

CONTENTS

Preface	ix
Acknowledgements	xi
List of Contributors	xiii
Map 1. Schematic map of Middle East, Israel & Qumran	xvi
Map 2. Schematic map of Qumran Site, Caves and Cemetery with indication of recent excavations	xvii
Map 3. Excavation Plan of the Qumran settlement.	xviii
Introduction	
JAN GUNNEWEG	1
1. The coin beneath the crust: A pilot study of coins from the Mediterranean coast of Israel ANNEMIE ADRIAENS, MARK DOWSETT, EBERHARD LEHMANN, YOAV FARHI, JAN GUNNEWEG & L. BOUCHENOIRE	11
2. A short note on the application of synchrotron-based micro-tomography on the Dead Sea scrolls JORIS DIK, LUKAS HELFEN, PETER REISCHIG, JORIK BLAAS AND JAN GUNNEWEG	21
3. Gender and Qumran KATHARINA GALOR	29
4. Was the Qumran settlement a mere pottery production center? What Instrumental Neutron Activation revealed JAN GUNNEWEG AND MARTA BALLA	39
5. Introduction to the "Buried Bones" JAN GUNNEWEG	63

6. Animal remains from Khirbet Qumran: A case study of two bones (QUM 392 and 393) from two bone burials GILA KAHILA BAR-GAL, TZVIKI ROSENBERG AND CHARLES GREENBLATT	67
7. Degradation of parchment and ink of the Dead Sea scrolls investigated using Synchrotron-based X-ray and Infrared Microscopy BRIDGET MURPHY, MARINE COTTE, MARTIN MUELLER, MARTA BALLA AND JAN GUNNEWEG	77
8. Radiocarbon dating and Qumran JOHANNES VAN DER PLICHT AND KAARE L. RASMUSSEN	99
9. Characterization of the writing media of the Dead Sea Scrolls IRA RABIN, OLIVER HAHN, T. WOLFF, E. KINDZORRA, A. MASIC, U. SCHADE AND G. WEINBERG	123
10. On the age of Jar-35 KAARE L. RASMUSSEN, JAN GUNNEWEG, JOHANNES VAN DER PLICHT AND MARTA BALLA	135
11. Analyzes of a sample of "masse de fer" from Qumran locus 104 excavated by R. de Vaux KAARE L. RASMUSSEN, ANDREW BOND, GREGORY DOUDNA AND JAN GUNNEWEG	145
12. The sciences and the reconstruction of the ancient scrolls: possibilities and impossibilities (summary) EMANUEL TOV	155
13. Introduction to "Soap at Qumran" JAN GUNNEWEG	163
14. Making soap as the Qumranites did SASJA VAN DER VAART, ALEXANDRA VAN DEN BROEK, LAURA KLERKX AND NANDA DE VREE	171

CONTENTS

vii

15. The Dead Sea, the nearest neighbor of Qumran and the
Dead Sea manuscripts. What SEM, XRD and Instrumental
Neutron Activation may show about Dead Sea mud
JAN GUNNEWEG 175

Epilogue 183

Publications 185

Index 189

Color plates follow page 192