

TABLE OF CONTENTS

Mossbauer Studies of Ancient Mexican Pottery S. Aburto, S. Cruz, R. Gómez, M. Jiménez	1
Fresh Chemical Data and the Cultural Affiliation of the Daimabad Bronzes D.P. Agrawal, R.V. Krishnamurthy, S. Kusumgar.....	8
Early Bronze Age Ceramics from Lerna in Greece: Radiochemical Studies M. Attas, F. Widemann, P. Fontes, K. Gruel, F. Laubenheimer, J. Leblanc, J. Lleres	14
Metallurgical Study of Coriosolite Coin M. Barral, M. Piolat, K. Gruel, J. Barralis, G. Revel, F. Widemann	29
The Early Iranian Metallurgy Analytical Study of Copper Ores from Iran T. Berthoud, R. Besenval, F. Cesbron, S. Cleuziou, M. Pechoux, J. Francaix, J. Liszak-Hours	68
The Archaeological Iron and Tin Cycles L. Biek.....	75
Comparison of Surface with Interior Compositions of Eight Roman Copper-Based Coins G.F. Carter, M. H. Kimiatek.....	82
Characterisation of Early Bronze Age Potsherds from Iran and Pakistan by magnetic properties of the iron they contain J.M.D. Goey, R. Bouchez.....	97
Chromium, Nickel and Vanadium in Neolithic Sherds and Related Clays G. Drews.....	98
Analytical Study of Three Gallo-Roman White Figurine Workshops P. Fontes, M. Attas, H. Vertet, F. Widemann, K.Gruel	101
The Effect of Heat on Some Samples of Halaf Pottery U.M. Franklin, R.G.V. Hancock.....	113
Provenance Study of Medieval, Decorated Floor-Tiles carried out by means of neutron activation analysis B.A. Hansen, M.A. Sørensen, K. Heydorn, V. Mejdahl, K. Conradsen.....	119
Analysis of Ancient Indian Deluxe Wares K.T.M. Hegde	141

Analyses of Late Mycenaean Pottery from Rhodes and Cyprus R.E. Jones, C.B. Mee, H.W. Catling.....	156
Neutron Activation Techniques Employing Short-Lived Isotopes for the Elemental Analysis of Soils for Archaeological Sites S.A. Kerr, N.M. Spyrou, A.J. Clark.....	157
Can Ancient Objects made of Native Copper be distinguished from Objects made of Smelted Copper ? R. Maddin, J.D. Muhly, Tamara S. Wheeler.....	172
The Advantages of Atomic Absorption Analysis applied to Archaeological Materials N.M. Magalouisis.....	173
A Mössbauer Study of Raw and Fired Clays and Comparison with Ancient Ceramics Y. Maniatis, A. Simopoulos, A. Kostikas.....	174
Trace Element Variations in Geological Obsidian from Central Anatolia H. McKerrell, S. Payne.....	175
On the Composition and Silver Sources of Aeginetan Coins from the Asyut Hoard O. Müller, W. Gentner.....	176
Lead Isotopes and Archaic Greek Silver Coins N.H. Gale.....	194
The Ancient Silver Mine at Ayos Sostis on Siphnos Greece) G.A. Wagner, G. Weisgerber.....	209
Chemical and Mineralogical Studies in Siphnos Ores and Slags E. Klein.....	223
Some Unusual Techniques of Gilding in Antiquity W.A. Oddy, T.G. Padley, N.D. Meeks.....	230
Mikromorphologische Aspekte der Genese-Problematik antiker Goldseifenvorkommen (Sart-Salihli, Westanatolien) H. Newesely, M. Andaç.....	243
The Application of Metallurgical Studies to Late Bronze Age Material J.P. Northover.....	244
Overstrikes on Antique Coins, Possibilities of Numismatic and Historial Evidence by Scientific Methods B. Overbeck, E. Born.....	247
Analysis of the White 'Ground' and Ancient Adhesives found on Canosa Vases (South Italy) of the Third Century B.C. A. Rinuy, F. Schweizer.....	253

Differential Thermal Studies of Painting Materials F. Preußer.....	259
Food Identification of Samples from Archaeological Sites R.C.A. Rottländer, H. Schlichtherle.....	260
Abstract: Neutron Activation Analysis Applied to Assemblage Problems in Fragmented Marble Sculptures L. Sangermano.....	268
Significance and Dependability of Reference Groups for Chemical Determinations of Provenance of Ceramic Artifacts G. Schneider, B. Hoffmann, E. Wirz.....	269
Titanium, possible Indicator for Medieval Archaeology owing to Exactness of a New Method for the Study of the Old-Stained Glasses M. Spitzer-Aronson.....	286
Chemical and Lead Isotope Analysis of Ancient Egyptian Gold, Silver and Lead Z. Stós-Fertner, N.H. Gale.....	299
Technological Characterisation of Crucibles, Tuyeres and Furnace Fragments from Timna M.S. Tite, M.J. Hughes, N.D. Meeks, M. Bimson.....	315
Analytical Problems in the Sourcing of English Medieval Alabasters S.E. Warren.....	316
Analytical and Typological Study of Gallo-Roman Workshops Producing Amphorae in the Area of Narbonne F. Widemann, F. Laubenheimer, M.Attas, P. Fontes, K. Gruel, J. Leblanc, J. Lleres... 317	
Analysis of 'Klippen' from Bonn V. Zedelius: Part I: History and Die Study..... H. Mommsen, K.G. Bauer, Q. Fazly: Part II: PIXE-Analysis of Klippen and Coins from Bonn and Jülich.....	342 348
Investigation on the Distribution of Metallic Elements in Copper Slag, Copper Matte and Copper and Comparison with Samples from Prehistoric Smelting Places U. Zwicker, F. Goudarzloo.....	360
Beispiele zur Erforschung der Umweltverhältnisse ur- und frühgeschichtlicher Siedlungen mit Hilfe der Pollenanalyse J. Meurers-Balke.....	376
Problems of the Early Husbandry of Domestic Animals in Northern Germany and Denmark G. Nobis.....	378

Landscape Archaeometry in an Historical Perspective S. Renimel.....	380
The Oaks from the Roman Age B. Schmidt.....	381
DATING TECHNIQUES	
Archaeomagnetic Investigations in Anatolia from Prehistoric and Hittite Sites (First Preliminary Results) H. Becker.....	382
Carbon-14 Dating of Milligram Samples Using a Tandem Accelerator R.P. Beukens.....	388
An Automated TL Dating System L. Bøtter-Jensen, J. Bundgaard, V. Mejda...l.....	395
Annual Dose Rate Calculations for Thermoluminescence Dating G.W. Carriveau, W. Troka.....	406
Direct Measurement of the Fraction of Radon Loss in Ceramics by Gamma-Ray Spectroscopy G.W. Carriveau, G. Harbottle.....	423
Surface Characterization of Weathered Florida Cherts D.E. Clark, B.A. Purdy.....	428
Weathering Studies of Chert: A Potential Solution to the Chronology Problem in Florida B.A. Purdy, D.E. Clark.....	440
Neutron Activation of Clay Sediments from Limestone Caves of Mallorca K.M. Creer, J.S. Kopper, C.E. McKerrell, H. McKerrell.....	451
Some Variables Affecting Variation of the Rates of Hydration in Obsidians J.E. Ericson.....	452
Element Concentration in Fossil Bones Using Neutron Activation R.M. Farquhar, N. Bregman, E. Badone, B. Beebe.....	453
Thermoluminescence Dating in West Africa J.S. Fleming.....	454
The TL Age Determination of Fossil Human Footprints H. Yeter Göksu.....	455
Isotope Enrichment ... E.T. Hall, R.E.M. Hedges, N.R. White.....	463

Dating of Pleistocene Calcite Formations by Disequilibria in the Uranium Decay Series G.J. Hennig, U. Bangert.....	464
Archaeomagnetic Investigations in Bulgaria M. Kovacheva.....	477
Some TL Dates and Neutron Activation Analysis of Greek Neolithic Pottery Y. Liritzis, H. McKerrell.....	486
A Problem Encountered in Dating Quartz by Thermoluminescence G. Valladas.....	499
High Temperature Thermoluminescence G. and H. Valladas.....	506
Some Applications of Thermoluminescence Dating to Prehistoric and Roman Materials (Pottery, Brick, Burnt Clay) G.A. Wagner.....	511
Alpha-Recoil Track Dating: Problems and Prospects D. Wolfman, T.M. Rolniak.....	512
Archaeomagnetic Dating in Arkansas D. Wolfman.....	522
 MATHEMATICAL METHODS	
On the Geometry of Non-Elliptical Megalithic Stone Rings I.O. Angell.....	534
Comparative Pictorial Graphics within the LERNIE Concept Leo Biek.....	541
An On-Site Computer Recording and Analysis System I. Graham.....	554
Numerical Classification of Roman Glasses Based on Trace Element Concentrations E. Kny and G. Nauer.....	555
Similarity Coefficients for Cluster Analysis S. Laflin.....	556
Attempt to Reconstitute the Original Organisation of Blocks Belonging to Dismantled Monuments. Application to the Gallo-Roman Monuments of Narbonne J. Leblanc, F. Widemann, K. Gruel, F. Laubenheimer, J. Lleres.....	566
Exploratory Data Analysis of Mycenaean Ceramic Compositions and Provenances R. Mertz, W. Melson, G. Levenbach.....	580

Simultaneous Measurements of Electrical Conductivity and Magnetic Susceptibility of the Ground in Electromagnetic Prospecting	
C. Parchas, A. Tabbagh.....	682
The Application of Geophysical Methods to Hunter/Gatherer, Prehistory in Australia	
J. M. Stanley.....	692
Thermal Airborne Prospection of the Lion en Beauce Township (Lioret, France)	
A. Tabbagh.....	700
Technical Developments and Results of the 1977 Season of the Great Plains Magnetic Surveying Program	
J. Weymoth.....	710