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A Bibliography on the Chemical Weathering of Granitic Rocks

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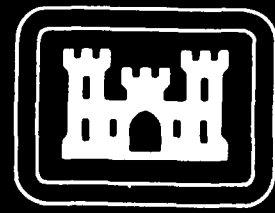
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PREFACE

Part of this bibliography was compiled under DA Project 4A161102B52C, Task OC, Work Unit 010, "Indicators of Terrain Conditions."

The bibliography was prepared during the period October 1984 - May 1988 partly under the supervision of Dr. J. N. Rinker, Team Leader, Center for Remote Sensing; and Mr. Lawrence A. Gambino, Director, Research Institute.

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COL David F. Maune, EN, was Commander and Director, and Mr. Walter E. Boge was Technical Director of the Engineer Topographic Laboratories during preparation of the report.

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A BIBLIOGRAPHY ON THE CHEMICAL WEATHERING OF GRANITIC ROCKS

INTRODUCTION

This bibliography was compiled as a result of discussions at "A Workshop on Desert Processes" in 1984 (McCauley and Rinker, 1987) in which it became clear that the prevalence of chemical weathering in all environments and on "non-soluble" rocks, such as granites, was not widely appreciated. This bibliography attempts to alleviate this situation by providing a list of some of the many papers on this subject. It cannot, however, be considered comprehensive, as the literature is extensive. The listed papers address all aspects of chemical weathering--the processes (for example, Keller and Frederickson, 1952; Ollier, 1984; Williams, 1949), their effects on landforms and materials (for example, Dumanowski, 1968; Thomas, 1974a; Twidale, 1982b), climatic influences (for example, Bakker, 1960; Tardy, et al., 1973; Thomas, 1974b) and weathering products (for example, Dearman, et al., 1978; Lumb, 1962). Papers discussing the controversy concerning chemical vs. physical weathering, as well as the difficulty in separating the two processes, are also included (for example, Ollier, 1984; Palmer and Neilson, 1962). In addition, a number of papers on salt weathering, which may be physical or chemical, are listed (for example, Hay and Jones, 1972; Wellman and Wilson, 1965). Papers referring to the chemical weathering of other igneous rocks (for example, Coleman, 1982; Nossin and Levelt, 1967) or other rocks generally considered "non-soluble" (for example, Frye and Swineford, 1947; White, et al., 1966) are included.

Papers with titles enclosed in () are in a language other than English and have English summaries. Examples include Takenaga (1968), Amaral (1973) and Bouchard (1983). Those with titles in a language other than English are written in another language, but often have English summaries. Demolon and Bastisse (1936) and Bakker (1958) are examples. The listing is in alphabetic order.

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