
- **Stem:** not preserved
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** estimated 1 cm

**Thickness:** 0.3-0.4 cm; 0.4 cm (ring)
**Analogies: Cat. No. 3;** Băjenaru, Bâltâc 2000-2001, pl. IX 6; Băjenaru, Bâltâc 2006, fig. 3, 26.


Fig. 3. Fragmentary stemmed goblets from the Acropolis Centre-South Sector (Histria).


Fig. 4. Fragmentary stemmed goblets from the Acropolis Centre-South Sector (Histria).

**23. Code:** HIS 15 ACS
**ID:** 883/2015
**Trench:** C019
**Depth:** -1.01 – -1.09 m
**Context:** 19005 (V)
**Preservation:** fragment
**Description:** fragment (half) of a base encircled by tubular ring; strongly iridescent

**Transparency:** transparent
**Colour:** greenish tinge
**Bubbles:** spherical (< 1 mm)
**Quality:** medium
**Height:** preserved 1.6 cm
**Diameter:**

- **Base:** estimated 4.6 cm
- **Stem:** estimated
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** not preserved

**Thickness:** 0.3-0.35 cm; 0.4 cm (ring)
**Analogies:** Dussart 1998, 267, pl. 27/34

**24. Code:** HIS 16 ACS
**ID:** 32/2016
**Trench:** C027
**Depth:** +0.49 – +0.41
**Context:** 27000
**Preservation:** fragment
**Description:** fragment of a base encircled by tubular ring; iridescent
**Transparency:** transparent
**Colour:** olive oil tinge
**Bubbles:** spherical (< 1 mm)
**Quality:** medium
**Height:** preserved 0.9 cm
**Diameter:**

- **Base:** estimated 4.6 cm
- **Stem:** not preserved
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** not preserved

**Thickness:** 0.3 cm; 0.35 cm (ring)
**Analogies: Cat. No. 8; Cat. No. 25;** similar to: Cat. No. 3; Băjenaru, Bâltâc 2000-2001, pl. IX 6; Băjenaru, Bâltâc 2006, fig. 3, 26.

**25. Code:** HIS 16 ACS
**ID:** 49/2016
**Trench:** C027
**Depth:** +0.41 – +0.26 m
**Context:** 27000
**Preservation:** fragment
**Description:** fragment of a base encircled by tubular ring; iridescent

**Transparency:** transparent
**Colour:** greenish tinge
**Bubbles:** spherical (< 1 mm)
**Quality:** medium
**Height:** preserved 1 cm
**Diameter:**

- **Base:** estimated 4.2 cm
- **Stem:** not preserved
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** not preserved

**Thickness:** 0.35-0.4 cm; 0.4 cm (ring)
**Analogies: Cat. No. 8; Cat. No. 24;** similar to: Cat. No. 3; Băjenaru, Bâltâc 2000-2001, pl. IX 6; Băjenaru, Bâltâc 2006, fig. 3, 26

**26. Code:** HIS 16 ACS
**ID:** 137/2016
**Trench:** C032
**Depth:**
**Context:** passim (the eastern profile)
**Preservation:** fragment
**Description:** hollow stem and base encircled by tubular ring; part of the stem preserved; part of the base preserved; pontil mark; iridescent
**Transparency:** transparent
**Colour:** greenish tinge
**Bubbles:** spherical (< 1 mm)
**Quality:** medium
**Height:** preserved 2.6 cm
**Diameter:**

- **Base:** estimated 4.2 cm
- **Stem:** 1.3-1-1.2 cm
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** 1.1 cm

**Thickness:** 0.2-0.4 cm; 0.3 cm (ring)
**Analogies:** Cat. No. 30; Dussart 1998, Pl. 27/10

**27. Code:** HIS 16 ACS
**ID:** 189/2016
**Trench:** C027
**Depth:** +0.11 – +0.04 m
**Context:** 27001
**Preservation:** fragment

**Description:** fragment of a base encircled by tubular ring; iridescent
**Transparency:** transparent
**Colour:** bluish tinge
**Bubbles:** spherical (< 1 mm)
**Quality:** medium
**Height:** preserved 0.8 cm
**Diameter:**

- **Base:** estimated 4.2 cm
- **Stem:** not preserved
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** not preserved

**Thickness:** 0.25-0.4 cm; 0.3 cm (ring)
**Analogies: Cat. No. 11; Cat. No. 13; Cat. No. 20; Cat. No. 28-29;** Băjenaru, Bâltâc 2006, fig. 2/3, 5, 7, 8; Gorin-Rosen, Winter 2010, fig. 2.8; Czurda-Ruth 2007, Taf. 19, 631; Atik 2009, fig. 59

**28. Code:** HIS 16 ACS
**ID:** 381/2016
**Trench:** C032
**Depth:** +0.78 – +0.57 m
**Context:** 32001
**Preservation:** fragment
**Description:** fragment of a base encircled by tubular ring; iridescent; patches of dark crust
**Transparency:** transparent
**Colour:** greenish tinge
**Bubbles:** spherical (< 1mm)
**Quality:** medium
**Height:** preserved 0.6 cm
**Diameter:**

- **Base:** estimated
- **Stem:** not preserved
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** not preserved

**Thickness:** 0.25 cm; 0.4 cm (ring)
**Analogies: Cat. No. 11; Cat. No. 13; Cat. No. 20; Cat. No. 27; Cat. No. 29;** Băjenaru, Bâltâc 2006, fig. 2/3, 5, 7, 8; Gorin-Rosen, Winter 2010, fig. 2.8; Czurda-Ruth 2007, Taf. 19, 631; Atik 2009, fig. 59

**29. Code:** HIS 16 ACS
**ID:** 439/2016
**Trench:** C033
**Depth:** +0.93 – +0.76 m
**Context:** 33000

**Preservation:** fragment
**Description:** fragment of a base encircled by tubular ring; iridescent
**Transparency:** transparent
**Colour:** greenish tinge
**Bubbles:** spherical (< 1 mm)
**Quality:** medium
**Height:** preserved 1.1 cm
**Diameter:**

- **Base:** estimated 5 cm
- **Stem:** not preserved
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** estimated 1.1 cm

**Thickness:** 0.3-0.4 cm; 0.35 cm (ring)
**Analogies: Cat. No. 11; Cat. No. 13; Cat. No. 20; Cat. No. 27-28;** Băjenaru, Bâltâc 2006, fig. 2/3, 5, 7, 8; Gorin-Rosen, Winter 2010, fig. 2.8; Czurda-Ruth 2007, Taf. 19, 631; Atik 2009, fig. 59

**30. Code:** HIS 16 ACS
**ID:** 502/2016
**Trench:** C032
**Depth:** +0.14 – -0.03 m
**Context:** 32004
**Preservation:** fragmentary; smooth surface
**Description:** completely preserved stem and base; small part of the bottom of the body also preserved; hollow stem; base encircled by tubular ring; pontil mark; slightly iridescent
**Transparency:** transparent
**Colour:** olive oil
**Bubbles:** spherical (< 1 mm); spherical and elongated on the inferior part of the body
**Quality:** medium
**Height:** preserved 3.2 cm
**Diameter:**

- **Base:** 4.35 cm
- **Stem:** 1-0.75-0.85 cm
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** 1.1 cm

**Thickness:** 0.25 cm; 0.25 cm (ring); 0.1 cm (wall)
**Analogies:** Cat. No. 26; Dussart 1988, Pl. 27/10

**31. Code:** HIS 16 ACS
**ID:** 767/2016
**Trench:** C005/C007 (baulk)
**Depth:** +0.40 – -0.15 m

**Context:** 5002/7002
**Preservation:** fragment; rough surface; pitting; much affected on the inferior side
**Description:** fragment of a base encircled by tubular ring; iridescent
**Transparency:** transparent
**Colour:** green (vert bouteille)
**Bubbles:** spherical (< 1 mm)
**Quality:** medium
**Height:** preserved 1.5 cm
**Diameter:**

- **Base:** estimated 5.1 cm
- **Stem:** not preserved
- **Body:** not preserved
- **Rim:** not preserved
- **Pontil:** not preserved

**Thickness:** 0.35-0.5 cm; 0.35 cm (ring)
**Analogies: Cat. No. 11;** Băjenaru, Bâltâc 2006, fig. 2/3, 5, 7, 8; Gorin-Rosen, Winter 2010, fig. 2.8; Czurda-Ruth 2007, Taf. 19, 631; Atik 2009, fig. 59

**BIBLIOGRAPHY**

Atik, Ş. 2009, *Late Roman/Early Byzantine Glass Finds from the Marmaray Rescue Excavation at Yenikapı in Istanbul*, in Lafli, E. (ed.), *Late Antique/Early Byzantine Glass in the Eastern Mediterranean, Colloquia Anatolica et Aegaea, Acta Congressus Internationalis Smyrnensis II*, Izmir, 2009, 1-16.

Băjenaru, C., Bâltâc, A. 2000-2001, *Depozitul de candele din sticlă descoperit la bazilica episcopală de la Histria*, Pontica 33-34, 469-513.

Băjenaru, C., Bâltâc, A.2006, *Histria – Bazilica Episcopală. Catalogul descoperirilor de sticlă (1984-2000)*, Pontica 36, 219-247.

Bottez, V., Liţu, A., Ţârlea, A. 2015, *Preliminary results of the excavations at Histria, the Acropolă Centru-Sud Sector (2013-2014)*, Materiale şi Cercetări Arheologice, Serie Nouă 11, 157-192.

Bottez, V., Ţârlea, A., Liţu, A., Iliescu, I. 2018, *Preliminary report of the excavations at Histria, the Acropolis Centre-South Sector (2015-2016)*, Peuce, Serie Nouă 16, 281-384.

Buljević, Z. 2001, *Stakleni inventar s Erešovih Šiljegovih i Popovih Bara u Vidu*, Vjesnik za Arheologiju i Historiju Dalmatinsku 94, 165-193.

Çakmakçi, Z. 2009, *A Typological Approach to the Glass Goblet Production from Late Antiquity to the Middle Ages in the Light of Recent Finds*, Lafli, E. (ed.), *Late Antique/Early Byzantine Glass in the Eastern Mediterranean, Colloquia Anatolica et Aegaea, Acta Congressus Internationalis Smyrnensis II*, Izmir, 49-66.

Cliante, L., Ţârlea, A. 2019, *The 6th century AD glass stemmed goblets from excavations in Histria (Centre-North Sector)*, Peuce, Serie Nouă 17, 235-248.

Czurda-Ruth, B. 2007, *Hanghaus I in Ephesos. Die Gläser, Wien, Verlag der Österreichischen Akademie der Wissenschaften*, Forschungen in Ephesos, VIII/7.

Dussart, O. 1988, *Le verre en Jordanie et en Syrie du sud*, Beyrouth.

Foy, D., Picon, M., Vichy, M., Thirion-Merle, V. 2003, *Caractérisation des verres de la fin d'Antiquité en Méditerranée occidentale : l'émergence de nouveaux courants commerciaux*, in *Échanges et commerce du verre dans le monde antique. Actes du colloque de l'Association Française pour l'Archéologie du Verre, Aix-en-Provence et Marseille, 7-9 juin 2001*, 41-78.

Foy, D., Picon, M. 2005, *L'origine du verre en Méditerranée occidentale à la fin de l'Antiquité et dans le haut Moyen Âge*, in *La Méditerranée et le monde mérovingien : témoins archéologiques*, BAP Supplément 3, Éditions de l'APA, 99-110

Fünfschilling, S., Lafli, E. 2013, *Hadrianopolis II: Glasfunde des 6. und 7. Jahrhunderts aus Hadrianupolis, Paphlagonien/TR*, Internationale Archäologie 123, Rahden/Westfalien, Verlag Marie Leidorf.

Gliozzo, E., Turchiano, M., Giannetti, F., Memmi, I. 2016, *Late Antique and Early Medieval Glass Vessels from Faragola (Italy)*, Archaeometry (accepted), doi: 10.1111/arcm.12242, 1-35.

Golofast, L. 2009, *Early Byzantine Glass from the Tauric Chersonesos (Crimea)*, in Lafli, E. (ed.), *Late Antique/Early Byzantine Glass in the Eastern Mediterranean, Colloquia Anatolica et Aegaea, Acta Congressus Internationalis Smyrnensis II*, Izmir, 301-335.

Gorin-Rosen, Y. 1999, *Glass Vessels from Ras Abu Ma'anuf (Pisgat Ze'ev East A)*, 'Atiqot XXXVIII, 205-214.

Gorin-Rosen, Y., Winter, T. 2010, *Selected Insights into Byzantine Glass in the Holy Land, Glass in Byzantium – Production, Usage, Analyses, International Workshop organised by the Byzantine Archaeology Mainz, 17th -18th of January 2008*, Römisch-Germanisches Zentralmuseum – Tagungen, Band 8, 165-182.

Harden, D. 1936, *Roman Glass from Karanis. Found by the University of Michigan Archaeological Expedition in Egypt, 1924-1929*, Ann Arbor, University of Michigan Press.

Isings, C. 1957, *Roman glass from dated finds*, Archaeologica Traiectina II, J.B. Wolters, Groningen/Djakarta.

Israeli, Y. 2003, *Ancient Glass in the Israel Museum. The Eliahu Dobkin Collection and Other Gifts*, with contributions by Dan Barag and Na'ama Brosh, The Israel Museum, Jerusalem.

Israeli, Y. 2008, *The Glass*, in Patrick, J., *Archaeological Excavations at Caesarea Maritima, Areas Cc, Kk and Nn Final Reports: The Objects, Israel Exploration Society*, Jerusalem, Eisenbrauns.

Khruškova, L. 2009, *Late Antique Glass from the Eastern Black Sea: Christian Context*, in Lafli, E. (ed.), *Late Antique/Early Byzantine Glass in the Eastern Mediterranean, Colloquia Anatolica et Aegaea, Acta Congressus Internationalis Smyrnensis II*, Izmir, 337-353.

Milavec, T., Šmit, Ž. 2018, *Analyses of late antique glass from Tonovcov grad near Koband in archaeological context*, Arheološki Vestnik 69, 351-368.

Schwarzer, H. 2009, *Spätantike und byzantinische Gasfunde aus Alexandreia Troas*, in Lafli, E. (ed.), *Late Antique/Early Byzantine Glass in the Eastern Mediterranean, Colloquia Anatolica et Aegaea, Acta Congressus Internationalis Smyrnensis II*, Izmir, 67-80.

Shalikadze, T., Kakhidze, E. 2009, *Early Byzantine Vessels from the Southwestern Littoral of Georgia*, in Lafli, E. (ed.), *Late Antique/Early Byzantine Glass in the Eastern Mediterranean, Colloquia Anatolica et Aegaea, Acta Congressus Internationalis Smyrnensis II*, Izmir, 369-377.

Stern, E.M. 2001, *Roman, Byzantine and Early Medieval Glass (10 BCE – 700 CE), Ernesto Wolf Collection*, Hatje Cantz Publishers, Osfildern-Ruit.
Whitehouse, D. 1997, *Roman Glass in the Corning Museum of Glass*, vol. I.
Whitehouse, D. 2001, *Roman Glass in the Corning Museum of Glass*, vol. II.