



THE INSTITUTE OF CERAMICS

**AN INTRODUCTION TO  
THE TECHNOLOGY  
OF POTTERY**

2nd Edition

**PAUL RADO**

PERGAMON PRESS

# An Introduction to the Technology of Pottery

**SECOND EDITION**

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## Preface to the Second Edition

Tremendous strides have been made in the manufacture of pottery since the first edition of this textbook was written nearly twenty years ago. The development of new processes, coupled with the application of computers, has transformed into reality what, twenty years ago, was only a conceptualized dream, viz. the continuous conveyor belt production line.

Compared with the first edition of the book, the scope of the second edition has been widened to embrace innovations concerning more efficient shaping methods, energy-saving kiln designs, etc. Moreover, the chapter on the properties of pottery has been brought up to date and elaborated, especially regarding the advances achieved in making pottery decoration dishwasher-proof and in reducing the amounts of lead released from pottery glazes and colours and passed into food to much less than those contained in the food itself (a topic that hardly existed when the first edition was published).

I would like to record my gratitude to Dr. W. E. Worrall of Leeds University for suggesting an updated version of the book in the first place; without his encouragement this revised edition would not have come about. I am grateful to Dr. J. H. Sharp of Sheffield University and especially to Dr. Robert Freer of Manchester University for their editorial assistance. I am greatly indebted to British Ceramic Research Ltd. for having given me permission to use the facilities of that organization's Information Department, my special gratitude being due to Dr. P. Engel and to Mrs. A. Pace for their invaluable help. I also thank my former colleagues at the Worcester Royal Porcelain Division of Royal Worcester Spode for having allowed me to use that company's technical library. Lastly, I wish to express my appreciation to the referee for his constructive criticism and suggestions.

P. RADO

## Preface to the First Edition

The term “pottery” means different things to different people. In the present context it embraces domestic ceramic ware, *objets d’art* as well as tableware, ranging from crude pottery to fine bone china.

There have been enormous technical developments in pottery during the last few years and the industry is being more and more mechanized and automated. It is not the purpose of this book to describe engineering aspects in detail—machines will continue to be changed and improved. In an effort to afford the reader an understanding of pottery as a technology, traditional methods of fabrication—particularly where the structure and properties of clay, the basic pottery material, become more immediately apparent—have been dealt with in greater detail than their present application seems to warrant. It is hoped that the resulting blend of information will be of interest to the keen general reader as well as the student professional.

Dr. Peter Murray (who was entrusted with selecting an author for the present volume in the series on ceramics when he was still Assistant Director of A.E.R.E., Harwell) thought a book on pottery should be written by a member of an industrial pottery, preferably one which combines a tradition of fine craftsmanship with a progressive technical outlook. He therefore approached the chairman of the Worcester Royal Porcelain Company, Mr. Joseph F. Gimson, C.B.E. (now retired), whom he knew as a pioneer in the industry. I feel honoured having been asked by Mr. Gimson to write this book and would like to record my gratitude to him for his encouragement.

I am indebted to Mr. A. T. Wright, Works Director of the Worcester Royal Porcelain Company, for his interest and for allowing me to use the Company’s library and other facilities. I am grateful to the Trustees of the Dyson-Perrins Museum for permission to reproduce objects from their collection. It is with special gratitude that I acknowledge the advice and help I received from Dr. F. Bäuml, Staatliche Porzellan-Manufaktur Nymphenburg, who granted me permission to include a Bustelli figure. My thanks are due to Dr. Peter Murray for initial discussions. Above all I must thank Dr. G. Arthur for reading and re-reading the manuscript, for his constructive criticism, suggestions, advice, and discussions.

P. RADO

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