



THE 4th INTERNATIONAL CONFERENCE ON CHEMICAL ENGINEERING

**SELECTED PEER-REVIEWED EXTENDED ARTICLES
BASED ON ABSTRACTS PRESENTED AT THE
4th INTERNATIONAL CONFERENCE ON
CHEMICAL ENGINEERING (ICCE)**

**EDITED BY:
ANASTASIA PRIMA KRISTIJARTI
ANGELA JUSTINA KUMALAPUTRI**



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The 4th International Conference on Chemical Engineering

Selected peer-reviewed extended articles
based on abstracts presented at the
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Angela Justina Kumalaputri

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Aggregated Book

Edited by

**Anastasia Prima Kristijarti
and Angela Justina Kumalaputri**

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Preface

On behalf of the organizing committee, we would like to extend our warmest regards to all participants of the 4th International Conference on Chemical Engineering (ICCE) UNPAR 2022.

The pandemic period was not an easy time to go through, especially during the preparations until the execution of this conference. We would like to convey our sincere and deepest gratitude and appreciation to all the organizers and people who have worked hard to support and arrange this conference. We are grateful that the 4th International Conference on Chemical Engineering (ICCE) was successfully held online on the 6th of October 2022 with the theme "Advancement of Product and Process Development for Green Sustainability". Being part of the world community, we were all aware that our research in product and process developments should be focused on improving important aspects of our life, as well as answering global issues of energy, food, and environmental sustainability. This conference intends to highlight current issues in various chemical engineering fields. In particular, improvements in process design and product development in bioprocess technology, renewable energy, and the production of new and advanced materials will be explored and disclosed.

We believe this book will serve as an important scientific work to initiate and build solid cooperation between us, while also becoming a contributor to the chemical engineering discipline for a better world in the future.

Best Regards,
The 4th ICCE Committee

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