

Contents

(Bracketed numbers are from the Bibliography)

Preface

ix

Bibliography of Oscar Zariski

xv

Part I Foundations of Algebraic Geometry

1

Introduction by D. Mumford

3

Reprints of Papers

- | | | |
|------|---|-----|
| [34] | Some results in the arithmetic theory of algebraic functions of several variables. | 9 |
| [35] | Polynomial ideals defined by infinitely near base points. | 14 |
| [36] | (with O. F. G. Schilling) On the linearity of pencils of curves on algebraic surfaces. | 68 |
| [37] | Some results in the arithmetic theory of algebraic varieties. | 73 |
| [40] | Algebraic varieties over ground fields of characteristic zero. | 119 |
| [42] | Pencils on an algebraic variety and a new proof of a theorem of Bertini. | 154 |
| [43] | Normal varieties and birational correspondences. | 177 |
| [45] | Foundations of a general theory of birational correspondences. | 189 |
| [48] | The theorem of Bertini on the variable singular points of a linear system of varieties. | 242 |
| [50] | The concept of a simple point of an abstract algebraic variety. | 253 |

Part II

Resolution of Singularities

305

Introduction by H. Hironaka
307

Reprints of Papers

- | | | |
|------|--|-----|
| [38] | (with H. T. Muhly) The resolution of singularities of an algebraic curve. | 317 |
| [39] | The reduction of the singularities of an algebraic surface. | 325 |
| [41] | Local uniformization on algebraic varieties. | 376 |
| [44] | A simplified proof for the resolution of singularities of an algebraic surface. | 421 |
| [46] | The compactness of the Riemann manifold of an abstract field of algebraic functions. | 432 |
| [47] | Reduction of the singularities of algebraic three dimensional varieties. | 441 |
| [62] | Le problème de la réduction des singularités d'une variété algébrique. | 512 |
| [78] | La risoluzione delle singolarità delle superficie algebriche immerse. Nota I e II. | 522 |
| [84] | Exceptional singularities of an algebroid surface and their reduction. | 532 |