

C O N T E N T S

	Page
OD AUTORA	
1. Metallic Minerals: the Ferrous Metals	7
2. Metallic Minerals: the Nonferrous Metals	10
3. Metallic Minerals: the Precious Metals	13
4. Preparation of Ores	15
5. Making Iron	19
6. Making Steel /1/	21
7. Making Steel /2/	24
8. Reaction Mechanisms in Basic Oxygen Steelmaking	27
9. Influence of Lime properties on Slag Formation	30
10. Alloys	33
11. The Uses of Alloys	35
12. The Uses of Aluminium	39
13. Making Steels of Very High Strengths	41
14. Reducing Fatigue in Metals Used for Aeroplanes	45
15. Ingot Casting	47
16. Gravity Die Casting	51
17. Pressure Die Casting	54
18. Powder Metallurgy	57
19. Forging /1/	61
20. Forging /2/	65
21. Cold Extrusion of Metals	69
22. Hot Extrusion of Metals	71
23. Cutting and Machining of Metals	75
24. Welding of Metals	81
25. Pressure Welding	85
26. Fusion Welding	91

27. Soldering	97
28. Sheat - Metal Work	100
29. Slitting Electrical Steel Sheet	105
30. The Role of Electron Microscopy in Design of Strong, Tough, Economical Structural Steels	108
31. Sulfide Inclusions in Steel	112
32. Influence of Inclusions on the Fracture Toughness of a SJS 2140 Type Tool Steel	115
33. Corrosion Resistance	118
34. Metal Spraying .!.....	123
Common Abreviations	126
Vocabulary	131
Bibliography	158