

Contents

Preface.....	iii
1. Introduction.....	1
2. Determination of Absorbed Dose Rates.....	2
2.1 The System of Measurement.....	2
2.2 The Working Instrument.....	2
2.3 The Technique of Measurement.....	3
3. Commentary on Numerical Values of the Factors Involved in the Determination of the Absorbed-Dose Rate.....	5
3.1 The Temperature and Pressure Correction Factor, k_1	5
3.2 The Exposure Calibration Factor, N	5
3.3 The Conversion Coefficient, F	5
3.4 The Backscatter Factor, B	6
3.5 The Depth of the Measurement, d	6
3.6 The Inverse-Square Factor, $(s + x)^2/s^2$	6
4. Practical Implementation of the Recommendations.....	7
4.1 Dosimeter Calibration.....	7
4.2 Determination of the Peak Absorbed-Dose Rates.....	7
4.3 Routine Checks of Absorbed-Dose Rate.....	7
4.4 Treatment Control by Timer.....	8
4.5 Treatment Control by Monitor Chamber.....	8
4.6 Specification of Radiation Quality.....	8
5. The Absorbed-Dose Rate at Any Point.....	10
5.1 The Absorbed-Dose Distribution on the Beam Axis.....	10
5.2 The Application and Limitations of Published Depth-Dose Data.....	10
5.3 The Scatter Component of Depth-Dose Data.....	11
5.4 Alternative Formats for Depth-Dose Data.....	13
5.5 Modification of Depth-Dose Data.....	14
6. Isodose Charts for Single Fields.....	16
6.1 Introduction.....	16
6.2 Acquisition of Isodose Charts.....	16
6.3 Checking of Isodose Charts, Including Effect of Penumbra.....	17
6.4 Construction of Isodose Charts.....	18
Appendix - Glossary of Terms.....	21
References.....	24
ICRU Reports.....	26
Index.....	29