

# 5th INTERNATIONAL MEETING OF CHARCOAL ANALYSIS

## The charcoal as cultural and biological heritage

### INTRODUCTION

The 5th International Meeting of Charcoal Analysis: Charcoal as Cultural and Biological Heritage, held in Valencia (Spain) from the 5th to the 9th of September 2011, is organized by the Department of Prehistory and Archaeology, University of Valencia, and convenes many of the principal specialists in the field.

Natural and human-made fires are the main agents for the deposition of charcolified remains in natural or archaeological sediments. Wood-charcoals produced and deposited by such processes are an important evidence of the flora and vegetation of the past, therefore forming part of the biological and cultural heritage. Wood-charcoal analysis provides precise ethnobotanical and ecological information and for this reason the results of such analysis have become a valuable tool not only for the reconnaissance of the environments of the past but also for a better understanding of the present day ones.

The scope of the 5th International Meeting of Charcoal Analysis: Charcoal as Cultural and Biological Heritage is to introduce current innovative issues and lines of investigation in this field of research and to promote discussion, collaboration and interdisciplinarity.

The Organizing and Scientific Committees have decided to publish this volume you have in your hands with the extended abstracts, where methods and main results of the communications and posters presented in the meeting can be found. The objective is to offer the tools for a suitable citation of the work and original ideas of the authors, even though the proceedings take a long time to be published—which is often the case. However, most of the works presented in the meeting were still in progress at the moment of publication of this volume, so results should be taken with due caution, as some authors point out in their abstracts.

About a hundred contributions are presented in this meeting and prove the current force of Charcoal Analysis. This discipline presents now a great diversity of approaches and generated interesting data that can contribute to a better understanding of the dynamics of natural and anthropogenic landscapes. During the 20th century, most of charcoal analyses were focused in Europe; now, in the 21st century, this discipline crosses ancient boundaries to all the continents: charcoal studies carried out in 29 different countries from Europe, America, Asia and Africa are presented in this meeting.

Five thematic sessions assemble all the fields of interest of Charcoal Analysis. Each session is opened by

a keynote speech, the issue of which has been chosen by the speakers in order to expose the brand new topics in Charcoal Analysis:

*1st session: Methods, taphonomy, dating.* The Keynote conference by Dr. Dominique Marguerie entitled “*Short tree ring series: the study materials of the dendro-anthracologist*” exposes an interesting approach of this line of research. This session consists of nine oral communications and five posters, in which new methods and solutions for the progress of the discipline are presented.

*2nd session: Wood and charcoal anatomy. Problems and solutions.* The Keynote conference by Werner H. Schoch entitled like the session itself, entails a recent approach to this topic of great interest. This session consists of five oral communications and a poster concerning the botanical identification of wood and charcoal of tropical and subtropical species from the New and Old Worlds.

*3rd session: Pedo-anthracology and Pre-Quaternary charcoal.* Dr. Antonio Martinez Cortizas opens this session with a conference entitled “*What is natural: the rol of palaeoenvironmental research in reconstructing the history of continental ecosystemes*”. Seven oral communications and two posters compose the session and deal with anthracological surveys carried out in soils from North America and Europe.

*4th sesión: Archaeological charcoal: natural or human impact on the vegetation.* The keynote conference presented by Dr. Isabel Figueiral—in collaboration with Dr. Laurent Fabre and Dr. Christophe Tardy—entitled “*Charcoal analysis in Preventive Archaeology: combining culture heritage management with scientific research in the A75 motorway (Clermont l’Hérault - Béziers, Southern France)*” will be the prelude to the session with the highest participation in the meeting, with 24 oral communications and 27 posters. These contributions cover many topics concerning charcoal analyses from the Palaeolithic to the Middle Age all around the world.

*5th sesión. Ethnographical data of wood and charcoal use.* The conference by Dr. Alexa Dufraisse entitled “*Interpretation of firewood management as a socio-ecological indicator*” open the last session of the meeting. In this session there will be seven oral communications and four posters about the uses of wood resources throughout History

This new edition of the International Meeting of Charcoal Analysis is intended as a reflection of the enormous number of researchers involved in the study

of charcoal and the interesting data generated by this discipline. Nonetheless, there is still much to discover and to investigate, and much to be done for charcoal to be systematically recovered in all sites. Our aim with the organization of this meeting is to vindicate wood charcoal remains as part of our cultural and biological heritage, since plants are concerned but also humans who lived and used these plant resources. Charcoal remains enclose rich environmental, cultural and chronological information.

#### ACKNOWLEDGEMENTS

We are grateful to all the institutions that have contributed to the organization of the 5th International Meeting of Charcoal Analysis. The charcoal as cultural and biological heritage:

- Universidad de Valencia
- Facultad de Geografía e Historia de la Universidad de Valencia.
- Departamento de Prehistoria y Arqueología de la Universidad de Valencia
- Centro de Investigaciones sobre Desertificación (CSIC)
- Museu de Prehistoria de Valencia

We are also thankful to all the members of the Scientific and Organizing Committees for their generosity in agreeing to share the task of organizing the conference. Special thanks are addressed to the keynote speakers for their enormous effort. Finally, we are very grateful to all the participants for coming from afar, despite the global crisis, to share these days in Valencia with our common goal, the analysis of charcoal as a historical and biological document.

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