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Collana	New analytical methods in earth and environmental sciences
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Sommario/riassunto	Virtual palaeontology, the use of interactive three-dimensional digital models as a supplement or alternative to physical specimens for scientific study and communication, is rapidly becoming important to advanced students and researchers. Using non-invasive techniques, the method allows the capture of large quantities of useful data without damaging the fossils being studied Techniques for Virtual Palaeontology guides palaeontologists through the decisions involved in designing a virtual palaeontology workflow and gives a comprehensive overview, providing discussions of underlying theory, applications, historical development, details of practical methodologies, and case studies. Techniques covered include physical-optical

tomography (serial sectioning), focused ion beam tomography, all forms of X-ray CT, neutron tomography, magnetic resonance imaging, optical tomography, laser scanning, and photogrammetry. Visualization techniques and data/file formats are also discussed in detail. Readership: All palaeontologists and students interested in three-dimensional visualization and analysis. New Analytical Methods in Earth and Environmental Science Because of the plethora of analytical techniques now available, and the acceleration of technological advance, many earth scientists find it difficult to know where to turn for reliable information on the latest tools at their disposal, and may lack the expertise to assess the relative strengths or limitations of a particular technique. This new series will address these difficulties by providing accessible introductions to important new techniques, lab and field protocols, suggestions for data handling and interpretation, and useful case studies. The series represents an invaluable and trusted source of information for researchers, advanced students and applied earth scientists wishing to familiarise themselves with emerging techniques in their field. All titles in this series are available in a variety of full-colour, searchable eBook formats. Titles are also available in an enhanced eBook edition which may include additional features such as DOI linking, high resolution graphics and video.