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Sommario/riassunto

Electric currents and electromagnetic fields have been applied to biological systems, particularly humans, with both therapeutic and pathological results. Applied Bioelectricity discusses biological responses to electric currents and electromagnetic fields, including

medical applications and shock hazards. The book covers fundamental physical and engineering principles of responses to short-term electrical exposure and emphasizes human reactions, although animal responses to electricity are considered as well. The treatment covers reactions from the just-detectable to the clearly detrimental. An important new chapter discusses standards for human exposure to electromagnetic fields and electric current and demonstrates how these standards have been developed based on the principles treated in earlier chapters. J. Patrick Reilly is a member of the principal staff of the Johns Hopkins University Applied Physics Laboratory and is President of Metatec Associates.