PRINCIPLES OF METALLOGRAPHY

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649541447

Principles of Metallography by Robert S. Williams

Edited by Trieste Publishing Pty Ltd.
Cover @ 2017

www.triestepublishing.com

ROBERT S. WILLIAMS

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Trieste

McGraw-Hill Book Co. Inc

PUBLISHERS OF BOOKS FOR

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OF
METALLOGRAPHY

BY

ROBERT S. WILLIAMS, S.B., PH.D.

ASSOCIATE PROFESSOR OF ANALYTICAL CHEMISTRY AND INSTRUCTOR IN METALLOGRAPHY, MASSACHUSETTS INSTITUTE OF TECHNOLOGY

FIRST EDITION

McGRAW-HILL BOOK COMPANY, INC.
NEW YORK: 239 WEST 39TH STREET
LONDON: 6 & 8 BOUVERIE ST., E. C. 4
1920

THE MAPLE PRESS YORK PA

To

H. F.

TO WHOSE INSPIRATION
MY INTEREST IN METALLOGRAPHY IS DUE

PREFACE

This little book has been written to meet the needs of those students of General Science or Engineering who do not specialize in Metallography but who will use it to a limited extent in connection with their professional work.

It is hoped that it will be of service, also, to the general reader as an introduction to an increasingly important branch of science and as an aid to the better understanding of the more highly specialized books.

Greater emphasis has been laid on the applications of Metallography than on the physico-chemical principles involved but it is believed that the fundamental ideas on which metallography is based have not been neglected.

In the appendix will be found a few of the tables most commonly used by the metallographist, a suggested outline of a brief laboratory course and a descriptive list of the more important books and journals dealing with the subject.

Thanks are due to the authors of many of the standard books on metallography which have been freely used in the preparation of this little volume and grateful acknowledgment is made for the use of a few drawings which have been copied with minor changes from other books.

Special thanks are due to Messrs. Bauer and Deiss from whose book on "The Sampling and Chemical Analysis of Iron and Steel" most of the microphotographs of steel and iron have been taken.

It is a pleasure to express my appreciation for the services of Professor L. F. Hamilton who has helped greatly by his kindly criticism of the proof.