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Editor: Patrick McMullan

Pesticide Formulation and Delivery Systems: 41st Volume, Formulation and Application Challenges of Diverse Agricultural Agrochemicals

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Foreword

THIS COMPILATION OF Selected Technical Papers, STP1641, *Pesticide Formulation and Delivery Systems: 41st Volume, Formulation and Application Challenges of Diverse Agricultural Agrochemicals*, contains peer-reviewed papers that were presented at a symposium held virtually on November 3–4, 2021. The symposium was sponsored by ASTM International Committee E35 on Pesticides, Antimicrobials, and Alternative Control Agents and Subcommittee E35.22 on Pesticide Formulations and Delivery Systems.

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Overview

The 41st Symposium on Pesticide Formulation and Delivery Systems was held virtually on November 3–4, 2021. The Symposium was sponsored by ASTM International Committee E35 on Pesticides, Antimicrobials, and Alternative Control Agents and organized by Subcommittee E35.22 on Pesticide Formulations and Delivery Systems. The purpose of the symposium was to provide a forum for presenting the latest advances in crop protection technologies and pesticide application technologies and delivery systems. The symposium consisted of two invited presentations and twenty-two contributed presentations.

The program started with an invited presentation from Michael Ott from Rantizo on the use of drones in agricultural applications. Michael gave an overview of current and future commercial uses of drones for agricultural chemical applications. That presentation was followed by an invited presentation from Matthew Levinson on bio surfactants. The remainder of the symposium consisted of presentation of the contributed presentations.

This publication is a collection of the symposium's peer-reviewed papers. The papers presented in this book represent several themes. Papers were presented primarily in three areas, formulation ingredients, formulation types, and methodology. The formulation ingredients papers focused on new adjuvant formulations and new inert chemistries. Inert suppliers introduced several new alternative inerts to impart improved environmental properties or handling characteristics of pesticide formulations. Presentations on alternative formulation or adjuvant types were presented. Presentations were given on oil dispersion formulations, improved rainfastness, and removal of pesticide residues in the spray tank to improve knowledge in that area. Several papers provided new information on methods for improved understanding of inert and adjuvant characteristics. Methodology on surface wetting by adjuvants was one of the key highlights in this area.

I would also like to express my personal thanks to all the ASTM staff who helped greatly in the organization and background work on the symposium and to the ASTM editorial staff and the many reviewers who helped put this publication together.

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