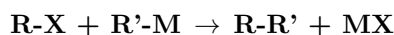


Preface

This special issue of the *Turkish Journal of Chemistry* is dedicated to cross-coupling reactions to yield R-R' from a nucleophile (R-X) and an electrophile (R'-M, where M is a main group element, such as B, Si, Sn, or Mg) and serves to illustrate how far the field has come since the publication of two seminal papers in the early 1970s by Heck and Mizoroki.



It opened up new areas of chemistry and deepened our understanding of the mechanisms of coupling reactions and reactivity, and hence paved the way for advances in the field of organometallic chemistry itself. The cross-coupling reactions followed a Pd(0)/Pd(II) catalytic cycle. The formation of new bonds in R-R' is of utmost importance in the synthesis of organic compounds. The 2010 Nobel Prize in Chemistry, which was shared by RF Heck, Ei-ichi Negishi, and Akira Suzuki, shows the impact of cross-coupling reactions in chemistry.

In this issue, cross-coupling reactions catalysed by palladium complexes are exemplified by sixteen contributions. However, we think that many more authors could have been included who are experts in the field of palladium-catalysed coupling reactions. We would like to express our sincere gratitude to all the authors and reviewers of the manuscripts, and to the editorial team of the *Turkish Journal of Chemistry*, all of whom have critically evaluated and improved the content. We hope that the readers of the journal will find this collection inspiring and stimulating in terms of further advancing the field and expanding the scope of applications of palladium-catalysed reactions.

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