

# **Ferrocement: Applications in Developing Countries**



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A Report of an Ad Hoc Panel of the  
Advisory Committee on Technological Innovation  
Board on Science and Technology for International Development  
Office of the Foreign Secretary

Con Resumen En Español  
Avec Résumé En Français

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# *Preface*

The National Academy of Sciences, through its Board on Science and Technology for International Development (BOSTID), has been concerned for many years with the application of science and technology to international economic development. The activities of the board have been largely supported by the U.S. Agency for International Development (AID).

Recently, at the request of AID, the Board established an Advisory Committee on Technological Innovation (ACTI) to oversee a continuing, systematic search for, and assessment of, developments in fields of science and technology that may bear particular relevance to the solution of specific problems of developing countries.

An early inquiry referred to ACTI concerned the replacement of the fishing fleet destroyed in the November, 1970, cyclone in what was then East Pakistan. AID wished to obtain information on innovations in boat-building techniques that would accelerate the reconstruction of this desperately needed resource. Preliminary investigations showed that ferrocement held substantial promise for boatbuilding and, indeed, for many other applications. To explore the broad potential of this material for both water and land uses, the board convened the Ad Hoc Panel on the Utilization of Ferrocement in Developing Countries.

This report is the result of the panel's deliberations during three 1-day meetings in Washington, D.C., and a 4-day session at Airlie House, Virginia, in the course of 1972.

During deliberations the panel often felt need of an analysis of the materials science and basic engineering of ferrocement. No such analysis exists, and the widespread fragmentation and scatter of data through the literature make conclusions and comparisons difficult. The panel recommends that a

document on the materials science of ferrocement be prepared by a panel chosen for this purpose.

The panel's efforts have been greatly assisted by Mignon Cabanilla, Administrative Secretary to the Advisory Committee on Technological Innovation, and by Jane Lecht, the BOSTID editor.

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