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TYPICAL ELECTRON
MICROSCOPE INVESTIGATIONS

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TYPICAL ELECTRON MICROSCOPE INVESTIGATIONS

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PREFACE

This is the fourth of a series of monographs on electron microscopy aimed at users of the equipment. They are written as both texts and sources of reference emphasising the applications of electron microscopy to the characterisation of materials.

In some places the author has referred the reader to material appearing in other monographs of the series:

1. *The Operation and Calibration of the Electron Microscope.*
2. *Electron Diffraction in the Electron Microscope.*
3. *Interpretation of Transmission Electron Micrographs.*

Abbreviations and Symbols Frequently Used in this Monograph

BF	bright field (image)
DF	dark field (image)
CDF	centred dark field (image)
WB	weak beam (image)
DP	diffraction pattern
SADP	selected area diffraction pattern
SRO	short-range order
APB	antiphase domain boundary
g	a vector normal to the reflecting plane
s	the deviation from the Bragg reflection position
ξ_g	the extinction distance
w	$s\xi_g$
b	the Burgers vector of an undissociated dislocation
b_p	the Burgers vector of a partial dislocation
u	the line vector of a dislocation
FN	the upward drawn foil normal (normal to the specimen surface)
B	the upward drawn incident beam direction in the specimen, that is opposite to the direction of the electron beam
ANO	anomalous absorption coefficient

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