

GEOLOGICAL SOCIETY SPECIAL PUBLICATION NO. 43

# Evolution of Metamorphic Belts

EDITED BY

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1989

Published for  
The Geological Society by  
Blackwell Scientific Publications

OXFORD LONDON EDINBURGH

BOSTON MELBOURNE

# Geological Society Special Publications

*Series Editor:* K. COE

Published for  
The Geological Society by  
Blackwell Scientific Publications  
Osney Mead, Oxford OX2 0EL  
(Orders: Tel. 0865 240201)  
8 John Street, London WC1 2ES  
23 Ainslie Place, Edinburgh EH3 6AJ  
3 Cambridge Center, Suite 208, Cambridge,  
Massachusetts 02142, USA  
107 Barry Street, Carlton, Victoria 3053,  
Australia

First published 1989

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Typeset by Setrite Typesetters, Hong Kong  
Printed and bound at the University Press,  
Cambridge

## DISTRIBUTORS

### USA

Publishers' Business Services  
288 Airport Industrial Drive  
Ypsilanti  
Michigan 48197  
(Orders: Tel: (313) 487 9720)

### Canada

Oxford University Press  
70 Wynford Drive  
Don Mills  
Ontario M3C 1J9  
(Orders: Tel. (416) 441-2941)

### Australia

Blackwell Scientific Publications  
(Australia) Pty Ltd.  
107 Barry Street, Carlton,  
Victoria 3053  
(Orders: Tel. (03) 347 0300)

### British Library

Cataloguing in Publication Data

### Evolution of metamorphic belts.

1. Metamorphic rocks. Petrology.
  - I. Daly, J. S. II. Cliff, R. A.
  - III. Yardley, B. W. D. (Bruce W. D.)
  - IV. Geological Society of London
- 552.'4

ISBN 0-632-02503-4

### Library of Congress

Cataloguing-in-Publication Data

### Evolution of metamorphic belts/edited by J. S. Daly,

R. A. Cliff, and B. W. D. Yardley.  
p. cm. — (Geological Society special  
publication; no. 43)

Contains papers presented at a joint meeting of  
the Metamorphic Studies Group and IGCP Project  
235 (Metamorphism and Geodynamics) held at  
University College Dublin in September 1987.

Bibliography: p.

Includes index.

1. Metamorphism (Geology) — Congresses.
2. Rocks, Metamorphic-Congresses. I. Daly, J.  
S. II. Cliff, R. A. III. Yardley, B. W. D.
- IV. Metamorphic Studies Group. V. IGCP  
Project No. 235 on 'Metamorphism and  
Geodynamics.' VI. Series.

QE475.A2E945 1988 552'.4 — dc 1988-7462

ISBN 0-632-02503-4

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## Abbreviations (after Kretz 1983)

### Minerals

Acm	acmite	Di	diopside	Mag	magnetite
Act	actinolite	Dol	dolomite	Mrg	margarite
Agt	aegirine-augite	Drv	dravite	Mel	melilite
Ak	åkermanite	Eck	eckermannite	Mc	microcline
Ab	albite	Ed	edenite	Mo	molybdenite
Aln	allanite	Elb	elbaite	Mnz	monazite
Alm	almandine	En	enstatite (ortho)	Mtc	monticellite
Anl	analcite	Ep	epidote	Mnt	montmorillonite
Ant	anatase	Fst	fassite	Mul	mullite
And	andalusite	Fa	fayalite	Ms	muscovite
Adr	andradite	Fac	ferroactinolite	Ntr	natrolite
Anh	anhydrite	Fed	ferroedenite	Ne	nepheline
Ank	ankerite	Fs	ferrosilite (ortho)	Nrb	norbergite
Ann	annite	Fts	ferrotschermakite	Nsn	noscan
An	anorthite	Fl	fluorite	Ol	olivine
Atg	antigorite	Fo	forsterite	Omp	omphacite
Ath	anthophyllite	Gn	galena	Oam	orthoamphibole
Ap	apatite	Grt	garnet	Or	orthoclase
Apo	apophyllite	Ged	gedrite	Opx	orthopyroxene
Arg	aragonite	Gh	gehlenite	Pg	paragonite
Arf	arfvedsonite	Gbs	gibbsite	Prg	argasite
Apy	arsenopyrite	Glt	glaucosite	Pct	pectolite
Aug	augite	Gln	glaucophane	Pn	pentlandite
Ax	axinite	Gt	goethite	Per	periclase
Brt	barite	Gr	graphite	Prv	perovskite
Brl	beryl	Grs	grossularite	Phl	phlogopite
Bt	biotite	Gru	grunerite	Pgt	pigeonite
Bhm	boehmite	Gp	gypsum	Pl	plagioclase
Bn	bornite	Hl	halite	Prh	prehnite
Brk	brookite	Hs	hastingsite	Pen	protoenstatite
Brc	brucite	Hyn	häuyne	Pmp	pumpellyite
Bst	bustamite	Hd	hedenbergite	Py	pyrite
Cam	Ca clinoamphibole	Hem	haematite	Prp	pyrope
Cpx	Ca clinopyroxene	Hc	hercynite	Prl	pyrophyllite
Cal	calcite	Hul	heulandite	Po	pyrrhotite
Ccn	cancrinite	Hbl	hornblende	Qtz	quartz
Crn	carnegieite	Hu	humite	Rbk	riebeckite
Cst	cassiterite	Ill	illite	Rds	rhodochrosite
Cls	celestite	Ilm	ilmenite	Rdn	rhodonite
Cbz	chabazite	Jd	jadeite	Rt	rutile
Cc	chalcocite	Jh	johannsenite	Sa	sanidine
Ccp	chalcopyrite	Krs	kaersutite	Spr	sapphirine
Chl	chlorite	Kls	kalsilite	Scp	scapolite
Cld	chloritoid	Kln	kaolinite	Srl	schorl
Chn	chondrodite	Ktp	kataphorite	Srp	serpentine
Chr	chromite	Kfs	K-feldspar	Sd	siderite
Ccl	chrysocolla	Krn	kornerupine	Sil	sillimanite
Ctl	chrysotile	Ky	kyanite	Sdl	sodalite
Cen	clinoenstatite	Lmt	laumontite	Sps	spessartine
Cfs	clinoferrosilite	Lws	lawsonite	Sp	sphalerite
Chu	clinohumite	Lpd	lepidolite	Spn	sphene
Czo	clinozoisite	Lct	leucite	Spl	spinel
Crd	cordierite	Lm	limonite	Spd	spodumene
Crn	corundum	Lz	lizardite	St	staurolite
Cv	covellite	Lo	loellingite	Stb	stilbite
Crs	cristoballite	Mgh	maghemite	Stp	stilpnomelane
Cum	cunningtonite	Mkt	magnesiokataphorite	Str	strontianite
Dsp	diaspore	Mrb	magnesioriebeckite	Tlc	talc
Dg	diginite	Mgs	magnesite	Tmp	thompsonite

Ttn	titanite	Tro	troilite	Wth	witherite
Toz	topaz	Ts	tschermakite	Wo	wollastonite
Tur	tourmaline	Usp	ulvöspinel	Wus	wüstite
Tr	tremolite	Vrm	vermiculite	Zrn	zircon
Trd	tridymite	Ves	vesuvianite	Zo	zoisite

### Components

fo	$\text{Mg}_2\text{SiO}_4$	sps	$\text{Mn}_3\text{Al}_2\text{Si}_3\text{O}_{12}$	phl	$\text{K}_2\text{Mg}_6\text{Al}_2\text{Si}_6\text{O}_{20}(\text{OH})_4$
fa	$\text{Fe}_2\text{SiO}_4$	en	$\text{Mg}_2\text{Si}_2\text{O}_6$	eas	$\text{K}_2\text{Mg}_5\text{AlAl}_3\text{Si}_5\text{O}_{20}(\text{OH})_4$
alm	$\text{Fe}_3\text{Al}_2\text{Si}_3\text{O}_{12}$	di	$\text{CaMgSi}_2\text{O}_6$	ab	$\text{NaAlSi}_3\text{O}_8$
prp	$\text{Mg}_3\text{Al}_2\text{Si}_3\text{O}_{12}$	tr	$\text{Ca}_2\text{Mg}_5\text{Si}_8\text{O}_{22}(\text{OH})_2$	an	$\text{CaAl}_2\text{Si}_2\text{O}_8$

## Symbol conventions for $P-T$ diagrams

It was the editors' belief that the value of the papers presented here would be enhanced if there was a common style for the  $P-T$  diagrams. To this end authors were asked to show proposed  $P-T-t$  paths for the metamorphic evolution of the rocks they described on a  $P-T$  diagram with the following additional information.

**1** An indication of *specific  $P-T$  points* determined along the path for particular metamorphic events/stages. Authors were asked, where possible, to use a box or ellipse that reflected the errors in their estimates, although in practice few felt able to do this.

**2** The relative timing of *deformation events* along the  $P-T$  path, if known, indicated by a *diamond symbol* on the path, and enclosing

a number corresponding to the number of the deformation event in the local structural sequence.

**3** Where available, the *absolute age* of specific stages on the  $P-T$  path, shown by a *circle symbol* with a letter to cross-reference with the figure caption; the age in Ma to appear beside the circle.

**4** *Equilibrium curves* for phase relations among the *Al-silicate minerals*, after Salje (1986) and taking his curve b to represent andalusite–sillimanite equilibrium, *and/or* the equilibrium curve for co-existence of *jadeite, albite* and *quartz* after Holland (1980). These curves are shown to facilitate comparisons between different papers.

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