FOREWORD

Sponsored by the West Coast Technical Program Committee, the Symposium on Railroad Materials and Facilities Research was held on Friday, October 5, during the Fourth Pacific Area National Meeting of the Society from September 30–October 5, 1962, in Los Angeles, Calif.

The chairman of the symposium, at which five papers were presented, was A. S. Pedrick of the Southern Pacific Co. M. R. Scott of the Standard Oil Company of California was the presiding officer, and the session chairman was G. W. Vreeland, of the Columbia-Geneva Steel Co.

All the papers were written by railroad representatives who discussed the possibilities of improving testing procedures, facilities, maintenance practices, and the applicability of new technological developments to railroads.

The symposium committee consisted of the following members:

- A. S. Pedrick, Southern Pacific Co. (symposium chairman)
- M. R. Scott, Standard Oil Co. of Calif. (presiding officer)
- G. W. Vreeland, Columbia-Geneva Steel Co. (session chairman)
- E. Lenzin, Southern Pacific Co.
- F. H. Stengele, Southern Pacific Co.
- C. O. Penney, The Denver and Rio Grande Western Railroad Co.
NOTE—The Society is not responsible, as a body, for the statements and opinions advanced in this publication.
CONTENTS

Introduction—A. S. Pedrick .................................................. 1
Automated Systems for Cleaning Diesel Engines and Other Railroad Equipment—
F. H. Stengele and E. Lenzin ............................................. 3
Discussion ................................................................. 9
Research and Rail Inspection—R. McBrian and C. O. Penney .............. 10
Discussion ................................................................. 21
Field Testing Experience With Freight Car Journal Lubricators—M. A. Pinney 22
Discussion ................................................................. 32
A Test for Oxidation Stability of Diesel Lubricating Oils—R. H. Wright .... 33
Functions and Design of a Research and Control Facility for Railroad Diesel Locomotives—E. R. Thomas ......................... 40
Discussion ................................................................. 47
Research for Better Timber Railroad Bridges—E. J. Ruble and F. P. Drew .... 49