

# Contents

## Generalia

W.F. Waldner  
Salt Mining and Trading in the Berchtesgaden and Salzburg Area.  
An Introduction to the Historical Background of the Congress  
Site (With 1 Figure) . . . . . 1

T. Finlow-Bates and S.E. Tischler  
Controls on Alpidic Mineralization Styles (With 4 Figures) . . . . . 7

O. Schulz  
Recent Results and Critical Considerations of the Eastern Alpine  
Metallogenesis (With 5 Figures) . . . . . 19

## Mineral Deposits of the Alpine Realm

A. Ferrario, G. Garuti, A. Rossi, and G.P. Sighinolfi  
Petrographic and Metallogenic Outlines of the "La Balma-M. Capiro"  
Ultramafic-Mafic Body (Ivrea-Verbano Basic Complex, NW Italian  
Alps) (With 4 Figures) . . . . . 28

L. Brigo and P. Omenetto  
Scheelite-Bearing Occurrences in the Italian Alps: Geotectonic  
and Lithostratigraphic Setting (With 4 Figures) . . . . . 41

J.G. Haditsch and H. Mostler  
The Succession of Ore Mineralization of the Lower Austroalpine  
Innsbruck Quartzphyllite (With 2 Figures) . . . . . 51

H. Wopfner, S. Griesecke, J. Koch, and H. Fels  
New Aspects on Metal Deposits of the Groeden Sandstone  
(South Tyrol, Italy) (With 4 Figures) . . . . . 60

W. Klau and H. Mostler  
Zn-Pb-F Mineralization in Middle Permian of Tregiovo (Province  
of Bozen/Trient, Italy) (With 6 Figures) . . . . . 70

**L. Weber**

The Stratiform Lead-Zinc Mineralisation of the "Paleozoic of Graz" (Styria, Austria) (With 3 Figures) . . . . . 81

**M. Drovnik**

Mineral Deposits in Permian and Triassic Beds of Slovenia (Yugoslavia) (With 3 Figures) . . . . . 88

**G. Niedermayr, A. Beran, and E. Scheriau-Niedermayr**

Magnesite in Permian and Scythian Series of the Eastern Alps, Austria, and Its Petrogenetic Significance (With 1 Figure) . . . . . 97

**G. Morteani, F. Schley, and P. Möller**

On the Formation of Magnesite (With 4 Figures) . . . . . 105

**S.Th. Schmidt and G.C. Amstutz**

Mineralogical Investigations of Strata-Bound Pb-Zn-Ba Occurrences in the Triassic of the Central Alps (Switzerland) (With 5 Figures) . . . . . 117

**J. Féraud**

Ore Veins Linked to Old Emersion Surfaces in the Crystalline Basement of Provence and of the External Belt of the French-Italian Alps (With 1 Figure) . . . . . 128

**J.H. Ziegler**

Eocene Iron Ore Deposits at the Northern Welt of the Bavarian Alps (With 4 Figures) . . . . . 136

**P. Ambatiello and P. Ney**

The Berchtesgaden Salt Mine (With 7 Figures) . . . . . 146

**V. Rudert**

Hydraulic Lime from Marienstein (Bavaria) (With 6 Figures) . . . . . 155

**Geochemistry of Alpine Mineral Deposits****V. Köppel**

Summary of Lead Isotope Data from Ore Deposits of the Eastern and Southern Alps: Some Metallogenetic and Geotectonic Implications (With 2 Figures) . . . . . 162

**E. Schroll and E. Pak**

Sulfur Isotope Investigations of Ore Mineralizations of the Eastern Alps (With 4 Figures) . . . . . 169

**T. Dolenec, J. Kušej, and J. Pezdič**

The Isotopic Composition of Oxygen and Carbon in Lead and Zinc Deposits from Northern Karavanke (With 9 Figures) . . . . . 176

E. Schroll	
Geochemical Characterization of the Bleiberg Type and Other Carbonate Hosted Lead-Zinc Mineralizations (With 7 Figures) . . . . .	189
U.F. Hein and H.-J. Schneider	
Fluorine Anomalies Accompanying the Alpine Pb-Zn Deposits Compared to the Geochemistry of Their Fluorites (With 8 Figures) . . . . .	198
P. Möller, P. Dulski, and H.-J. Schneider	
Interpretation of Ga and Ge Content in Sphalerite from the Triassic Pb-Zn Deposits of the Alps (With 4 Figures) . . . . .	213
R. Wolter and H.-J. Schneider	
Saline Relics of Formation Water in the Wettersteinkalk and Their Genetical Connection with the Pb-Zn Mineralization (With 5 Figures) . . . . .	223
W. Büttner and R. Saager	
Factor Analyses of Stream Sediment Data from the Vicinity of the Zinc-Lead Occurrences at S-Carl (Unterengadin, Switzerland) (With 7 Figures) . . . . .	231
G. Niedermayr and E. Schroll	
The Tungsten Distribution in Rocks of the Western Hohe Tauern (With 3 Figures) . . . . .	240
 <b>Mineral Deposits of the Alpine Epoch in Europe</b>	
J.M. Fontboté, L. Fontboté, and G.C. Amstutz	
Observations on the Setting of the Strata-Bound F-(Pb-Zn) Deposits in the Triassic of the Alpujarrides (Betic Cordillera, Southern Spain) (With 5 Figures) . . . . .	249
E. Martínez-García	
Permian Mineralizations in the Cantabrian Mountains (North-West Spain) (With 6 Figures) . . . . .	259
D. Badia and Y. Fuchs	
Permo-Carboniferous Volcanism in the Massif Central (France) and its Relations to Ore Deposits (With 6 Figures) . . . . .	275
O. Kolli	
Copper Mineralization in the Aïn Sefra Area (West of Algeria) (With 3 Figures) . . . . .	291

Ch. Marignac	
The Polymetallic Ore Veins of Aïn-Barbar (Algeria) as a Consequence of Alpine Geothermal Activity (With 7 Figures) . . . . .	298
H.W. Walther	
The Alpidic Metallogenetic Epoch in Central Europe North of the Alps (With 4 Figures) . . . . .	313
R. Schaeffer	
Late Mesozoic to Tertiary Mineralization in the North-Eastern Sauerland (Rheinisches Schiefergebirge, Western Germany) (With 2 Figures) . . . . .	329
W. Tufar and P. Podufal	
Mineral Paragenetic Revelations in the Barite Deposit of Dreislar (Sauerland, Rheinisches Schiefergebirge, West Germany) (With 8 Figures) . . . . .	335
L. Fontboté and G.C. Amstutz	
Facies and Sequence Analysis of Diagenetic Crystallization Rhythmites in Strata-Bound Pb-Zn-(Ba-F-) Deposits in the Triassic of Central and Southern Europe (With 6 Figures) . . . . .	347
M. Vavelidis and G.C. Amstutz	
New Genetic Investigations on the Pb-Zn Deposits of Thasos (Greece) (With 3 Figures) . . . . .	359
N. Epitropou, D. Constantinides, and D. Bitzios	
The Marlow Pb-Zn Mineralization of Thasos Island (Greece) (With 12 Figures) . . . . .	366
E. Mack	
Auriferous Mineralization in Northern Greece: History, Exploration, and Evaluation (With 4 Figures) . . . . .	375
M. Vavelidis and G.C. Amstutz	
Investigations on the Gold Occurrences in the Kinyra and Thasos (City) Area on Thasos Island (Greece) (With 5 Figures). . .	385
<b>Subject and Locality Index</b>	. . . . . 393
<b>List of Oral Presentations</b>	. . . . . 399