

Book Review

Harris, R. J., *The Investigation and Control of Gas Explosions in Buildings and Heating Plants*, British Gas Corporation, Midlands, England, 1983, xiv + 194 pp., \$39.00.

An excellent monograph has been produced by the author on the subject of gas explosions—both buoyant and nonbuoyant. The book is written at a level and in a style to be useful to any reader with science or engineering training; it does not presuppose an extensive knowledge of combustion.

After a general introduction to combustion, the author discusses the dynamics of the formation of a combustible mixture resulting from a gas leak and ventilation. The result of the combustion of this mixture—a pressure increase—is then described in nonvented and vented enclosures. Subsequently the results of a

pressure increase on a structure are given, including a most comprehensive discussion of the breakage of glass, which is indeed a common, severe problem in gas explosions. The design of vents to alleviate this pressure increase is then presented.

The concluding chapter concerns the problem of investigating an accident and addresses many relevant field problems. Worked examples and analytical details are given in the appendices to aid those not previously experienced in the area. Considerable references are furnished that document the text, thus allowing an in-depth examination of areas of special interest. This book is highly useful, easily readable, and can be quite warmly recommended.

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