BARNEY COOPER

GREEN CHEMISTRY
AN INTRODUCTION

MURPHY & MOORE

TABLE OF CONTENTS

Green Chemistry: An Introduction

Green chemistry is concerned with the study of designing of processes and products that reduce or eliminate the formation and use of hazardous substances. It deals with the environmental impact of chemistry. It is also referred to as sustainable chemistry as it deals with the problems of resource depletion and chemical pollution. The goal of this discipline is to be more resource efficient by finding ways to reduce consumption of these resources and formulate technological approaches to prevent pollution. Atom economy, use of renewable feedbacks, real-time analysis for pollution prevention, less hazardous chemical synthesis, inherently safer chemistry for accident prevention, design for degradation and design for energy efficiency are some of the principles on which the discipline operates. This book elucidates the concepts and innovative models around prospective developments with respect to this discipline. It is compiled in such a manner, that it will provide an in-depth knowledge about the theory and practice of green chemistry. Through this book, we attempt to further enlighten the readers about the new concepts in this field.

Barney Cooper completed his MSc in Green and Sustainable Chemistry from University of Nottingham, United Kingdom. His primary areas of academic research include green chemistry metrics, green solvents and atom economy. Cooper has authored and edited more than 25 articles, journal papers and book chapters in the field of green chemistry. He has won the "Outstanding Professor Award" for his excellence in guiding students.

ISBN 978-1-63987-270-1

9 781639 872701

MURPHY & MOORE
www.murphy-moorepublishing.com