



Managing Archaeological Sites with Mosaics: From Real Problems to Practical Solutions

**The 11th conference of the International Committee
for the Conservation of Mosaics, Meknes, October 24-27 2011**

edited by

Demetrios Michaelides and Anne-Marie Guimier-Sorbets

edifir
EDIZIONI FIRENZE

© 2017 EDIFIR-Edizioni Firenze
via Fiume, 8 – 50123 Firenze
Tel. 055/289639 – Fax 055/289478
www.edifir.it – edizioni-firenze@edifir.it

Managing editor
Simone Gismondi

Design and production editor
Elena Mariotti

Printing
Pacini Editore Industrie Grafiche - Ospedaletto (Pisa)

ISBN 978-88-7970-844-9

On cover
Season, Labours of Hercules mosaic, House of the labours of Hercules, Volubilis, Morocco (photo: D. Michaelides)

Photocopies for reader's personal use are limited to 15% of every book/issue of periodical and with payment to SIAE of the compensation foreseen in art. 68, codicil 4, of Law 22 April 1941 no. 633 and by the agreement of December 18, 2000 between SIAE, AIE, SNS and CNA, ConfArtigianato, CASA, CLAAI, ConfCommercio, ConfEsercenti. Reproductions for purposes different from the previously mentioned one may be made only after specific authorization by Edifir.

CONTENTS

FOREWORD, Demetrios Michaelides	XI
PRESIDENT'S OPENING REMARKS, Demetrios Michaelides	XV
SPEECH IN HONOUR OF ANTONIO CASSIO, Roberto Nardi	XXI

SESSION I: VOLUBILIS, CHELLAH AND MEKNES

Caractérisation des colorants et des opacifiants dans les tesselles à base de verre des mosaïques romaines de Volubilis (Maroc) Abdelilah Dekayir, Nissma Bouzoubaa, Lahcen Bejjit	3
Le zellij des monuments historiques de Meknès : techniques de fabrication, modes d'utilisation et formes décoratives Abdeltif El Khammar	7
La mosaïque figurée de Volubilis : Banalité ou originalité? Zahra Qninba, Bidaouia Belkamel	21
La conservation des mosaïques de Chellah (Rabat, Maroc) Hicham Rguig, Hakim Ammar, Meriem Hansali	31

SESSION II: METHODS OF SURVEY AND DOCUMENTATION

The Al-Majdal mosaic: documentation, study, urgent intervention, reburial Mohannad Al Taweel, Maher Jbaee, Nesreen Bouza, Alaa Hammoud	45
Surveying as a means for the development of a national strategy for the conservation and management of the mosaics of Greece Stefania Chlouveraki, Maria Krini, Elisavet Anamaterou	57
Documentation for mosaics: a conservation technique Andreina Costanzi Cobau, Roberto Nardi	71
Conservation and maintenance of mosaics in Cyprus Maria Hadjicosti, Eleftherios Charalambous	83

The Empúries mosaics: from initial restoration to today's needs and problems
Sílvia Llobet i Font 91

An approach to the management of mosaics through preliminary condition
and risk assessment
John Stewart 109

POSTER

MOSAİKON regional survey of lifted mosaics in museums: a planning and learning tool
Catherine Antomarchi, Karen Abend 127

SESSION III: CONSERVATION AND MANAGEMENT OF MOSAICS AT SITES

Guidelines for planning of shelters over archaeological sites and mosaics:
approaches for development of a methodology
Yael Alef, Jacques Neguer 149

Ecological analysis of biodeterioration of mosaics in Ostia Antica (Rome, Italy)
and conservation problems
Sarah Brignocchi, Giulia Caneva, Simona Ceschin, Sandra Ricci, Ada Roccardi 159

Archaeological sites with mosaics in Turkey: managing the unmanageable
Hande Kökten 175

Temporary protecting covering system for mosaics in archaeological sites
Alessandro Lugari 183

Site management planning: Eirene archaeological site, Plovdiv, Bulgaria
Cynthia Luk, Elena Kantareva-Decheva, Mina Bospachieva, Katherine Holbrow 189

Towards a methodology for a visitor management approach at sites with mosaic floors:
the case of Herculaneum
Niki Savvides 199

The archaeological site of Sirmium, Sremska Mitrovica, Serbia: condition survey
and development of a conservation and maintenance program for the mosaics
Nemanja Smičiklas, Marijana Protić, Aleksa Jelikić 225

Réussites, difficultés et coûts de la conservation d'un site et de ses mosaïques
Denis Weidmann 243

Conservation, maintenance and display of the mosaics in Perge – Turkey
Şehrigül Yeşil-Erdek 253

POSTERS

- Archaeometric studies on the Haleplibahçe mosaics in Turkey
Ali Akin Akyol, Yusuf Kagan Kadioglu 265
- Suitable restoration mortars for the conservation of mosaics in archaeological sites
Mara Camaiti, Emma Cantisani, Iz-Eddine El Amrani El Hassani, Fabio Fratini,
Caterina Materassi, Pasquino Pallecchi 283
- La sauvegarde des mosaïques *in situ* dans le site archéologique de Bulla Regia en Tunisie :
bilan préliminaire
Moheddine Chaouali 291
- Geology and the use of mortar in the conservation and manufacture of Cypriot floor mosaics
Eleftherios Charalambous 297
- The fisherman mosaic in the House of the Ephebe, near the Triumphal Arch of Volubilis,
Morocco
Magyda Cherradi 309
- Floor mosaics from the Greco-Roman theatre at Nea Paphos
Jennie Lindbergh 313
- Reburial of mosaic pavements: an *in situ* conservation method
Vassiliki Lysandrou, Eleftherios Charalambous 319
- Heritage management of the Monastery of Aghios Lot at Deir 'Ain 'Abata in Jordan
Konstantinos D. Politis 325
- Mosaic conservation planning and implementation at the site of Bulla Regia, Tunisia
Thomas Roby, Livia Alberti, Cristina Caldi, Ermanno Carbonara, Moheddine Chaouali,
Leslie Friedman, Hamida Rhouma 327

SESSION IV: CAPACITY BUILDING AND THE STATE OF THE PROFESSION

- A brief bibliographical review on mosaic conservation: critical and statistical analysis of re-
cent publications regarding evolution and criteria
Jessica Lewinsky, Jacques Neguer 335
- The MOSAIKON initiative for the conservation of mosaics in the Mediterranean region:
an update on activities
Jeanne Marie Teutonico, Leslie Friedman, on behalf of the MOSAIKON partners 365

SESSION V: PRESENTATION AND DISPLAY

The Memorial of Moses on Mount Nebo, Jordan. A new shelter for the monument and the restoring of the mosaics: the ongoing project and new perspectives
Carmelo Pappalardo 377

Conservation work on the mosaics of the Villa of the Amazons (Şanlıurfa, Turkey): from “theme park” to “archaeopark”
Yaşar Selçuk Şener 385

POSTERS

Managing the loss: a comparative study of theories on aesthetic reintegration of lacunae in mosaic floors
Mikal Kindt, Stefania Chlouveraki 399

Investigation and conservation of a fragment of a Roman mosaic floor from the Governor's Palace of Aquincum (Pannonia), Hungary
Brigitta Maria Kürtösi 411

A Roman black and white mosaic from the *villa rustica* near Mošnje (Slovenia): the presentation of mosaic fragments
Judita Lux, Manlio Titomanlio, Sabina Kramar 419

Conserving and displaying the mosaics of the cyclops Polyphemus and the Medusa
Christos Pilalis 429

Conservation des mosaïques de la collection du Musée National – Beyrouth
Isabelle Doumet Skaf, Badr Jabbour-Gédéon, Ghada Salem 439

The Yale Gerasa mosaic project: innovative methods to replace reinforced concrete backings
Carol Snow, Jason DeBlock, Burrus Harlow, Thomas Philips, Anthony Florio 447

SESSION VI: CASE STUDIES

Les mosaïques d'El Jem, de Hergla et de Sousse : des exemples de conservation *in situ*
Lotfi Belhouchet 461

La mosaïque au dieu Océan de Maubourguet et son contexte archéologique
Evelyne Chantriaux, Marion Hayes, Christophe Laporte, Andréas Phoungas, Maurice Simon 469

La mosaïque du Khroub (Constantine-Algérie). Découverte et sauvegarde Sabah Ferdi	481
L'entretien et la conservation des mosaïques de Dougga (Tunisie) Mouid Hani	487
<i>POSTERS</i>	
Preservation of the mosaics and structures of the Roman city of <i>Turris Libisonis Colonia Iulia</i> Antonietta Boninu, Giuseppe De Boni, Antonella Pandolfi	501
Mosaic floors in the North-West Church of Sussita: a case-study on ten years of a joint conservation and archaeological project Julia Burdajewicz	513
Sur les traces du temps – la mosaïque dite « d'Achille à Skyros » Verena Fischbacher, Myriam Krieg	525
Restituer l'état initial d'une mosaïque après un siècle d'interventions diverses : le cas de la mosaïque nilotique de Thmouis (Égypte) au musée d'Alexandrie Anne-Marie Guimier-Sorbets, Hanah Tewfik	531
Restoration of mosaic of Al-Zahirya library Maher Jbaee	537
The oldest form of pebble mosaic floor discovered in Syria. Site of Tel al Ahmar: detachment and restoration Mouhamad Kaied, Borhaan AlZraa	547
Learning from the consequences of inappropriate lifting methods: case studies at the mosaic conservation laboratory in Hama, Syria Anna Tsoupra, Ali Al Ahmad, Nader Lada, Georgios Misemikes, Stefania Chlouveraki	553

SESSION VII: EDUCATION AND TRAINING

Results of the regional survey <i>Mosaic Conservation and Training of Conservators in Southeast Europe</i> Maja Frankovic, Branislava Lazarevic	563
The Syrian mosaic pavement documentation training programme Konstantinos D. Politis, Amr al-Azm, Charalambos Bakirtzis	579

Conserving and managing mosaics in Libya (CAMMIL): a new collaborative project
Will Wootton 585

POSTER

Training of archaeological site managers: MOSAIKON's approach to the conservation and
management of mosaics at archaeological sites in the Mediterranean region
Kathleen Dardes, Leslie Friedman, Thomas Roby, Zaki Aslan 603

CLOSING REMARKS, Gaël de Guichen 609