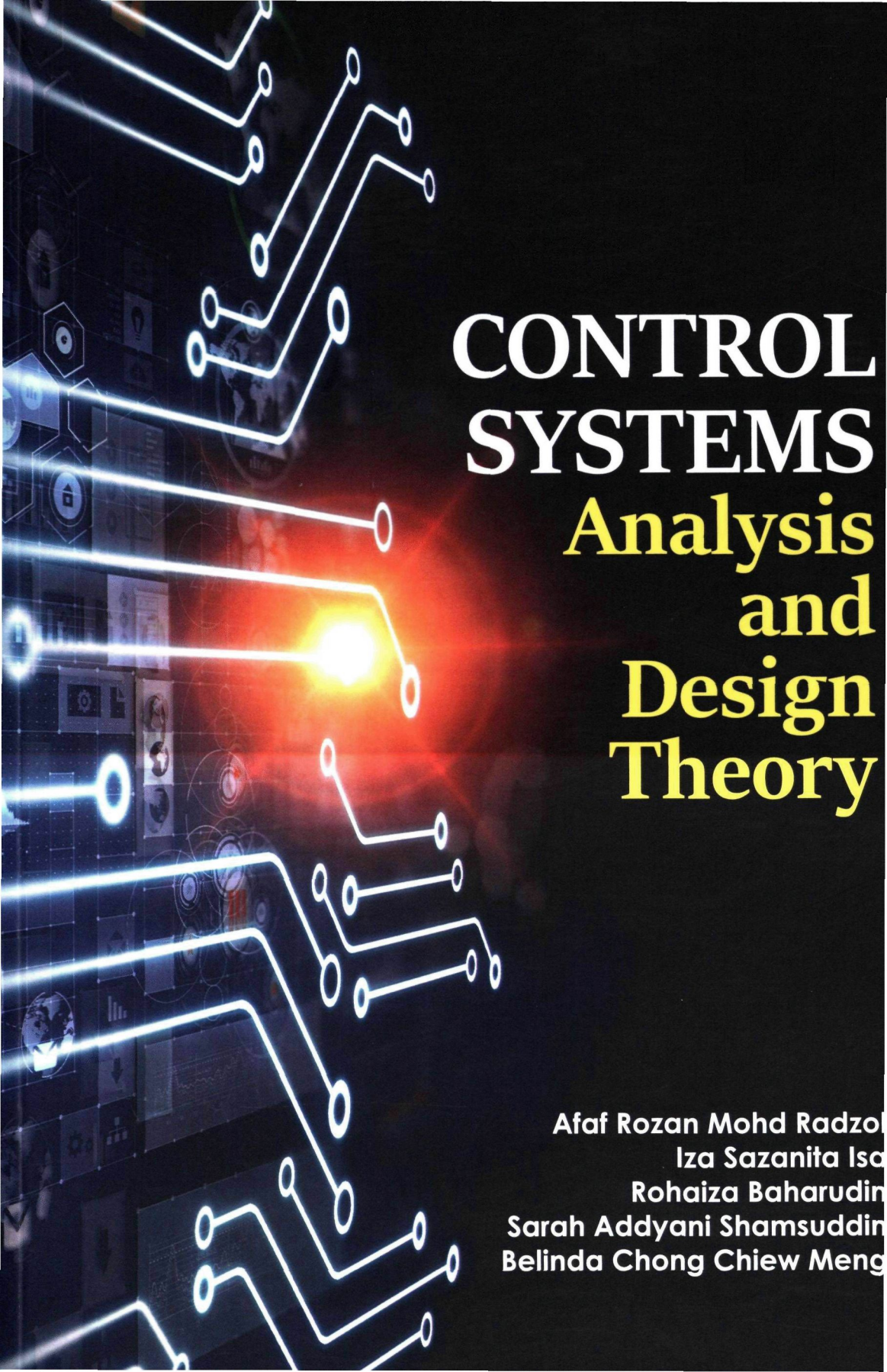

CONTROL SYSTEMS
Analysis and Design Theory

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Preface

This book is designed to introduce the theory of control systems engineering to undergraduate students. The study of control systems engineering is essential for all engineering fields, including electrical, mechanical, aerospace, biomedical, and chemical engineering. It is intended to be used as a supplement to all textbooks on control systems. It may also be used as a textbook in its own right. It consists of seven chapters arranged accordingly to suit the syllabus of control systems for diploma students or higher levels. This book presents less wording but a clear definition throughout all the chapters. There are also many exercises included after each chapter to strengthen students' knowledge in the respective chapters.

Acknowledgement

All praise and thanks be to Allah SWT, the most Merciful and the most Gracious, Lord of the universe. To Him we belong and to Him we shall return. Peace be upon him, Prophet Muhammad SAW, his family, his companion, and those who follow his path. Thanks to the Almighty Allah SWT for the opportunity, strength, and ability to complete this book. Sincere appreciation to all members of School of the Electrical Engineering, College of Engineering, UiTM Pulau Pinang Campus for their encouragement and support. Also, thank you to the students, who are the main motivation to complete this book. Last but not least, thanks to all who have directly and indirectly contributed to the completion of this book. May Allah SWT repay your kindnesss.