

SYMPOSIUM ON ROAD AND PAVING MATERIALS

INTRODUCTION

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During recent years, much experimental work has been done in the field of asphaltic paving mixtures, particularly with respect to relating the properties of the ingredients—*asphalt and aggregate*—to performance on the road. In planning the program for the two sessions sponsored by ASTM Committee D-4 on Road and Paving Materials at the Third Pacific Coast Area National Meeting, the objective was to record some of the activities along these lines which had been carried out by West Coast groups and were ready for presentation and publication.

Accordingly, the first session was devoted to three papers on the Zaca-Wigmore Experimental Test Road, a project of the California Division of Highways in which the asphalt producers of the Pacific Coast participated on a cooperative basis. Constructed in 1954, the primary purpose of this test road was to observe the performance of asphalts, from various sources and manufacturers, complying with a new asphalt specification proposed by the California Division of Highways, in comparison with two typical asphalts supplied under the then existing asphalt specification. The paper by F. N. Hveem, E. Zube, and J. Skog is the first published progress report on this field experiment and should prove of

vital interest to all asphalt technologists. Rounding out this symposium are two additional papers: one by J. B. Skog, presenting a statistical analysis of the results of a cooperative test series on the Zaca-Wigmore asphalts; the other by W. C. Simpson, T. K. Miles, and R. L. Griffin, reporting on a correlation between a laboratory durability test and field hardening rates of the various Zaca-Wigmore asphalts.

At the second session, several timely subjects were also discussed. The paper by F. S. Rostler and R. M. White, for instance, presents a novel approach to predicting the performance of asphalts, particularly durability, in terms of chemical composition. In many respects, the reader will find this paper to be an interesting supplement to the Zaca-Wigmore symposium inasmuch as chemical compositions of two Zaca-Wigmore asphalts are presented and analyzed. Comparisons of chemical composition with field performance for these asphalts can be readily made, because the same identifying code numbers are used by Rostler and White as were used by the participants in the symposium.

The comprehensive treatment by C. L. Monismith of the flexibility characteristics of asphaltic paving mixtures, as influenced by temperature, is an outstanding contribution and a particularly appropriate one in these days of heavy traffic volumes. Finally, the studies relat-

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ing to degradation of aggregates employed in asphalt pavement structures are ably treated in the last two papers by C. E. Minor and by Martin Ekse and H. C. Morris.

It is believed that this collection of papers will serve to acquaint the reader with the scope and aims of investigational activities being undertaken on the West Coast.