



## Scientific Dating in Archaeology

By Seren Griffiths

ISBN 9781789255621 • PB • 256pp • Pub: 2022

Publisher: Oxbow Books

Feelbooks Special Edition: Rs. 2795



A variety of techniques have been developed to provide scientific chronologies of archaeological sites and material culture. These chronologies underpin the narratives that are generated for prehistoric and other periods. The application of Bayesian statistical analysis to scientific chronologies has been hailed as 'a revolution in understanding', and has brought renewed emphasis onto how we generate scientific chronological data, how these data are applied into wider narratives, and the epistemological importance of these data. This volume will provide a timely review of the methods, applications and challenges of applying different scientific dating techniques to archaeological sites and material culture. It will then provide an introduction to Bayesian modelling, and highlight a series of considerations in the application of scientific dating techniques.

### Contents

Figure List

Table List

Contributors

Abstract

Conventions used

Acknowledgements

Chapter 1: Introduction

Chapter 2: Radiocarbon

Chapter 3: Dendrochronology

Chapter 4: Luminescence – Optically Simulated  
Luminescence and Thermoluminescence

Chapter 5: Archaeomagnetic Dating

Chapter 6: Palaeoenvironmental Chronologies

Chapter 7: On Site — Designing and Implementing  
Chronometric Sampling Strategies

Chapter 8: Analysing Datasets – Bayesian Inference and  
Archaeological Chronometric Data

Chapter 9: Scientific Dating and Narrative