

The Sirte Basin Province Of Libya Sirte Zelten Total

A reference volume on the geology of North Africa, this volume deals with Egypt, Libya, Algeria, Tunisia and Morocco. In great detail the geology, tectonic elements, the geology of the Pan-African Shield, the Phanerozoic geological evolution and most of the lithostratigraphic units of the five countries are described. Moreover, the petroleum geology and petroleum systems are discussed, as well as the history of geological exploration. With the incentive to provide a reference to the geology of North Africa that can be used both by professionals and students, this review work provides a large amount of data, based on more than 2500 references. Written in a clear, straight-forward and structured style, and with many schematic maps, it allows the reader to easily search a topic and find further information with help of the extensive bibliography. This volume is intended for senior undergraduate and graduate students, professional geologists and geophysicists, who are working in North Africa and the Middle East. It is ideally suited for any professional who is looking for a quick, round-up reference on the geology of North Africa. It is an expanded and revised version of 'The Geology of Egypt and Libya' by the same author (Balkema, 2001).

"The Mediterranean region and Asia provide a natural laboratory to investigate the driving forces of continental tectonics in an ongoing collisional orogen and the crustal and mantle response to various modes of deformation associated with plate boundary processes. The multidisciplinary research efforts in this region over the last fifteen years have produced a wealth of new data to better understand the interplay and feedback mechanisms between crustal and mantle processes and the dynamic landscape evolution in a complexly deforming area. A number of discrete collisional events between the Gondwana-derived continental fragments (i.e., Adria, Pelagonia, Arabia, India) and Eurasia controlled the geodynamics of the Mediterranean region and Asia during the late Mesozoic and Cenozoic. This book is a collection of research papers, presenting new data, interpretations, and syntheses on various aspects of the collision-induced tectonic, magmatic, metamorphic, and geomorphic processes that have affected the evolution of this orogenic belt. It should help us better understand the mode and nature of tectonic and magmatic processes and crustal evolution in active collision zones, and the distribution and causes of seismic and volcanic events and their impact on landscape evolution."--Publisher's website.

2011 Updated Reprint. Updated Annually. Libya Oil & Gas Sector Business & Investment Opportunities Yearbook

Tertiary Extension Within the Alpine Orogen

AAPG Memoir 86

The Sirte Basin Province of Libya

The Pre-Cambrian in North Africa

1986 Annual Report on Alaska's Mineral Resources

In 2011, there was the Arab Spring Revolution in the Middle East which brought the fall of Arab countries such as Egypt, Yemen, Tunisia, Syria, and Libya. The Arab Spring is a dark history for Muslims because after these countries were destroyed, its people struggled with civil war and lived in chaos due to the intervention of the Western powers. In most of these countries, war and chaos are still happening until now. Libya is one of the countries involved in the historic revolution, which sadly costed the life of Libyan President, Muammar Gaddafi. Although the country was once rich in petroleum resources, the post-Arab Spring was not the alternative promised by the Western countries, with the hope of a more peaceful life and the offer of democratic developments. A country that was once peaceful, rich and its people lived in luxury, is now living with murder, rebellion, chaos, and poverty. In fact, several years after Gaddafi's death, the citizens of Libya have begun to miss him and hoped that the glory of Libya that had been enjoyed during his leadership could be rebuilt. This begets the questions of who exactly was Gaddafi and what was the relation between his execution, the country's wealthy oil resources, and the Western involvement including the US, British, France, and Israel. This book unravels the important facts behind the execution of Gaddafi in the Arab Spring. Empirical studies on this revolution have shown that his assassination was strategically planned by the superpower countries through sponsorship and training of Libyan rebel forces against Gaddafi. Britain and France spent millions of dollars daily in their investments in Libya to eliminate Gaddafi by providing weapons and war equipment to the Libyan people who opposed Gaddafi. The plot to assassinate Gaddafi was carried out in retaliation on the basis of the anti-imperialism approach that he imposed.

Libya Mining Laws and Regulations Handbook

Petroleum Geology of Libya, Second Edition, systematically reviews the exploration history, plate tectonics, structural evolution, stratigraphy, geochemistry and petroleum systems of Libya, and includes valuable new chapters on oil and gas fields, production, and reserves. Since the previous edition, published in 2002, there have been numerous developments in Libya, including the lifting of sanctions, a new licensing system, with licensing rounds in 2004, 2005, 2006, and 2007, many new exploratory wells, discoveries and field developments, and a change of regime. A large amount of new data has been published on the geology of Libya in the past fourteen years, but it is widely scattered through the literature. Much of the older data has been superseded, and several of the key publications, especially those published in Libya, are difficult to access. This second edition provides an updated source of reference which incorporates much new information, particularly on petroleum systems, reserves, oil and gas fields, play fairways, and remaining potential. It presents the results of recent research and a detailed description of Libyan offshore geology. The book includes an extensive and comprehensive bibliography. Presents over 180 full colour illustrations including maps, diagrams and charts, illustrating the key concepts in a clear and concise manner Authored by two recognized world authorities on geology in Libya, with over 40 years' experience in Libya between them Provides an expanded and updated version of the bestselling previous edition, nicknamed the Explorationist's Bible Lays the foundation for the post-revolution exploration age in Libya

Monthly Catalog of United States Government Publications

Elwyn Simons: A Search for Origins

U.S. Geological Survey Circular

Quantifying Uncertainty in Subsurface Systems

Analysis, Modelling and Prediction

This book is Open Access. A digital copy can be downloaded for free from Wiley Online Library. Exploring the links between Large Igneous Provinces and dramatic environmental impact An emerging consensus suggests that Large Igneous Provinces (LIPs) and Silicic LIPs (SLIPs) are a significant driver of dramatic global environmental and biological changes, including mass extinctions. Environmental changes caused by LIPs and SLIPs include rapid global warming, global cooling ('Snowball Earth'), oceanic anoxia events, mercury poisoning, atmospheric and oceanic acidification, and sea level changes. Continued research to characterize the effects of these extremely large and typically short duration igneous events on atmospheric and oceanic chemistry through Earth history can provide lessons for understanding and mitigating modern climate change. *Large Igneous Provinces: A Driver of Global Environmental and Biotic Changes* describes the interactions between the effects of LIPs and other drivers of climatic change, the limits of the LIP effect, and the atmospheric and oceanic consequences of LIPs in significant environmental events. Volume highlights include: Temporal record of large igneous provinces (LIPs) Environmental impacts of LIP emplacement Precambrian, Proterozoic, and Phanerozoic case histories Links between geochemical proxies and the LIP record Alternative causes for environmental change Key parameters related to LIPs and SLIPs for use in environmental change modelling Role of LIPs in Permo-Triassic, Triassic-Jurassic, and other mass extinction events The American Geophysical Union promotes discovery in Earth and space science for the benefit of humanity. Its publications disseminate scientific knowledge and provide resources for researchers, students, and professionals.

Libya Investment and Business Guide - Strategic and Practical Information

"Cambrian-Ordovician and Upper Cretaceous reservoir formations are found in the central western Sirte Basin, the main oil producing region in the Sirte Basin, Libya. As a result of changes in sedimentary environments and structural activities, a number of irregularities in reservoir continuity have developed, which negatively affected the overall performance of the reservoir. Effective simulation of such complex reservoirs can be achieved by integrating geophysical, geological, and petrophysical data to construct a reliable full-field static model, which has the potential to simulate the vertical and lateral variations in the reservoir formations. In this study, 2D and 3D seismic data acquired in the central western Sirte Basin are used to construct a fault and structural model which is an important component of the static model. The median filter and spectral whitening are applied to enhance the data quality and remove noise resulted from acquisition and processing effects. Spectral whitening is used to enhance the resolution of the data while median filter is used as noise filter. Coherence and curvature attributes are used to delineate faults and fracture zones. Coherence adequately detect major faults and minor faults. Most positive and most negative curvatures are used to define upthow and downthrow faults blocks. Curvatures attributes are also used to define fracture zones in reservoir formations. The most common fracture zone are identified in the northwest and southeast in the Cambrian-Ordovician reservoir formation in the study area. Well data are incorporated with core data to construct a property model that integrates a range of reservoir properties including facies, porosity, permeability, and net-to-gross ratio. A fine-scale geo-cellular model is created by integrating the fault, structural, and property models for the entire field"--Abstract, page iv.

Assessment of Shale-oil Resources of the Sirte Basin Province, Libya, 2019

Geology of North Africa

Postcollisional Tectonics and Magmatism in the Mediterranean Region and Asia

New Publications of the U.S. Geological Survey

Petroleum Geology of Libya

Reservoir quality is studied using a wide range of similar techniques in both sandstones and carbonates. Sandstone and carbonate reservoir quality both benefit from the study of modern analogues and experiments, but modelling approaches are currently quite different for these two types of reservoirs. There are many common controls on sandstone and carbonate reservoir quality, but also distinct differences due primarily to mineralogy. Numerous controversies remain including the question of oil inhibition, the key control on pressure solution and geochemical flux of material to or from reservoirs. This collection of papers contains case-study-based examples of sandstone and carbonate reservoir quality prediction as well as modern analogue, outcrop analogue, modelling and advanced analytical approaches.

For nearly a half century, Dr. Simons has dominated the study of primate evolution. This volume summarizes the current state of knowledge in many aspects of primate and human evolution that have been studied by Simons and his colleagues and place it in a broader paleontological and historical perspective. The book contains the results of new research as well as reviews of many of the critical issues in primate and human evolution during the last half of the twentieth century.

The Sirte Basin Province of Libya Sirte-Zelten Total Petroleum System Assessment of Shale-oil Resources of the Sirte Basin Province, Libya, 2019 The Geology of the Hofra Region, Sirte Basin, Libya (S.P.L.A.J.) Post-Oligocene sediments, Jalo Region, Sirte Basin, Libya The Pre-Cambrian in North Africa Brill Archive Non-standard Problems in Basin Modelling Springer

Libya Mining Laws and Regulations Handbook Volume 1 Strategic Information and Basic Law

Statistics of Petroleum Exploration in the Caribbean, Latin America, Western Europe, the Middle East, Africa, Non-communist Asia, and the Southwestern Pacific

Global Resource Estimates from Total Petroleum Systems

Reservoir Quality of Clastic and Carbonate Rocks

Under the Earth's surface is a rich array of geological resources, many with potential use to humankind. However, extracting and harnessing them comes with enormous uncertainties, high costs, and considerable risks. The valuation of subsurface resources involves assessing discordant factors to produce a decision model that is functional and sustainable. This volume provides real-world examples relating to oilfields, geothermal systems, contaminated sites, and aquifer recharge. Volume highlights include: • A multi-disciplinary treatment of uncertainty quantification • Case studies with actual data that will appeal to methodology developers • A Bayesian evidential learning framework that reduces computation and modeling time Quantifying Uncertainty in Subsurface Systems is a multidisciplinary volume that brings together five major fields: information science, decision science, geosciences, data science and computer science. It will appeal to both students and practitioners, and be a valuable resource for geoscientists, engineers and applied mathematicians. Read the Editors' Vox: <https://eos.org/editors-vox/quantifying-uncertainty-about-earths-resources>

This book details how the GALO system of basin modelling may be used in the analysis of actual, non-standard problems of geology. It begins by addressing the tectonic subsidence of sedimentary basins, and goes on to consider the problems of maturation of organic matter and hydrocarbon generation in the vicinity of intrusions and subtrapean sedimentary complexes. Lastly, the book discusses the formation of temperature and heat flow distributions with depth due to the sharp climate variations in the Quaternary, which was marked by repeated formation and degradation of permafrost. The book studies the application of the GALO basin modelling system to the three problems mentioned above. Employing the GALO system provides a unique opportunity to assess the amplitude and duration of the stretching and thermal activation of the basin lithosphere, and to study in detail the formation of a maturity aureole of organic matter in the basin's subtrapean sedimentary cover. This book offers a valuable resource for all graduate students and professionals interested in numerical modelling of the thermal evolution of sedimentary basins. It will also be of great interest to petroleum geologists engaged in oil and gas exploration in the trap provinces of the world. Lastly, it will benefit those students and geologists dealing with the thermal field of sedimentary blankets in actual and degraded permafrost areas.

Permo-Triassic Salt Provinces of Europe, North Africa and the Atlantic Margins: Tectonics and Hydrocarbon Potential deals with the evolution and tectonic significance of the Triassic evaporite rocks in the Alpine orogenic system and the Neogene basins in the Iberian Peninsula, North Africa, and the western Mediterranean. As the nature of the Triassic evaporite sequences, the varied diapiric structures they feed, and the occurrence of hydrocarbons suggest that the Triassic evaporites represent an efficient system to trap hydrocarbons, this book explores the topic with a wide swath, also devoting content to a relatively unexplored topic, the mobilization and deformation of the Triassic salt in the western and northern Tethys (from Iberia and North Africa, Pyrenees and Alps, Adriatic and Ionian) during the subsequent Alpine orogenic processes. The book includes chapters updating varied topics, like the Permian and Triassic chronostratigraphic scales, palaeogeographic reconstructions of the western Tethys since the Late Permian, the petroleum systems associated with Permo-Triassic salt, allochthonous salt tectonics, and a latest revision of salt tectonic processes in the Permian Zechstein Basin, the Atlantic Margins (from Barents Sea, Scotia, Portugal, Morocco, and Mauritania), the Alpine folded belts in Europe, and the various Triassic salt provinces in North Africa. The book is the go-to guide for salt tectonic researchers and those working in the hydrocarbon exploration industry. Presents the first reference book to cover salt tectonics of Permo-Triassic period rocks Features case studies of passive margins like the Barents and the North Sea, Greenland, Nova Scotia, offshore Mauritania, Morocco and Iberia, and folded belts like the Betics-Rif, Tell, Pyrenees, Atlas Mountains, Alps, Balkans, Apennines, the Adriatic and Ionian Seas, and the Zechstein Basin in Norway, the UK, the Netherlands, Germany and Poland Integrates field observations, seismic examples, well-log data and models developed in universities with highly technical and advanced subsurface studies developed by the petroleum industry

GADDAFI: FACTS OF A MASSACRE

Structural Architecture, Thermal Regimes, and Petroleum Systems

Non-standard Problems in Basin Modelling

Large Igneous Provinces

The Future of Petroleum in Lebanon

What is the future of the oil and gas sector in Lebanon? Following the recent discovery of these valuable resources in the southern Mediterranean, including in the Cypriot and Israeli offshore reserves, the possibility of Lebanon also becoming a petroleum-producing country has been raised. This collection of essays addresses the major challenges and opportunities that accompany the country's hope to join the petroleum club. Covering the key policy issues - from Lebanon's susceptibility to the oil curse, to the environmental risks of production - this book brings together expert analysis to offer answers at the institutional level. Of central importance, the contributors argue, is that for Lebanon to benefit from the discovery of petroleum, it must first reform its institutions with the full support of the voting public and civil society. Combining rigorous quantitative and qualitative research, the Lebanese Center for Policy Studies has produced here an essential book that puts petroleum in Lebanon, and the important questions that come with it, within a global perspective.

The second edition of The Biomarker Guide is a fully updated and expanded version of this essential reference.

The second edition of The Biomarker Guide is a fully updated and expanded version of this essential reference. Now in two volumes, it provides a comprehensive account of the role that biomarker technology plays both in petroleum exploration and in understanding Earth history and processes. Biomarkers and Isotopes in Petroleum Exploration and Earth History itemizes parameters used to genetically correlate petroleum and interpret thermal maturity and extent of biodegradation. It documents most known petroleum systems by geologic age throughout Earth history. The Biomarker Guide is an invaluable resource for geologists, petroleum geochemists, biogeochemists, and environmental scientists.

Sirte Basin, North-central Libya

Statistics of Petroleum Exploration in the Non-Communist World Outside the United States and Canada

The Biomarker Guide

The Petroleum Resources of Libya, Algeria, and Egypt

The Geology of the Hofra Region, Sirte Basin, Libya (S.P.L.A.J.)

Following on from the first 2 books in the series, Sedimentary Basins of the World, which covered Chinese Sedimentary Basins (Volume 1) and South Pacific Sedimentary Basins (Volume 2), comes Volume 3, on African Basins. Africa covers a larger area than the USA, Europe, India and the ASEAN nations put together. It is rich in natural resources, including oil, gas and nearly every metalliferous mineral. Yet Africa is still one of the least explored continents. This book brings together in this volume, concise reviews of basins previously documented in a vast array of diffuse literature. It also contains some very detailed accounts of several basins which have never before been described in such depth. These include the onshore Niger, Chad, and Sudanese rift basins, and the offshore basins of southern Africa. The contributions are by authors, many of whom have great knowledge and experience of the basins that they describe. The thirteen chapters are arranged geographically covering North Africa, Central Africa and Southern Africa and the book is illustrated by maps, cross-sections, stratigraphic sections and seismic lines. Each chapter includes a comprehensive bibliography and the book concludes with a subject index. For academic geologists researching the geology of Africa, and for industrial geologists seeking natural resources within African sedimentary rocks, this book is an invaluable source of information.

A summary of the geographic location, amount, and results of petroleum exploration, including an atlas showing exploration and delineated prospective areas through 1982.

There are three types of rock—igneous, metamorphic and sedimentary. Sedimentary rocks form from the weathering and transportation and deposition of older rocks. Applied Sedimentology describes the formation, transportation and deposition of sediment, and the post-depositional processes that change soft sediment into sedimentary rock. Sedimentary rocks include sandstones, limestones and mudstones. All the world's coal, most of its water and fossil fuels, and many mineral deposits are in sedimentary rocks. Applied Sedimentology shows how the study of sediments aids the exploration for and exploitation of natural resources, including water, ores and hydrocarbons. * Completely revised edition; Like its precursor, it describes sedimentation from sand grains to sedimentary basins; Features up-to date account and critique of sequence and cyclostratigraphy * Extensively illustrated with photos and remotely sensed sea bed images describing sedimentary processes, products and depositional environments. Color plates illustrate sediment textures, lithologies, pore types, diagenetic textures, and carbonate and clastic sequence stratigraphic models * Emphasises the applications of sedimentology to the exploration for and exploitation of natural resources including water, ores and hydrocarbons * Extensive references and up-to-date bibliography for further study

Libya Investment and Business Guide Volume 1 Strategic and Practical Information

Tectonics and Hydrocarbon Potential

Applied Sedimentology

Energy, Politics and Economic Growth

Remote Sensing for Hydrocarbon Exploration

This is a comprehensive synthesis of state-of-the-art information on vitally important hydrocarbon habitats for advanced geology students and researchers, exploration geoscientists, and petroleum managers.

"The coexistence in space and time of growing mountain belts and actively extending basins poses a number of yet unsolved questions in terms of mechanics. This problem is particularly crucial in the Mediterranean regions, where all Cenozoic basins opened in the internal zones of mountain belts." "This volume brings together contributions from geologists and geophysicists in the quest to solve the complex dynamic problem posed by the Mediterranean region. It presents a wealth of new data on various topics centred on the Mediterranean region from the deep mantle structure to the detailed geometry of sedimentary basins."--BOOK JACKET.Title

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A Driver of Global Environmental and Biotic Changes

Rifts and Passive Margins

African Basins

Statistics of Petroleum Exploration in the World Outside the United States and Canada Through 2001

Prospects for the Future