

CONTENTS OF VOLUME 8

Number 1

- 1 Editorial
- H. TAKAGI 3 Implications of mylonitic microstructures for the geotectonic evolution of the Median Tectonic Line, central Japan
- J. P. PLATT and J. H. BEHRMANN 15 Structures and fabrics in a crustal-scale shear zone, Betic Cordillera, SE Spain
- S. J. NARUK 35 Strain and displacement across the Pinalaño Mountains shear zone, Arizona, U.S.A.
- A.-M. BOULLIER 47 Sense of shear and displacement estimates in the Abeibara–Rarhous late Pan-African shear zone, Adrar des Iforas, Mali
- W. J. GREGG 59 Deformation of chlorite–mica aggregates in cleaved psammitic and pelitic rocks from Islesboro, Maine, U.S.A.
- J. S. RATHORE and A. M. KAFAY 69 A magnetic fabric study of the Shap region in the English Lake District
- B. C. WEBB and D. J. D. LAWRENCE 79 Conical fold terminations in the Bannisdale Slates of the English Lake District
- D. G. DE PAOR 87 Orthographic analysis of geological structures—II. Practical applications

Number 2

- D. A. COLLINS and D. G. DE PAOR 101 A determination of the bulk rotational deformation resulting from displacements in discrete shear zones in the Hercynian Fold Belt of South Ireland
- S. HANMER 111 Asymmetrical pull-aparts and foliation fish as kinematic indicators
- J. P. BURG 123 Quartz shape fabric variations and *c*-axis fabrics in a ribbon-mylonite: arguments for an oscillating foliation
- J. C. WHITE and C. K. MAWER 133 Extreme ductility of feldspars from a mylonite, Parry Sound, Canada
- B. J. TEWKSBURY 145 Conjugate crenulation cleavages in the Uncompahgre Formation, Needle Mountains, Colorado
- D. K. NARAHARA and D. V. WILTSCHKO 157 Deformation in the hinge region of a chevron fold, Valley and Ridge Province, central Pennsylvania
- M. LESPINASSE and A. PÊCHER 169 Microfracturing and regional stress field: a study of the preferred orientations of fluid-inclusion planes in a granite from the Massif Central, France
- D. BAHAT 181 Joints and en échelon cracks in Middle Eocene chalks near Beer Sheva, Israel

R. L. THIESSEN and T. HAVILAND	191	A technique for the analysis of re-fold structures
<i>Brevia</i>		
C. A. BOULTER	201	Accretionary lapilli-filled clastic dykes: a comparison of compaction strain estimates from dyke folding and lapilli shape factors
P. M. TRAYNER	205	A comparison of Sanderson's and Panozzo's strain measurement methods using calcite grain boundaries from the Variscan fold and thrust belt in Ireland
I. DAVISON	209	Listric normal fault profiles: calculation using bed-length balance and fault displacement
W. B. JONES and J. W. NORMAN	211	Letters to the Editors: Tectonic effects of old very large meteoric impacts
	213	Book Reviews
Numbers 3/4		
	v	Preface
I. R. VANN, R. H. GRAHAM and A. B. HAYWARD	215	The structure of mountain fronts
C. J. BANKS and J. WARBURTON	229	'Passive-roof' duplex geometry in the frontal structures of the Kirthar and Sulaiman mountain belts, Pakistan
R. A. PRICE	239	The southeastern Canadian Cordillera: thrust faulting, tectonic wedging, and delamination of the lithosphere
R. L. BROWN, J. M. JOURNEY, L. S. LANE, D. C. MURPHY and C. J. REES	255	Obduction, backfolding and piggyback thrusting in the metamorphic hinterland of the southeastern Canadian Cordillera
F. A. DIEGEL	269	Topological constraints on imbricate thrust networks, examples from the Mountain City window, Tennessee, U.S.A.
E. G. BOMBOLAKIS	281	Thrust-fault mechanics and origin of a frontal ramp
G. MITRA and S. E. BOYER	291	Energy balance and deformation mechanisms of duplexes
M. A. COOPER and P. M. TRAYNER	305	Thrust-surface geometry: implications for thrust-belt evolution and section-balancing techniques
N. B. WOODWARD, D. R. GRAY and D. B. SPEARS	313	Including strain data in balanced cross-sections
S. E. BOYER	325	Styles of folding within thrust sheets: examples from the Appalachian and Rocky Mountains of the U.S.A. and Canada
S. WOJTAL	341	Deformation within foreland thrust sheets by populations of minor faults
R. P. NICKELSEN	361	Cleavage duplexes in the Marcellus Shale of the Appalachian foreland

J. L. MUGNIER and P. VIALON	373	Deformation and displacement of the Jura cover on its basement
D. DIETRICH and D. W. DURNEY	389	Change of direction of overthrust shear in the Helvetic nappes of western Switzerland
J. A. MUÑOZ, A. MARTINEZ and J. VERGES	399	Thrust sequences in the eastern Spanish Pyrenees
M. JULIVERT and M. L. ARBOLEYA	407	Areal balancing and estimate of areal reduction in a thin-skinned fold-and-thrust belt (Cantabrian zone, NW Spain): constraints on its emplacement mechanism
F. BASTIDA, J. R. MARTINEZ-CATALAN and J. A. PULGAR	415	Structural, metamorphic and magmatic history of the Mondoñedo nappe (Hercynian belt, NW Spain)
C. TOWNSEND, D. ROBERTS, A. H. N. RICE and R. A. GAYER	431	The Gaissa Nappe, Finnmark, North Norway: an example of a deeply eroded external imbricate zone within the Scandinavian Caledonides
J. A. GILOTTI and R. KUMPULAINEN	441	Strain softening induced ductile flow in the Särvi thrust sheet, Scandinavian Caledonides
A. W. MENEILLY and B. C. STOREY	457	Ductile thrusting within subduction complex rocks on Signy Island, South Orkney Islands
J. M. TUBIA and J. CUEVAS	473	High-temperature emplacement of the Los Reales peridotite nappe (Betic Cordillera, Spain)
J. L. LAGARDE and A. MICHARD	483	Stretching normal to the regional thrust displacement in a thrust-wrench shear zone, Rehamna Massif, Morocco
Number 5		
R. D. LAW	493	Relationships between strain and quartz crystallographic fabrics in the Roche Maurice quartzites of Plougastel, western Brittany
G. E. LLOYD and C. C. FERGUSON	517	A spherical electron-channelling pattern map for use in quartz petrofabric analysis
M. W. JESSELL	527	Grain boundary migration and fabric development in experimentally deformed octachloropropane
G. S. LISTER, J. N. BOLAND and H. J. ZWART	543	Step-wise growth of biotite porphyroblasts in pelitic schists of the western Lys-Caillaouas massif (Pyrenees)
R. THIESSEN	563	Two-dimensional re-fold interference patterns
M. E. JONES and M. A. ADDIS	575	The application of stress path and critical state analysis to sediment deformation
<i>Brevia</i>		
A. BOSELLINI and C. DOGLIONI	581	Inherited structures in the hangingwall of the Valsugana Overthrust (Southern Alps, Northern Italy)
H. A. BABAIE	585	A comparison of two-dimensional strain analysis methods using elliptical grains

Contents

S. SIMIGIAN and J. STARKEY	589 Automated grain shape analysis
J. M. DIXON and J. M. SUMMERS	593 Another word on the rheology of silicone putty: Bingham
Number 6	
M. R. HEMPTON and K. NEHER	597 Experimental fracture, strain and subsidence patterns over an échelon strike-slip faults: implications for the structural evolution of pull-apart basins
W. R. FITCHES, R. CAVE, J. CRAIG and A. J. MALTMAN	607 Early veins as evidence of detachment in the Lower Palaeozoic rocks of the Welsh Basin
C. K. MORLEY	621 Vertical strain variations in the Osen-Røa thrust sheet, North-western Oslo Fjord, Norway
A. CASTRO	633 Structural pattern and ascent model in the Central Extremadura batholith, Hercynian belt, Spain
J. RIDLEY	647 Parallel stretching lineations and fold axes oblique to a shear displacement direction—a model and observations
D. DIETRICH	655 Calcite fabrics around folds as indicators of deformation history
T. G. BLENKINSOP and E. H. RUTTER	669 Cataclastic deformation of quartzite in the Moine thrust zone
L. N. DELL'ANGELO and J. TULLIS	683 A comparison of quartz <i>c</i> -axis preferred orientations in experimentally deformed aplites and quartzites
J.-M. CASAS	693 Shear bands and related extensional structures in a mylonitized quartz dyke
M. A. ELLIS	701 The determination of progressive deformation histories from antitaxial syntectonic crystal fibres
<i>Brevia</i>	
G. J. AXEN	711 Superposed normal faults in the Ely Springs Range, Nevada: estimates of extension
A. M. MCCOSS	715 Simple constructions for deformation in transpression/transension zones
C. A. BOULTER	719 Strain paths during slaty cleavage formation—the role of volume loss: Discussion
	721 Book Reviews
	724 Diary
Number 7	
N. H. WOODCOCK and M. FISCHER	725 Strike-slip duplexes
M. A. NAYLOR, G. MANDL and C. H. K. SIJPESTEIJN	737 Fault geometries in basement-induced wrench faulting under different initial stress states

C. K. MORLEY	753	The Caledonian thrust front and palinspastic restorations in the southern Norwegian Caledonides
J. H. LEE, D. R. PEACOR, D. D. LEWIS and R. P. WINTSCH	767	Evidence for syntectonic crystallization for the mudstone to slate transition at Lehigh Gap, Pennsylvania, U.S.A.
R. KLIGFIELD, J. HUNZIKER, R. D. DALLMEYER and S. SCHAMEL	781	Dating of deformation phases using K–Ar and $^{40}\text{Ar}/^{39}\text{Ar}$ techniques: results from the Northern Apennines
J. M. CRESPI	799	Some guidelines for the practical application of Fry's method of strain analysis
R. J. LISLE	809	The sectional strain ellipse during progressive coaxial deformations
S. H. TREAGUS	819	Some applications of the Mohr diagram for three-dimensional strain
Number 8		
C. W. PASSCHIER and C. SIMPSON	831	Porphyroclast systems as kinematic indicators
J. P. GRATIER and R. GUIGUET	845	Experimental pressure solution–deposition on quartz grains: the crucial effect of the nature of the fluid
J. P. BURG, C. J. L. WILSON and J. C. MITCHELL	857	Dynamic recrystallization and fabric development during the simple shear deformation of ice
R. J. NORRIS and N. A. RUPKE	871	Development of slaty cleavage in a mudstone unit from the Cantabrian Mountains, northern Spain
B. A. VAN DER PLUIJM, J. F. SAVAGE and C. H. KAARS-SIJPESTEIJN	879	Variation in fold geometry in the Yuso Basin, northern Spain: implications for the deformation regime
J. WHEELER	887	Strain analysis in rocks with pre-tectonic fabrics
N. J. WHITE, J. A. JACKSON and D. P. MCKENZIE	897	The relationship between the geometry of normal faults and that of the sedimentary layers in their hanging walls
K. R. McCLAY and M. W. INSLEY	911	Duplex structures in the Lewis thrust sheet, Crowsnest Pass, Rocky Mountains, Alberta, Canada
M. P. SEARLE	923	Structural evolution and sequence of thrusting in the High Himalayan, Tibetan–Tethys and Indus suture zones of Zaskar and Ladakh, Western Himalaya
<i>Brevia</i>		
N. J. SOPER	937	Geometry of transecting, anastomosing solution cleavage in transpression zones
F. KOENEMANN	941	A universal stage method for very fine-grained crystal aggregates
	943	Referees for Volume 8
	944	Editorial

AUTHOR INDEX

ADDIS, M. A.	575	HAYWARD, A. B	215
ARBOLEYA, M. L.	407	HEMPTON, M. R.	597
AXEN, G. J.	711	HUNZIKER, J.	781
BABAIE, H. A.	585	INSLEY, M. W.	911
BAHAT, D.	181	JACKSON, J. A.	897
BANKS, C. J.	229	JESSELL, M. W.	527
BASTIDA, F.	415	JONES, M. E.	575
BEHRMANN, J. H.	15	JONES, W. B.	211
BLENKINSOP, T. G.	669	JOURNEAY, J. M.	255
BOLAND, J. N.	543	JULIVERT, M.	407
BOMBOLAKIS, E. G.	281	KAARS-SIJPESTEIJN, C. H.	879
BOSELLINI, A.	581	KAFAFY, A. M.	69
BOULLIER, A.-M.	47	KLIGFIELD, R.	781
BOULTER, C. A.	201, 719	KOENEMANN, F.	941
BOYER, S. E.	291, 325	KUMPULAINEN, R.	441
BROWN, R. L.	255	LAGARDE, J. L.	483
BURG, J. P.	123, 857	LANE, L. S.	255
CASAS, J.-M.	693	LAW, R. D.	493
CASTRO, A.	633	LAWRENCE, D. J. D.	79
CAVE, R.	607	LEE, J. H.	767
COLLINS, D. A.	101	LESPINASSE, M.	169
COOPER, M. A.	305	LEWIS, D. D.	767
CRAIG, J.	607	LISLE, R. J.	809
CRESPI, J. M.	799	LISTER, G. S.	543
CUEVAS, J.	473	LLOYD, G. E.	517
DALLMEYER, R. D.	781	MALTMAN, A. J.	607
DAVISON, I.	209	MANDL, G.	737
DE PAOR, D. G.	87, 101	MARTINEZ, A.	399
DELL'ANGELO, L. N.	683	MARTINEZ-CATALAN, J. R.	415
DIEGEL, F. A.	269	MAWER, C. K.	133
DIETRICH, D.	389, 655	MCCLAY, K. R.	911
DIXON, J. M.	593	MCCOSS, A. M.	715
DOGLIONI, C.	581	McKENZIE, D. P.	897
DURNEY, D. W.	389	MENEILLY, A. W.	457
ELLIS, M. A.	701	MICHARD, A.	483
FERGUSON, C. C.	517	MITCHELL, J. C.	857
FISCHER, M.	725	MITRA, G.	291
FITCHES, W. R.	607	MORLEY, C. K.	621, 753
GAYER, R. A.	431	MUGNIER, J. L.	373
GILOTTI, J. A.	441	MUNOZ, J. A.	399
GRAHAM, R. H.	215	MURPHY, D. C.	255
GRATIER, J. P.	845	NARAHARA, D. K.	157
GRAY, D. R.	313	NARUK, S. J.	35
GREGG, W. J.	59	NAYLOR, M. A.	737
GUIGUET, R.	845	NEHER, K.	597
HANMER, S.	111	NICKELSEN, R. P.	361
HAVILAND, T.	191	NORMAN, J. W.	211
		NORRIS, R. J.	871

Author index

PASSCHIER, C. W.	831	TEWKSBURY, B. J.	145
PEACOR, D. R.	767	THIESSEN, R.	563
PECHER, A.	169	THIESSEN, R. L.	191
PLATT, J. P.	15	TOWNSEND, C.	431
PRICE, R. A.	239	TRAYNER, P. M.	205, 305
PULGAR, J. A.	415	TREAGUS, S. H.	819
		TUBIA, J. M.	473
RATHORE, J. S.	69	TULLIS, J.	683
REES, C. J.	255		
RICE, A. H. N.	431	VAN DER PLUIJM, B. A.	879
RIDLEY, J.	647	VANN, I. R.	215
ROBERTS, D.	431	VERGES, J.	399
RUPKE, N. A.	871	VIALON, P.	373
RUTTER, E. H.	669		
		WARBURTON, J.	229
SAVAGE, J. F.	879	WEBB, B. C.	79
SCHAMEL, S.	781	WHEELER, J.	887
SEARLE, M. P.	923	WHITE, J. C.	133
SIJPESTEIJN, C. H. K.	737	WHITE, N. J.	897
SIMIGIAN, S.	589	WILSON, C. J. L.	857
SIMPSON, C.	831	WILTSCHKO, D. V.	157
SOPER, N. J.	937	WINTSCH, R. P.	767
SPEARS, D. B.	313	WOJTAL, S.	341
STARKEY, J.	589	WOODCOCK, N. H.	725
STOREY, B. C.	457	WOODWARD, N. B.	313
SUMMERS, J. M.	593		
		ZWART, H. J.	543
TAKAGI, H.	3		