

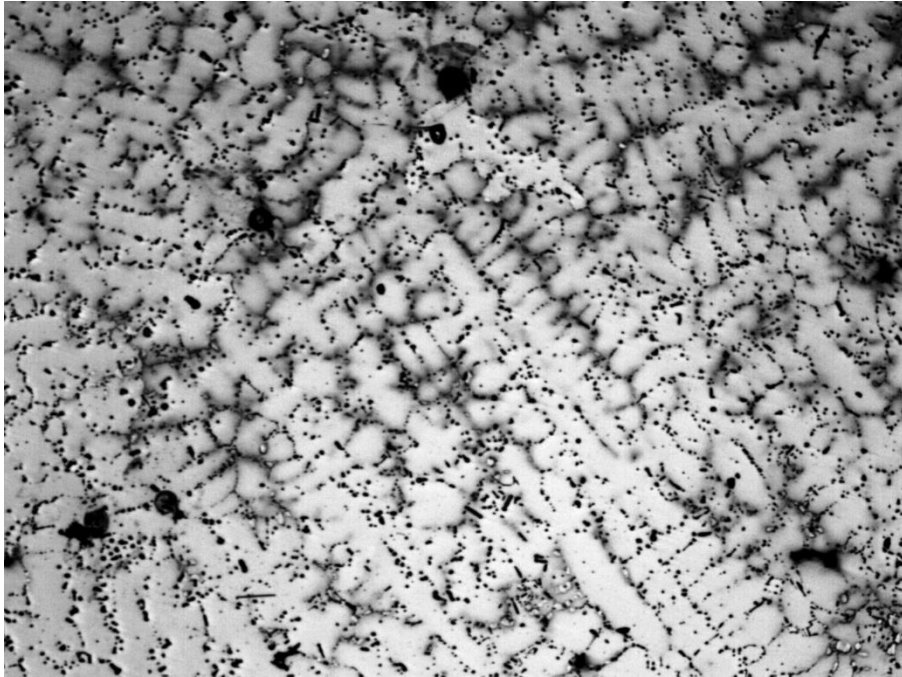
ALBUM

STRUCTURE OF HEAT-STRENGTH NICKEL ALLOYS

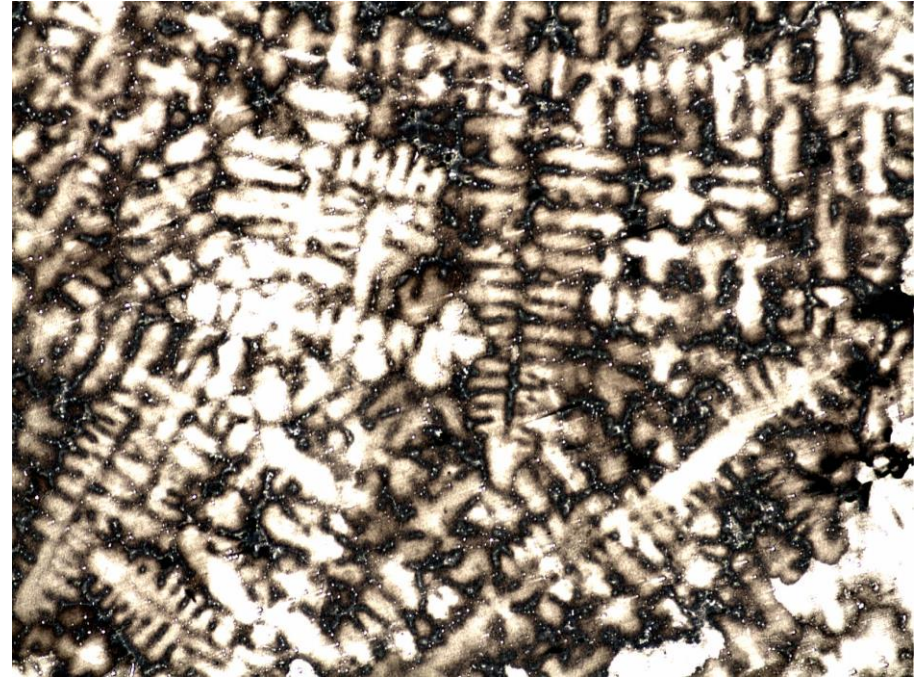
LABORATORY PRACTICAL COURSE

ALLOY Cr-Ni77-Ti-Al-B (EI 437B)

CAST state



without etching



after etching

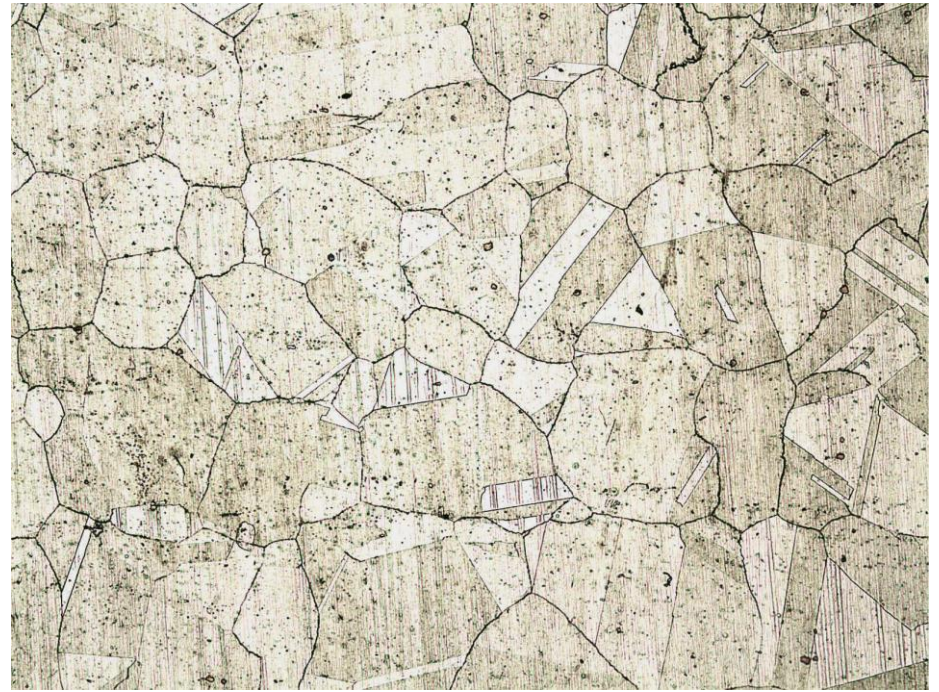
×50

ALLOY Cr-Ni77-Ti-Al-B (EI 437B)

Hot-deformed condition



Quenching 1080 °C, 6 h, cooling in the air



×200

ALLOY Cr-Ni77-Ti-Al-B (EI 437B)

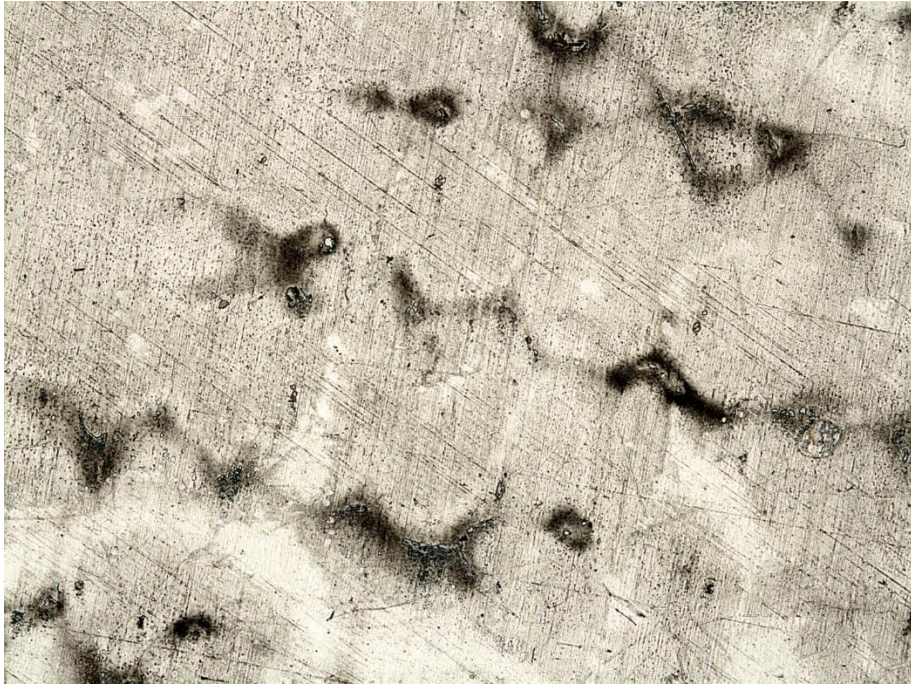
Aging 700 °C, 10 h, air cooling



×200

ALLOY JS6-K

CAST state



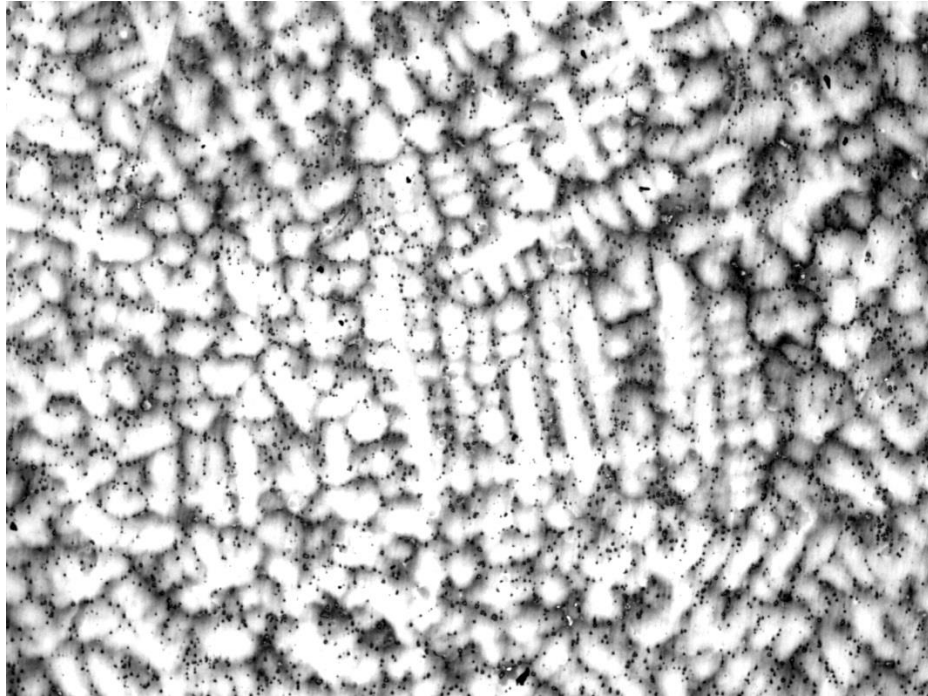
×200



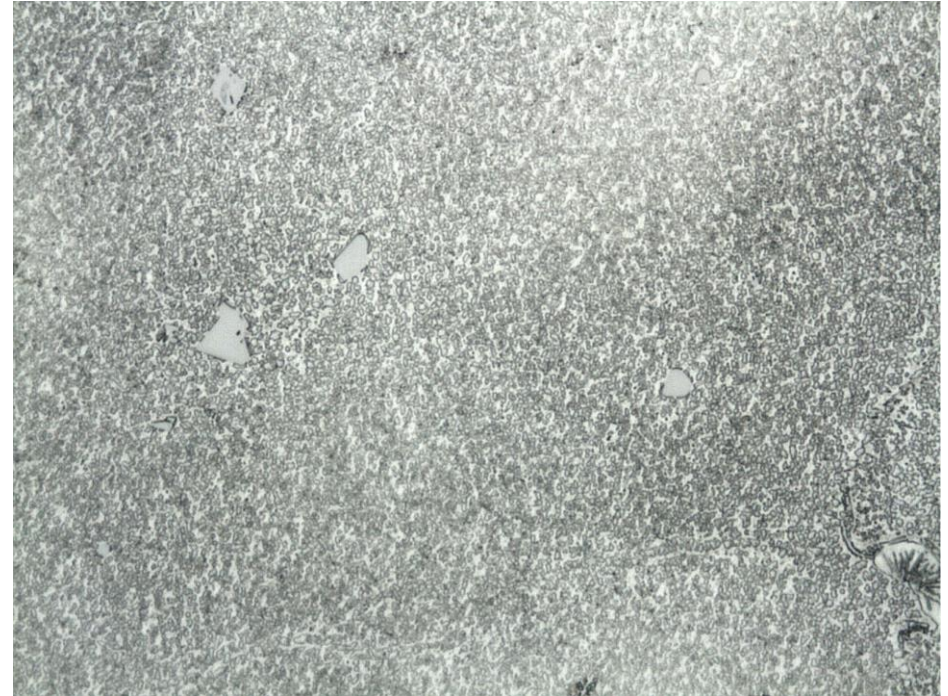
×1000

ALLOY JS6-K

Heat treatment (1200 °C, 4 h, air cooling)

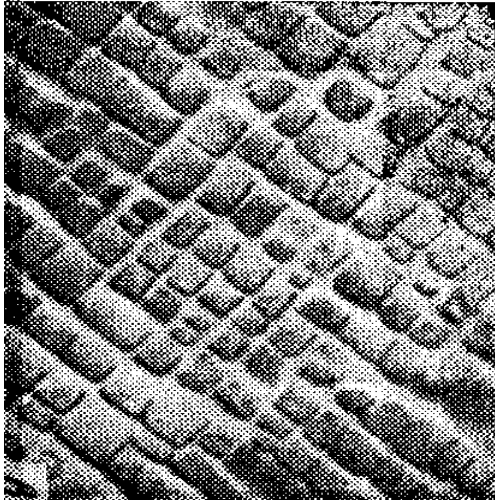


×200

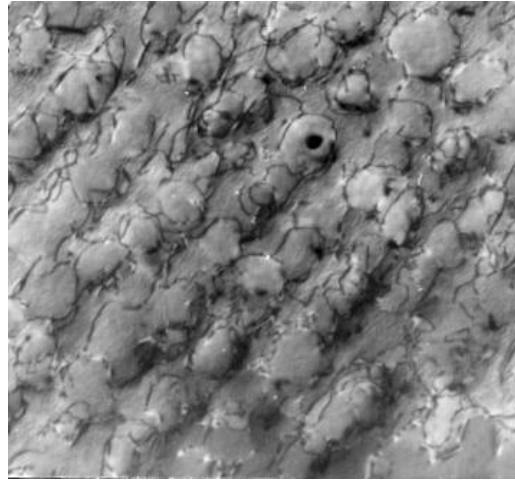


×1000

MORPHOLOGY OF γ' -PARTICLES IN NICKEL-BASED ALLOYS



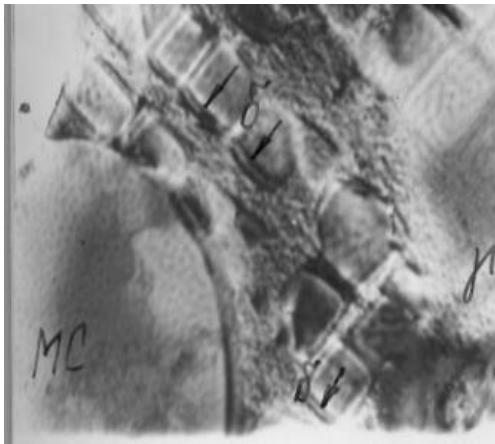
cubic shape of γ' - particles



γ' -particles of granulated alloy



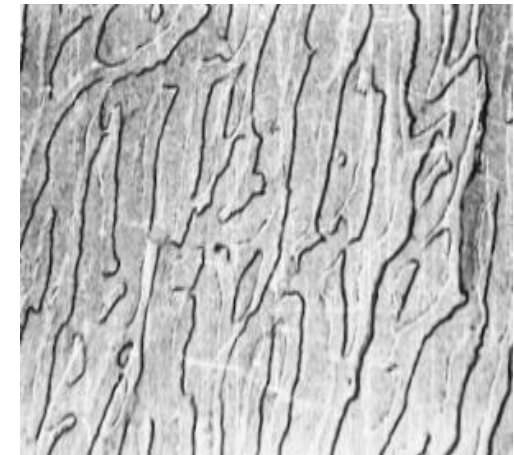
spherical shape of γ' -particles



cubic form of γ' -particles

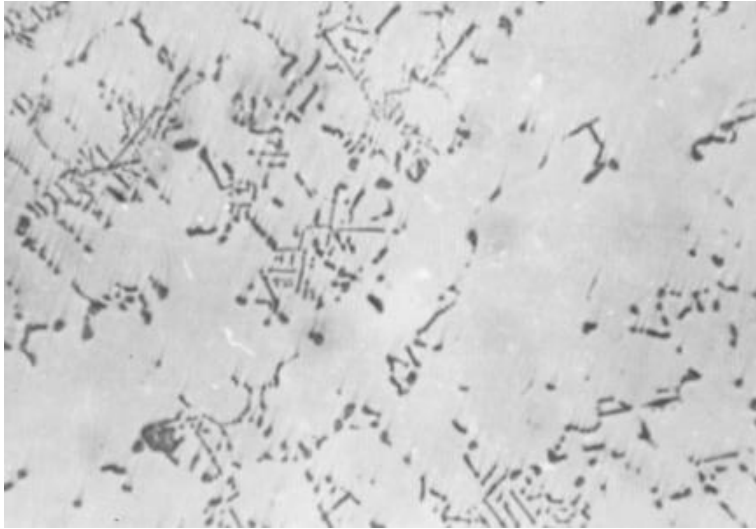


coagulated γ' - particles

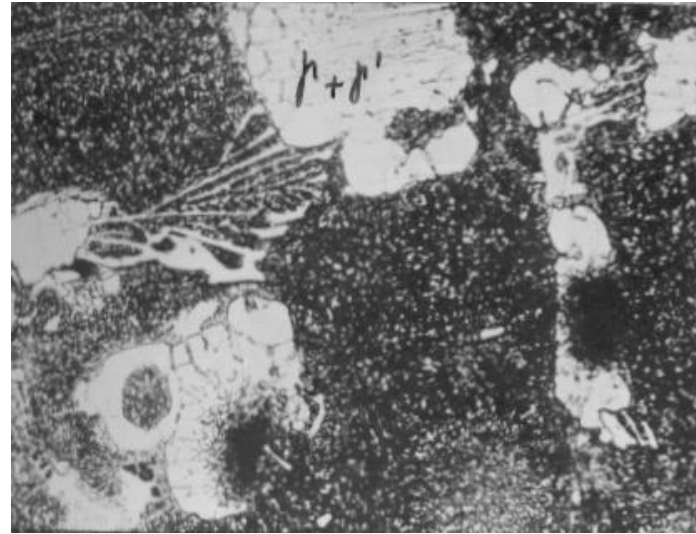


elongated particles of the γ' -phase

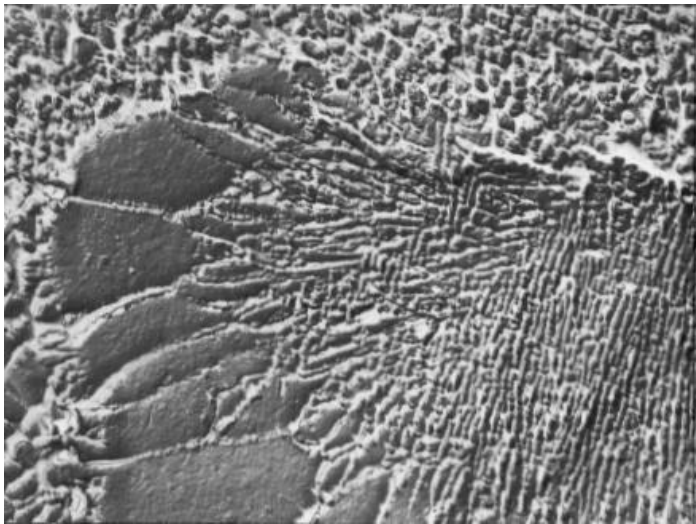
EUTECTIC γ - γ' AND CARBIDES IN ALLOY JS6-U



metallography, without etching, $\times 120$

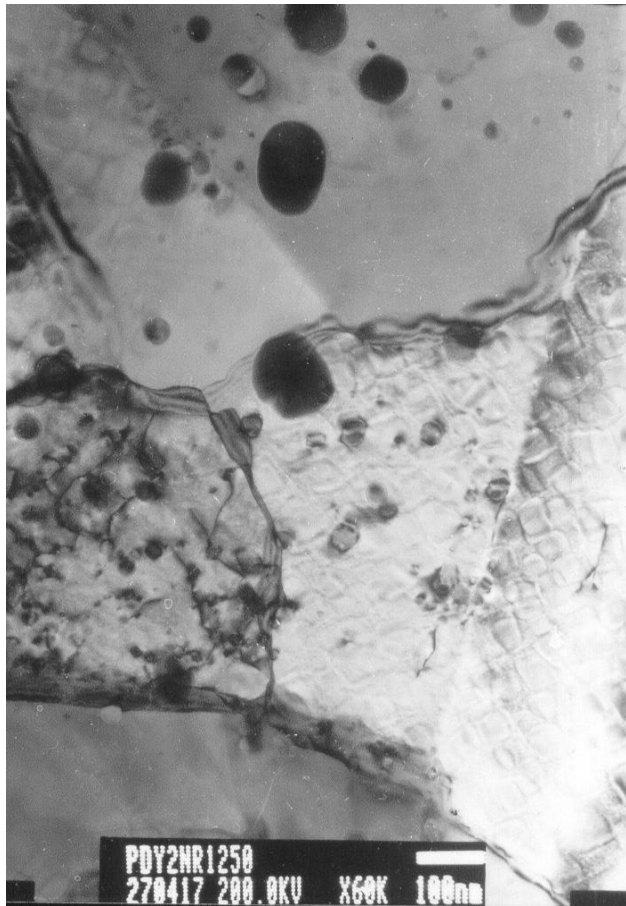


metallography with etching, $\times 400$

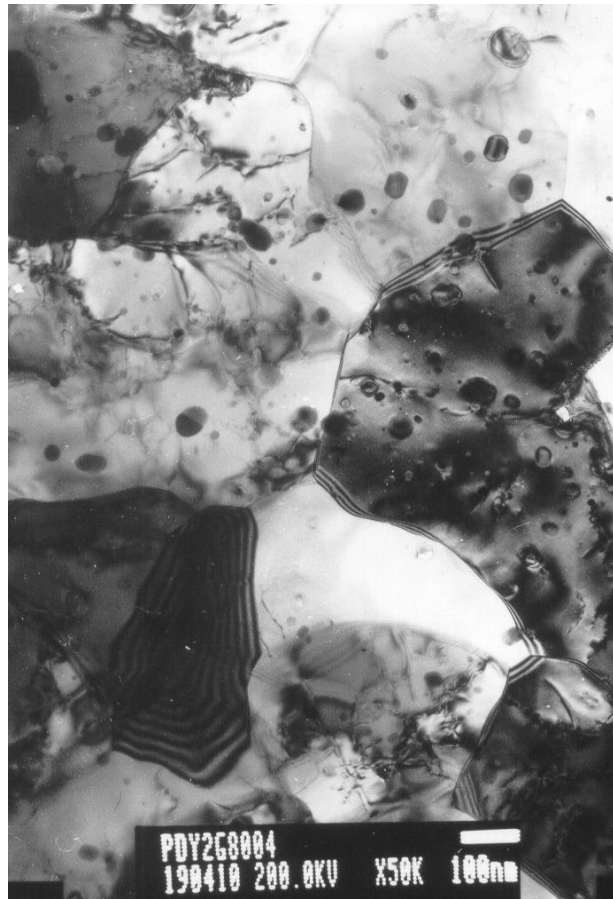


electronic image of two-stage replicas, $\times 4000$

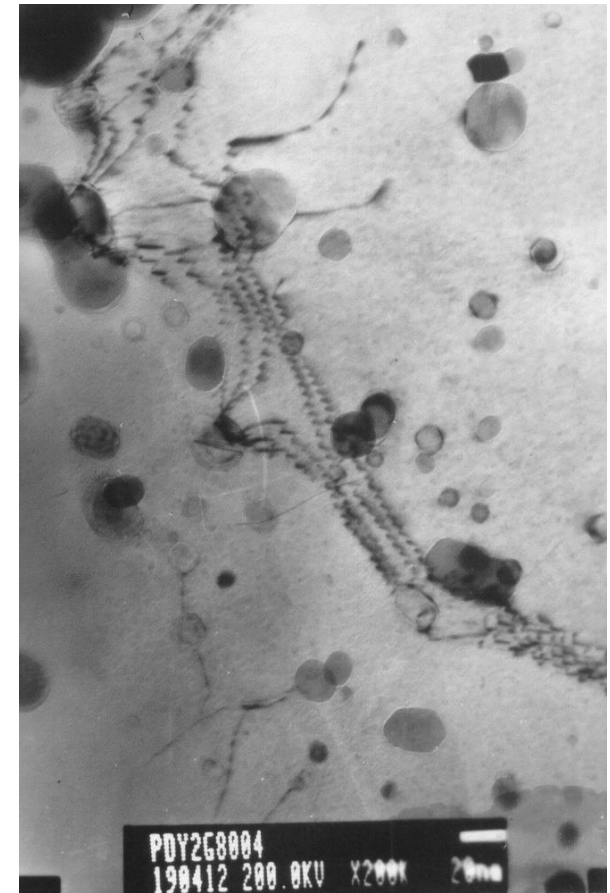
MICROSTRUCTURE OF PDU-1 ALLOY AFTER SP DEFORMATION



a - at a temperature of 1250 °C ;



b, c - at a temperature of 800 °C



MICROSTRUCTURE OF THE EXPERIMENTAL ALLOY SDJS-15.

SEM IN THE BACKSCATTERED ELECTRON MODE (BSE)

