



DE AQUAEDUCTU ATQUE AQUA URBIVM LYCIAE PAMPHYLIAE PISIDIAE

The Legacy of Sextus Julius Frontinus

International Congress on the History of Water Management and Hydraulic Engineering in the Mediterranean Region

Antalya, October 31 – November 9, 2014

PROGRAMME

17.10.2014

Conference hotel is the **SU HOTEL**, Dumlupınar Bulvarı, Konyaaltı Koruluğu Yanı,
TR - 07050 Antalya

31.10.2014, Friday

- 16.00 Opening of Registration
19.00 Welcome Cocktails at the Hotel Pool
20.00 Dinner at the Hotel

01.11.2014, Saturday

08:30 OPENING SESSION

Welcome and Introduction / Information: **Gilbert WIPLINGER**

Greetings: **Director B. Çelik KÖKSAL – Manager of Project and Construction, State
Hydraulic Works (DSİ), 13th District**

**Prof. Dr.-Ing Hans MEHLHORN – President of Frontinus-Society
Representativ of the Rectorate of Akdeniz University Antalya**

**PD Dr. Sabine LADSTÄTTER – Director of the Austrian Archaeological Institute
Recep YÜKSEL – Deputy Governor of Antalya**

09:00 OPENING LECTURES

- 09:00 1. **Ünal ÖZİŞ / Turkey:** *Ingenieure im Dienst der Archäologie – am Beispiel der Fernwasserleitungen von Ephesos*
09:30 2. **Christer BRUUN / Kanada:** *Inscriptions on Roman Water Pipes: A Global Survey*

10:00 Coffee break

10.30 - 17:30 Lectures

ANATOLIA 1 – Aqueducts

Chairperson: Havva İŞKAN IŞIK

- 10:30 3. **Ahmet ALKAN, Orhan N. BAYKAN, Yalçın ÖZDEMİR / Turkey:** *Long-distance Water Conveyance to Phocaea*
11:00 4. **Gilbert WIPLINGER / Austria:** *Der hadrianische und antoninische Değirmendere Aquädukt von Ephesos – 10 Jahre nach dem Ephesos-Symposium*
11:30 5. **Angela R. COMMITO / USA:** *The Aqueducts of Aphrodisias: A Regional Approach –*
read by Jordan PICKET
12:00 6. **Ahmet ALKAN / Turkey:** *Water Conveyance to Mylasa*

12:30 Lunch at the hotel

ANATOLIA 2 – Aqueducts and the Urban Water Network

Chairperson: Wolfgang MERKEL

- 14:00 7. **Mehmet ÖZHANLI / Turkey:** *Wasserleitungssysteme von Antiochia ad Pisidiam.*
14:30 8. **Dennis MURPHY / USA:** *The Ancient Aqueduct of Diocaesarea in the Olbian Territory of Southern Turkey*
15:00 9. **Brianna BRICKER / USA:** *Development, Delights, and Display in the Hydraulic Landscape of Sardis*

15:30 Coffee break

Chairperson: Gemma JANSEN

- 16:00 10. **Vedat KELEŞ, Ersin ÇELİKBAŞ, Alper YILMAZ / Turkey:** *The Water System in the Ancient City of Parion*
16:30 11. **Akın ERSOY, Sarp ALATEPELİ / Turkey:** *Water-Related Structures of Ancient Smyrna*
17:00 12. **Birol CAN / Turkey, Michael C. Hoff / USA:** *Water Management Systems at Antiochia ad Cragum in Western Rough Cilicia –* read by Dennis MURPHY

18:00 - 19:00 FRONTINUS-MEDAL

Awarding of the Frontinus-Medal to Isaac Moreno Gallo, Spain and Prof. Dr.-Ing. Ünal Öziş, Turkey

- 18:00 Laudatio Isaac MORENO GALLO by Hans MEHLHORN - Frontinus-Society / Germany
18:15 13. **Isaac MORENO GALLO / Spain:** *Roman Water Supply Systems - New Concepts*
18:45 Laudatio Ünal ÖZİŞ by Hans MEHLHORN - Frontinus-Society / Germany
19:00 Awarding of the two Frontinus-Medals by Hans MEHLHORN - Frontinus-Society / Germany

19:30 Dinner at the Lara Balıkevi restaurant in Konyalati

The restaurant is a nice fishrestaurant we can reach in a five minutes bus ride from the hotel. The dinner is sponsored by the Austrian Archaeological Institute.

02.11.2014, Sunday

08.00 – 15.00 Lectures

JORDAN

Chairperson: Wolfram LETZNER

- 08:00 14. **Laura WEIS / Germany:** *Die Nabatäer und ihre Beziehung zu Wasser: Mehr als nur eine Lebensnotwendigkeit.*
- 08:30 15. **David Donald BOYER / Australia:** *Recent Advances in Understanding the Water Delivery System to Gerasa of the Decapolis*
- 09:00 16. **Noor MULDER-HYMANS / Netherland:** *Khirbat al Mudayna, a Nabataean Agricultural Settlement in the Wadi ath-Thamad, Jordan*
- 09:30 17. **Charles ORTLOFF / USA:** *Three Hydraulic Masterpieces at Nabataean Petra (Jordan)*

10:00 Coffee break

CISTERNS

Chairperson: Christer BRUUN

- 10:30 18. **Havva İŞKAN, Orhan BAYKAN / Turkey:** *Die sog. Kurşunlu-Zisterne in Patara*
- 11:00 19. **Mehmet KÜRKÇÜ / Turkey:** *Termessos – Valley of Cisterns*
- 11:30 20. **Gemma JANSEN / Netherland:** *Let it Rain! Provisions to Catch and Store Rainwater in Roman Pompeii*
- 12:00 21. **Patrik KLINGBORG / Sweden:** *Cistern-arse! Dry Humour with Wet Cisterns*

12:30 Lunch at the hotel

WATER – PRIVAT and RELIGION

Chairperson: Joachim WIEN

- 14:00 22. **Inge UYTTERHOEVEN / Turkey, Belgium:** *A Private Piece of Nature: Water Display as Part of an Artificial Natural Environment in Roman and Late Antique Elite Houses of the Eastern Mediterranean*
- 14:30 23. **Christine ERTEL / Austria:** *Wasserführende Heiligtümer auf dem Forum Romanum in Rom*

POSTERS

35. **Isabel BESTUÉ CARDIEL, Jenny PÉREZ MARRERO, Licas RUÍZ RAFEAEL / Spain:** *Route of the Roman Aqueduct of Cádiz*
36. **Dario ROSE, Marilena COZZOLINO, Paolo MAURIELLO / Italy:** *Preliminary notes of the research on the Roman aqueduct of Alba Fucens (AQ) in Italy. The geophysical prospecting*
- and other posters from the lectures will be left up from **October 1 untill October 3**
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15:00 – 19:00 Study trip to ANTALYA

Hadrians gate, Kaleiçi with old houses, Kesik Minaret mosque, Suna-İnan Kiraç museum, harbour, clock tower and Yivli minaret.

Guided by Aytac DÖNMEZ, Wolfram LETZNER and Gilbert WIPLINGER

19:00 Dinner at the Öz Şampiyon restaurant in Antalya downtown

The dinner at an authentic fast food restaurant in the Bazar of the Döner kebab houses (Dönerciler Çarşısı) with excellent Turkish food.

03.11.2014, Monday

08.00 – 12.00 Lectures

BATHS

Chairperson: Inge UYTTERHOEVEN

- 08:00 24. **Jens KÖHLER / Italy:** *Death in the Bath. From Therapeutical Hazard to a Reconstruction of Ancient Roman Bathing*
- 08:30 25. **Matthias NIEBERLE / Germany:** *Baiae – Genese, Nutzung und Funktion eines römischen Heilbades und Kurzentrums*
- 09:00 26. **Joseph PATRICH / Israel:** *The Bathhouse of the Praetorium of the Byzantine Governor at Caesarea Maritima*
- 09:30 27. **Fatih GÜLŞEN / Turkey:** *Patara Medieval Seljuk Bath*

10:00 Coffee break

HYDRAULIC ENGINEERING

Chairperson: Jens KÖHLER

- 10:30 28. **Orhan BAYKAN, Nesrin BAYKAN / Turkey:** *The Bezirgan Tunnel (Turkey) - a Case Study in Testing of Modern Flood Estimation Methods on Ancient Closed Conduits*
- 11:00 29. **Paul KESSENER / Netherland:** *The Aspendos Aqueduct and Roman Hydraulics*
- 11:30 30. **Julian RICHARD / Belgium:** *Stagnant Beauties? A few Reflections on the Speed of the Water Flow in Roman Nymphaea – read by Brianna BRICKER*

12:00 Lunch at the hotel

13.30 – 18.00 Study trip to TERMESSUS

View from the car parking place to the high situated reservoir and the gallery of the aqueduct in the steep rock wall, cisterns D 5 + D 12 (only for sure footed climber), gymnasium with cistern, huge cisterns, theatre, odeion, dam

Guided by Mehmet KÜRKÇÜ (director of the Termessus survey from Université Paris – Sorbonne)

or Museum Antalya Guided by Havva İŞKAN and Aytac DÖNMEZ

19.00 – 20.00 Lectures

INDUSTRY

Chairperson: Paul KESSENER

- 19:00 31. **Regula WAHL-CLERICI / Swizerland:** *Wasser in der antiken Bergbauindustrie. Beispiele aus dem Nordwesten der iberischen Halbinsel*
- 19:30 32. **Jordan PICKETT / USA:** *Churches, Baths, Temples and Water Pipes: Water in Late Antique Ephesos*
- 20:00 33. **Raghid SABRI, Broder MERKEL / Germany:** *Watermills – an Example for a Sustainable Technology*

20.30 Dinner at the hotel

04.11.2014, Tuesday

07:00 Full day tour to SIDE

Departure at 07:00 at the hotel

Morning: Aqueduct tour starts with a view from the Oymapınar dam (the spring is now buried under the lake) into the very impressive Fıfırdelik gallery of the aqueduct, then we will visit the complete length that is not under the lake. Stop at the Kirkgöz-, Yüksekemer- Akcay- and Naras aqueduct bridges and the long bridge before town

Lunch at the excavation house of the Anadolu university of Eskişehir or at the temple of Apollo.

Afternoon: nymphaeum in front of the city wall, colonnaded street with long nymphaeum, agora with latrine, baths (museum) and water distribution and small fountains in the town and the theatre

Tea at sunset time at the Apollo temple.

Guided by Prof. Dr. Hüseyin ALANYALI and Dr. Feristah SOYKAL-ALANYALI (director and vice director of the Side excavation from Anadolu university of Eskişehir)

20:00 Dinner at the Antalya hotel

05.11.2014, Wednesday

07:00 Full day tour to ASPENDUS and PERGE:

Departure at 07:00 at the hotel

ASPENDUS

Visit of the famous inverted siphon of the aqueduct of Aspendos with the two pressure towers in the bends, theatre and nymphaeum

Guided by Paul KESSENER

13:00 Lunch (trout) at Nehir Restaurant at the Eurymedon river near Aspendus.

PERGE

Visit of the city gates, baths, colonnaded streets with long nymphaeum, nymphaeum, agora with macellum, stadium.

19.00 – 20.00 Lecture

34. **Marc WAELKENS / Belgium:** *Sagalassos. City of Water.*

20:00 Dinner at the Antalya hotel

06.11.2014, Thursday

06:00 Full day tour to SAGALASSUS

Departure at 06:00 at the hotel

From the colonnaded street up to the lower agora with the nymphaeum and up to the Hadianic nymphaeum, Roman baths with palaestra, palace and domestic area up to the upper agora with the Antonine nymphaeum

Lunch at the upper Agora in front of the nymphaeum.

Up to the bouleuterion, the north-west heroon, to the Hellenistic fountain and the theatre.

Guided by Marc WAELKENS and Inge UYTTERHOEVEN (palace and domestic area)

20:00 Dinner at the Antalya hotel

07.11.2014, Friday

06:00 Two days tour to PHASELIS and PATARA

Departure at 06:00 at the hotel

PHASELIS

07:00 Aqueduct bridge in front of the town and a quick tour from the north harbour at the street with baths and the theatre to the south harbour.

PATARA

12:00 **Bezirgan tunnel:** This tunnel from Lycian time drains an enormous fertile plain in the Taurus mountains near the springs of the aqueduct to Patara and brings the water to a point where it can tumble steeply down to the sea
Guided by Orhan BAYKAN

13:00 Bodamiye / İslamlar: Spring area of the aqueduct to Patara with topographic view.

13:30 Lunch at the Değirmen restaurant in Bodamiye (trout)

15:00 Delikkemer: the famous siphon of the Patara aqueduct and Tavas aqueduct bridge.

18:00 Check in at the **Golden Lighthouse Hotel** in Patara

19:30 Dinner at the hotel in Patara

08.11.2014, Saturday

08:00 Full day tour PATARA and back to Antalya

08:00 The water distribution in the town of Patara: castellum aquae, distribution towers, Mettius Modestus gate, nympheaea, baths

11:00 Final discussion and closing of the conference in the Bouleuterion of Patara

12:00 Lunch cocktail at the colonnaded street of Patara sponsored by the Patara excavation

14:00 Return to Antalya

The Patara tour will be guided by Havva İŞKAN (director of Patara excavation from the Akdeniz university in Antalya and her husband Fahri İŞİK) and Prof. Dr. Orhan BAYKAN.

20:00 Farewell dinner at the Su Hotel in Antalya

09.11.2014, Sunday

Transfers to the airport
Departure