Wear by corrosion of refractory materials remain a major concern for plant operators, manufacturers of refractories, installers and refractory engineers involved in R&D and Education in this field of expertise. This third volume on the theme of corrosion is focused on the modes of degradation met in practical situations, for a better understanding of the corrosion processes.

Once characterization of corroded samples has been achieved, from micro-, meso-, and macro-scale, it is essential to integrate all the data, taking on account the lining construction and lining maintenance schedule, the operation process fluctuations, the dismantling and sampling procedures, with the cost consideration.

The volume is divided into three chapters. Chapter I is about the definition of the context in which refractories wear down to be able further to distinguish between the notion of continuous and discontinuous wear, authored by T.Vert and M.Rigaud.

Chapter II is to illustrate how to benefit from post-mortem analysis, and case studies considering a total of 14 different applications, in Steelmaking (BOF; EAF; Ladles; Continuous Casting; Vacuum Degasser) in specific cases of the Aluminum, Non-Ferrous, Cement, Glass Industries, as well as in Incinerators, Boilers, Gasifiers and Induction furnaces. Principal authorship is by T. Vert; P. Prigent; In-Ho Jung; J. Poirier; R. Telle; G. Pacheco; T. Tonnesen; A. Villaba-Weinberg; J. Bennett; J. Souder with several other collaborators. Chapter III is on the impacts of corrosion on 1- Quality of the products, in Steemaking, authored by by P.Galliano et al. and in Glass Melting. 2- Refractory Management in Steel- Plants by T. Vert 3- on New Processes at Ultra High Temperatures and Ultra-Low Partial Pressures, by A. Maître.

The content of the book has been outlined and reviewed by 14 fellow experts (industrials and academics). It represents a major contribution to understand corrosion of refractories and to appreciate its impact on the plant availability and quality of products.
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