

## Preface

This special edition is devoted to studying the properties of the semi-solid casting of non-ferrous alloys and corresponding metal matrix composites.

The semi-solid metal casting processes are typically used to produce high-end elements - structural medical and aerospace parts, pressure-containing parts, engine blocks and mounts, oil pump filter housings, etc.

This collection contains articles that analyse mechanical properties, microstructure features, and processes of solidification of semi-solid casted non-ferrous alloys and aluminium and magnesium metal matrix composites. The modelling and numerical investigation procedures of semi-solid casting processes are also presented here.

This special edition will be helpful to metallurgists and engineers from mechanical engineering.