

Table 1. *Petrography of investigated rock samples. All rocks contain apatite, zircon and opaques as minor constituents, S 350 and B 41 secondary calcite. \bar{n} is the average refractive index of the diaplectic quartzes and glasses, see Table 8. % are volume percentages*

No.	Rock name	Stage of shock metamorphism	Quartz vol. percentage, grain size and refractive index	Feldspar	Biotite	Amphibole
B 10	quartz diorite gneiss	I	33% [0.05—0.5 mm] $\bar{n} = 1.546$	61% oligoclase	5%	—
B 51	granite gneiss	I	32% [0.05—0.4 mm] $\bar{n} = 1.546$	63% oligoclase and orthoclase	5%	—
S 289	granite or quartz diorite gneiss	II	19% [0.1 —0.8 mm] $\bar{n} = 1.545$	57% feldspar, nearly completely isotropic	24% with kinkbands	—
B 36	granite	I	33% [0.2 —1.0 mm]	64% oligoclase and orthoclase, the latter with sanidine optics	3%	—
B 151	diorite	II	6% [0.05—0.4 mm] $\bar{n} = 1.536$	47% oligoclase-andesine. Isotropic twin lamellae	12%	35% with twin lamellae
B 1	quartz diorite gneiss	II	33% [0.2 —0.6 mm] $\bar{n} = 1.534$	62% oligoclase. Isotropic twin lamellae	3%	1%
S 350	granite or diorite gneiss	II	34% [0.2 —0.1 mm] $\bar{n} = 1.533$	60% feldspar partially or completely isotropic	5% biotite and chlorite	—
S 349	quartz diorite gneiss	II	22% [0.6 —0.2 mm] $\bar{n} = 1.529$	55% andesine, partially or completely isotropic (see STÖFFLER, 1967)	4% with kinkbands	19%
B 7	granite or quartz diorite gneiss	II	37% [0.2 —0.6 mm] $\bar{n} = 1.480$ partially isotropic and transformed into secondary clay minerals	58% feldspar Partially isotropic, recrystallisation	4%	—
B 9	granite or quartz diorite gneiss	II	35% [0.2 —0.8 mm] $\bar{n} = 1.479$ partially transformed into secondary clay minerals	60% feldspar, partially isotropic, recrystallisation	4%	—

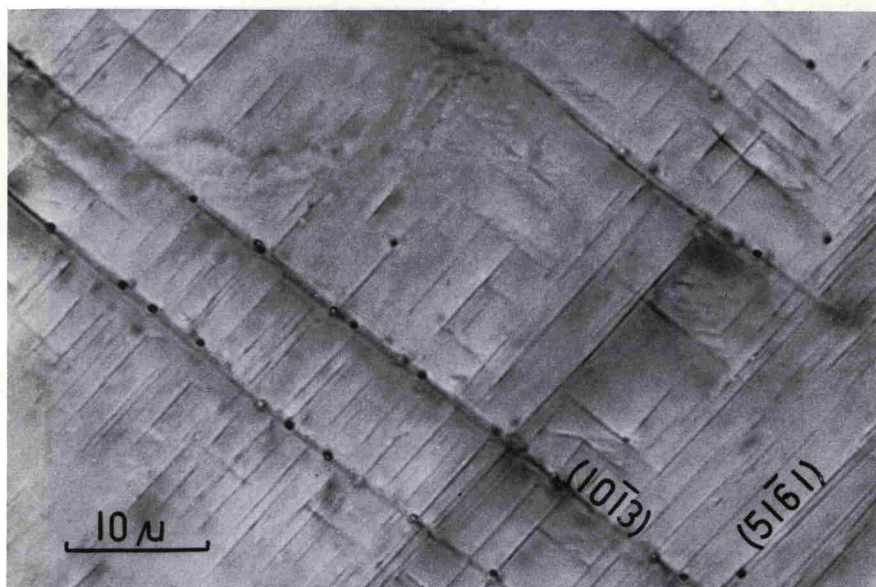


Fig. 2. Planar elements with some single decorations in quartz from sample B 151. Plane polarized light

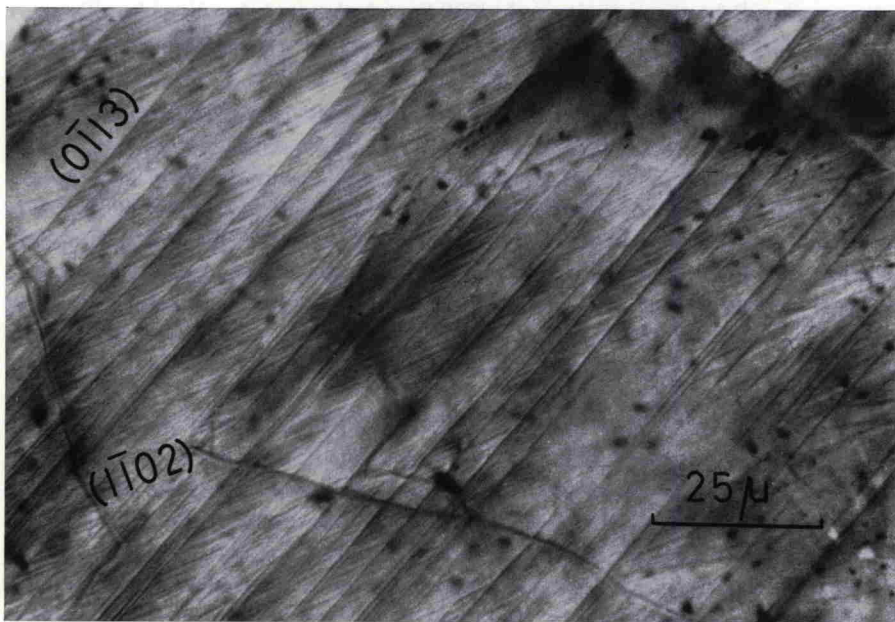


Fig. 3. Non-decorated planar elements in quartz from sample B 7. Crossed nicols

found in the sample S 349 (Fig. 4). Some lamellae can be observed only under highest magnifications (oil immersion).

All quartz lamellae in the investigated rock samples are symmetrical. Asymmetric lamellae like those reported by CHRISTIE, GRIGGS and CARTER (1964) from studies