Geostatistics Oslo 2012

Contents
Mountain Weather Research and Forecasting

Recent Progress and Current Challenges

Features
- Provides a review of the latest research in mountain meteorology (similar resources are over 20 years old)
- Provides a great starting point for graduate students and forecasters who need to start with basics but delve deep into the field
- Bridges the gap across the research and forecasting communities by providing topics of interest to both, and from the perspective of both forecasters and researchers

Contents

Fields of interests
Meteorology/Climatology; Monitoring/Environmental Analysis; Earth Sciences, general

Target groups
Research

Product category
Contributed volume

J. A. Cooper, University of Ulster, Northern Ireland, UK; O. H. Pilkey, Duke University, Durham, NC, USA (Eds.)

Pitfalls of Shoreline Stabilization

Selected Case Studies

Contents

Fields of interests
Oceanography; Coastal Sciences; Biogeosciences

Target groups
Professional/practitioner

Product category
Monograph

J. Götze, R. Möckel, Institute of Mineralogy, Freiberg, Germany (Eds.)

Quartz, deposits, mineralogy and analytics

Contents
Classification, mineralogy and industrial potential of SiO2 minerals and rocks - Assessment of High Purity Quartz Resources - Quality requirements of quartz sand in the building industry - Petrological and chemical characterisation of high-purity quartz deposits with examples from Norway - Evaluation of the potential of the pegmatic quartz veins of the Sierra de Comechigones (Argentina) as a source of high purity quartz by a combination of LA-ICP-MS, ICP, cathodoluminescence, gas chromatography, fluid inclusion analysis, Raman and FTIR spectroscopy - Brazilian quartz deposits and a perspective about industrial use, gemstone and color treatment - First-principles calculations of the E’1 center in quartz: Structural models, 29Si hyperfine parameters and association with Al impurity - Gamma-Irradiation Dependency of EPR and TL-Spectra of Quartz - Analysis of low element concentrations in quartz by electron microprobe - In situ analysis of trace elements in quartz using laser ablation inductively coupled plasma mass spectrometry - Cathodoluminescence microanalysis of the defect microstructures of bulk and nanoscale ultrapure SiO2 polymorphs for device applications - Trace element characteristics, luminescence properties and real structure of quartz - Mineralogy, geochemistry and cathodoluminescence of authigenic quartz from different sedimentary rocks - CL textures and trace elements in hydrothermal quartz - Quartz regeneration and the use of quartz as a carrier of genetic information.

Fields of interests
Mineralogy; Mineral Resources; Geochemistry

Target groups
Research

Product category
Monograph

Due June 2012

2012. 300 p. 260 illus., 156 in color. (Springer Atmospheric Sciences) Hardcover
- $129.00
ISBN 978-94-007-4097-6

Due June 2012

2012. X, 240 p. 122 illus., 60 in color. (Coastal Research Library, Volume 3) Hardcover
- approx. $129.00

Due May 2012

2012. X, 367 p. 130 illus., 55 in color. (Springer Geology) Hardcover
- $179.00
ISBN 978-3-642-22160-6
Earth System Sciences

D. E. Harlov, GeoForschungsZentrum Potsdam, Germany; H. Austrheim, University of Oslo, Norway

Metasomatism and Metamorphism

The Role of Fluids in Crustal and Upper Mantle Processes

Contents

Fields of interests
Mineralogy; Geochemistry; Geophysics/Geodesy

Target groups
Research

Product category
Monograph

J. Louys, Queensland Museum, Hendra, QLD, Australia (Ed.)

Paleontology in Ecology and Conservation

The fossil record contains unique long-term insights into how ecosystems form and function which cannot be determined simply by examining modern systems. It also provides a record of endangered species through time, which allow us to make conservation decisions based on thousands to millions of years of information. The aim of this book is to demonstrate how palaeontological data has been or could be incorporated into ecological or conservation scientific studies. This book will be written by palaeontologists for modern ecologists and conservation scientists. Manuscripts will fall into one (or a combination) of four broad categories: case studies, review articles, practical considerations and future directions.

Features
• First palaeontology book directly addressing both ecology and conservation science • Provides both case-studies and review articles, allowing readers to know what has been done and how it has been done • Includes an outlook chapter with future directions in ecology/conservation issues

Contents
Paleontology and ecology – their common origins and later split. - Ecology needs a palaeontological perspective. - Reconciling Palaeontological and Neontological Data: Issues of Scale, Taxonomy, and Taphonomy. - Building links between ecology and palaeontology with taphonomic studies of recent vertebrate communities. - Phylogeography and the fossil record.

Fields of interests
Biogeosciences; Paleontology; Ecology

Target groups
Research

Product category
Monograph

G. D. Naidu, Council of Scientific and Industrial Research, Hyderabad, India

Deep Crustal Structure of the Son-Narmada-Tapti Lineament, Central India

With a length of about 1200 km, the Son-Narmada-Tapti Lineament (NSL) is one of the most prominent geomorphic features in the Indian subcontinent. Anomalous conductive bodies are delineated at mid-lower crustal depths below major earthquake epicentral zones. The region has been interpreted as the collision zone of the Indian Plate with the Eurasian Plate. The NSL zone is therefore also known to be the second most important tectonic feature in the Indian geology, after the Himalayas.

Features
• Nominated for a Springer Theses Prize by the National Geophysical Research Institute, Hyderabad, India • The present study provides insight into the subduction/collision history of a seismically significant Central India tectonic zone • Comprehensive background information and detailed description of magnetotelluric analyses along four traverses across the Son-Narmada-Tapti Lineament, one of the most prominent geomorphic features in the Indian subcontinent with a length of about 1,200 km

Contents
Magnetotellurics - Basic theoretical concepts. - MT Data Acquisition and Processing. - Geo-electric Crustal Structure along the Sanawadchopda Traverse across the NSL zone. - Andharwadibalapur Traverse. - Hoshangabadner Traverse. - Galangibrahmana-Wada Traverse.

Fields of interests
Geophysics/Geodesy; Structural Geology; Geophysics and Environmental Physics

Target groups
Research

Product category
Monograph

Due May 2012
2012. 690 p. 100 illus., 60 in color. (Lecture Notes in Earth System Sciences) Hardcover
$229.00
ISBN 978-3-642-28393-2

Due May 2012
2012. XIV, 286 p. 70 illus., 39 in color. (Springer Earth System Sciences) Hardcover
$129.00
ISBN 978-3-642-25037-8

Due April 2012
2012. XIII, 184 p. 72 illus., 65 in color. (Springer Theses) Hardcover
$129.00
ISBN 978-3-642-28441-0