

## *List of Contents*

List of contributors .....	vii
Foreword .....	ix
<i>G. O. Kesse</i>	
Preface—Quantitative Correlation in Stratigraphy .....	xi
<i>John Cubitt and Richard Reyment</i>	
Introduction—IGCP Project 148: Background, Objectives, and Impact .....	1
<i>F. Agterberg</i>	
I. FORMALIZED STRATIGRAPHY AND CORRELATION	
A Short Note on the Correlation of Geologic Sequences .....	7
<i>Brian R. Shaw</i>	
The Mathematical Formalization of the Geological Relations Identifying the Basic Structure of a Geological Data Bank .....	13
<i>Roberto Carimati, Alberto Marini, and Roberto G. Potenza</i>	
Formalized Eocene Stratigraphy of Dorog Basin, Transdanubia, Hungary, and Related Areas .....	19
<i>I. Dienes</i>	
II. BIOSTRATIGRAPHY	
Quantitative Biostratigraphy: The Methods Should Suit the Data .....	45
<i>Lucy E. Edwards</i>	
A Simple Method for Quantitative Biostratigraphy .....	61
<i>James C. Brower and William A. Burroughs</i>	
The Automation of Biochronological Correlation .....	85
<i>Eric Davaud</i>	
The Conceptual Basis for Lateral Tracing of Biostratigraphic Units .....	101
<i>Stephen A. Millendorf and Marion T. Millendorf</i>	
Properties of Composite Sections Constructed by Least-Squares .....	107
<i>Michael E. Hohn</i>	
Models of Cenozoic Foraminiferal Stratigraphy—Northwestern Atlantic Margin .....	119
<i>F. M. Gradstein and F. P. Agterberg</i>	

Analysis of Paleontologic Time Series and its Application in Stratigraphic Correlation—A Case Study Based on <i>Orbulina</i> Data from DSDP Samples . . . . .	175
<i>Benoy K. Ghose</i>	
Correlating Between Electrical Borehole Logs in Paleoecology . . . . .	223
<i>Richard Reymont</i>	
On Measuring and Modelling the Relationship Between the Stratigraphically-recorded Variables . . . . .	241
<i>A. D. Gordon</i>	
Correspondence Analysis Used to Define the Paleoecological Control of Depositional Environments of French Coal Basins (Westphalian and Stephanian) . . . . .	249
<i>Isabelle Cojan and Hazel Bremner-Teil</i>	

### III. LITHOSTRATIGRAPHY

Quantitative Correlation of a Cyclic Limestone–Shale Formation . . . . .	275
<i>W. Schwarzacher</i>	
A Proposed Geologically Consistent Segmentation and Reassignment Algorithm for Petrophysical Borehole Logs . . . . .	287
<i>C. M. Griffiths</i>	
Index . . . . .	299