

PREFACE

The 21st International Radiocarbon Conference was held in the headquarters of UNESCO, in the beautiful city of Paris, France. The attractiveness of the French capital melded into the conference and led to a very successful meeting.

A total of 485 participants from 27 countries attended the meeting, which was hosted for the first time in France. We had 513 presentations including 146 oral communications split into 20 sessions (listed below). Sessions were held in a wide variety of fields related to radiocarbon studies, including new thematic sessions never before appearing in past Radiocarbon conferences: ^{14}C modeling, ^{14}C as tracer of life, and unusual applications of ^{14}C . The conference also included classical topics related to calibration, archaeology, oceanography, and paleoclimatology. Three invited talks from Davide Mazzotti on optical detection of $^{14}\text{CO}_2$, from Kristy Spalding on ^{14}C analysis of human cells and tissues, and from Jean-Michel Geneste on the Chauvet Cave were very well received.

To continue with acknowledgments, we would like to thank the 63 conveners who managed the 20 sessions and guided the Radiocarbon 2012 conference to a high scientific level. Thanks to our academic and industrial partners for their financial support. As the main organizers of the conference, we would like to thank the Europa Organisation, UNESCO staff, and all colleagues and students who assisted in this very successful meeting and its associated evening events.

We are thankful to *Radiocarbon* editors A J Timothy Jull and Mark McClure for this huge volume that comprises 169 papers, and for their amazing work, patience, and friendly attitude.

Finally, we would like to express our gratitude to all participants of the conference, authors and reviewers who did their excellent work for the proceedings in order for the publication to be available just over a year after the meeting.

The Radiocarbon 2012 Organizing Committee



Photo courtesy of Adam Walanus

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SESSIONS LIST

- S1** Calibration
- S2** Advances in Physical Measurement Techniques of ^{14}C , and Other Long-lived Radionuclides
- S3** Advances in Radiocarbon Pretreatment Protocols
- S4** Specific Compounds: Towards New Applications
- S5** Statistical Tools
- S6** Variations in Radiocarbon Reservoir Effects
- S7** Radiocarbon Dating and the Paleolithic
- S8** Archaeology - Eurasia and Africa
- S9** Radiocarbon and Archaeology of the Americas and Oceania: Improving Chronologies and Theoretical Insights
- S10** Oceanic Paleoclimatology and Paleoceanography
- S11** Continental Paleoclimatology and Paleohydrology
- S12** Insights into the Ocean Carbon Cycle from Radiocarbon Measurements
- S13** Radiocarbon as a Tracer of Sources, Fluxes, and Time in Continental Water
- S14** Continental Carbon Cycle
- S15** Atmospheric Carbon Cycle
- S16** Anthropogenic Impacts
- S17** ^{14}C Tracer of Life
- S18** Cosmogenic Nuclides
- S19** Unusual Applications of ^{14}C Measurement
- S20** ^{14}C and Modeling



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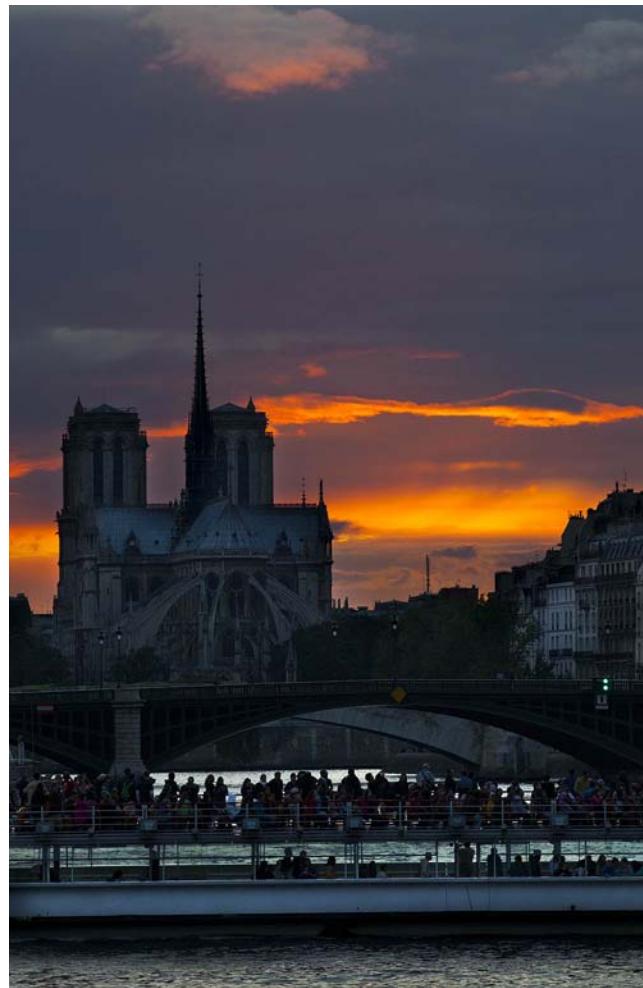


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