College Code: 1706

RBVRR WOMEN'S COLLEGE OF PHARMACY
3-4-343, Barkathpura, Hyderabad - 500 027 (T.S), India
Office: +91 40-27563065, Mobile: +91 9848930555
(Approved by PCI & Affiliated to Osmania University)
Recognized under Section 2(f) of the UGC Act 1956
EAMCET Code: RBVW | PGECET Code: RBVW1
www.rbvrrwcp.org | Email: rbvrrwcoph@rediffmail.com & rbvrrwcp2006@gmail.com

Year of Publication - 2023

S. No.	Name of the teacher	Title of the book/chapters published	Name of the conference
1	M. Kavitha	Drug Discovery and Drug Development with Artificial Intelligence in Artificial Intelligence in Pharmaceutical Technology (volume 2)	-
2	M. Kavitha	Pharmacogenomics and Overview in Current Trends in multidisciplinary sciences -Vol 9	-
3	Dr. K. Bhavyasri	TEXTBOOK OF PHARMACEUTICAL QUALITY ASSURANCE	-
4	Dr. K. Bhavyasri	HYPHENATED TECHNIQUE - THERMOGRAVIMETRY-DIFFERENTIAL SCANNING COLORIMETRY COUPLED TO MASS SPECTROSCOPY	-
5	Dr. K. Bhavyasri	Recent Research Trends in Pharmaceutical Science (Volume - 3)	-
6	Dr. M. Vijaya Bhargavi	REVIEW: HYPERTROPHIC CARDIOMYOPATHY	-

Total Books/Chapters/Conference : 06

PRINCIPAL
RBVRR Women's College of Pharmacy
(CC No: 1706)
Barkatpura, Hyderabad-500 027 (TS)

Indexing and Abstracting in Following Databases

1. Bowker: A ProQuest Affiliate

2. Crossref

ISBN 9789355708939

₹ 721, US $16

Published by
AkiNik Publications®
169, C-11, Sector - 3, Rohini,
Delhi - 110085, India
Toll Free (India): 18001234070
Email: akinikbooks@gmail.com

Peer Reviewed & Refereed

ARTIFICIAL INTELLIGENCE IN PHARMACEUTICAL TECHNOLOGY

Volume 2

Editors
Dr. Akhil Sharma
Dr. Shaweta Sharma

AKINIK PUBLICATIONS™
NEW DELHI

Contents

Chapter - 5

Drug Discovery and Drug Development with Artificial Intelligence

Dr. Narender Boggula, S. Raja Shekhar, Marati Kavitha, Aravinda Nalla and Dr. G. Umarani

Abstract

As expenditure on drug development increases exponentially, the overall drug discovery process requires a sustainable revolution. Since artificial intelligence (AI) is leading the fourth industrial revolution, AI can be considered as a viable solution for unstable drug research and development. Generally, AI is applied to fields with sufficient data such as computer vision and natural language processing, but there are many efforts to revolutionize the existing drug discovery process by applying AI. Artificial intelligence (AI) is becoming more widely adopted in the pharmaceutical industry, creating both excitement and questions about its potential and long-term success. In recent years, a plethora of companies-ranging from large pharmaceuticals to startups – have set expectations of AI as a panacea that will revolutionize the industry. While the thought of AI as such is an appealing one, it is not realistic. This review provides a comprehensive, organized summary of the recent research trends in AI-guided drug discovery process including target identification, Hit identification, ADMET prediction, lead optimization, and drug repositioning. The main data sources in each field are also summarized in this review. In addition, an in-depth analysis of the remaining challenges and limitations will be provided, and proposals for promising future directions in each of the aforementioned areas. The increasing relevance of AI in drug discovery and development is reflected by the growing number of start-up companies specialized in this field, the growing number of collaborations from pharma with AI platforms, and the high number of articles and reviews reporting current applications, their success and limitations. In this chapter, we focused on the recent data-driven based research trends of the fields that are effectively cost reducible with AI. This review will address the stages of drug discovery and development in which the application of AI and ML modelling has altered the traditional development of drugs.

South Asian Academic Publications
3-37, Dirisavancha, Kanigiri, Prakasm District
Andhra Pradesh-523445 India
Email- saapbooks@gmail.com
http://www.saap.org.in/

CURRENT TRENDS IN MULTIDISCIPLINARY SCIENCES VOLUME - 9

Current Trends in Multidisciplinary Sciences

Volume - 9

Dr. S. Neelufar Shama

INDEX

PHARMACOGENOMICS – AN OVERVIEW

Dr. Narender Boggula
Associate Professor, CMR College of Pharmacy, Kandlakoya, Medchal, Hyderabad, Telangana, India

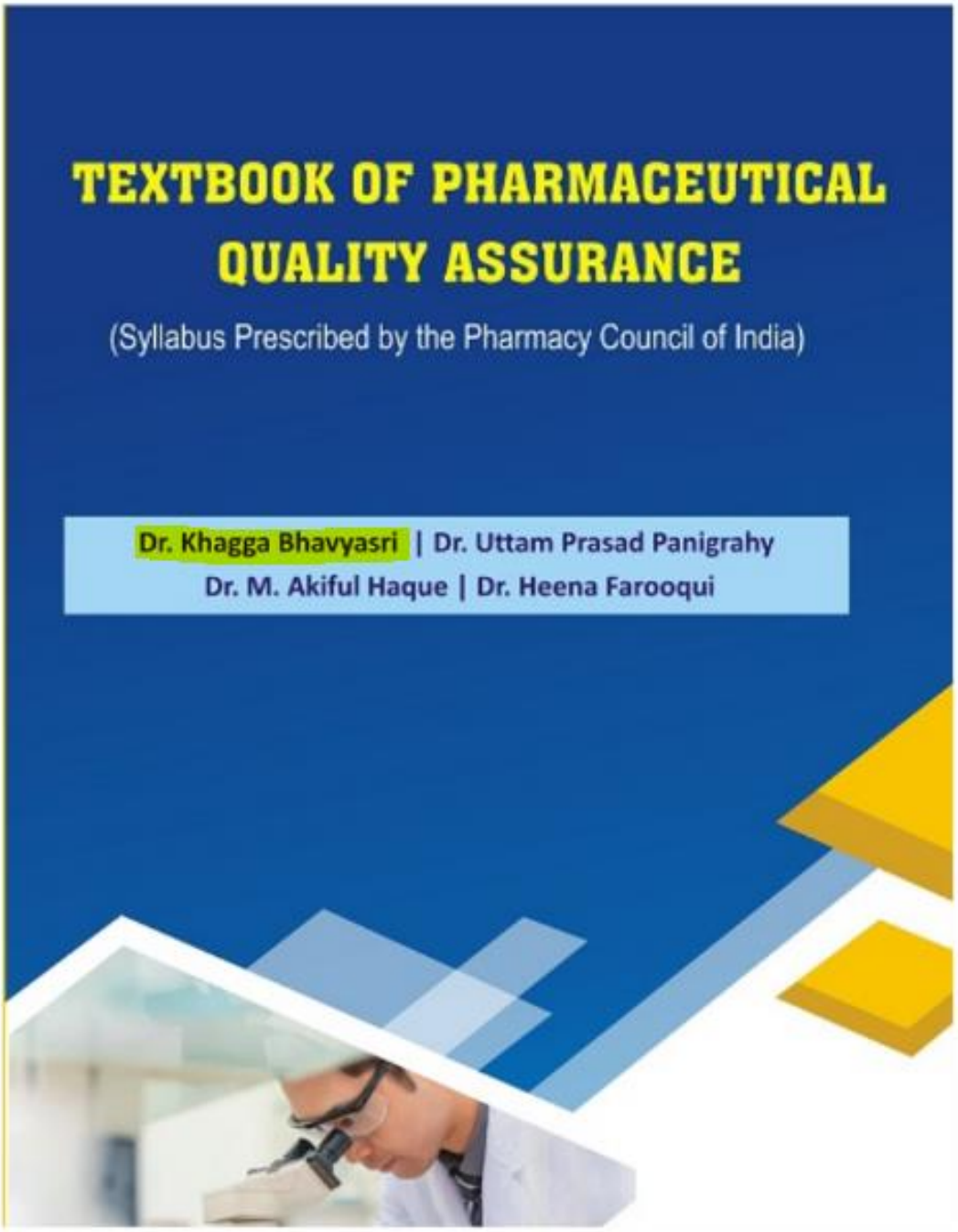
Marati Kavitha
Assistant Professor, RBVRR Women's College of Pharmacy, Barkatpura, Hyderabad, Telangana, India

Santhoshipriya Dandamudi
Assistant Professor, School of Pharmacy, Anurag University, Venkatapur, Ghatkesar, Hyderabad, Telangana, India

Kaveti Vamshi Sharathnath
Associate Professor, Nalla Narasimha Reddy Education Society's Group of Institutions, School of Pharmacy, Chowdariguda, Ghatkesar, Telangana, India

Abstract

The use of pharmacogenomics in clinical practice is becoming standard of care. However, due to the complex genetic makeup of pharmacogenes, not all genetic variation is currently accounted for.Pharmacogenomics is crucial for individualizing drug dosages and thereby improving drug therapy outcomes. Pharmacogenomics relies on inferred phenotypes based on known variants in pharmacogenes.Pharmacogenomics (constitute both branches i.e., pharmacology and genetic) is the study of the role of genetics in drug response. It deals with the effect of genetic variation on drug response in patient by correlating the gene expression with the pharmacokinetic parameter i.e., absorption, distribution metabolism and excretion. The Pharmacogenomics is used in the research to increase the safety and efficacy of the drug by targeting the drug at the particular site of


TEXTBOOK OF PHARMACEUTICAL QUALITY ASSURANCE
(Syllabus Prescribed by the Pharmacy Council of India)
Dr. Khagga Bhavyasri | Dr. Uttam Prasad Panigrahy
Dr. M. Akiful Haque | Dr. Heena Farooqui

Textbook of Pharmaceutical Quality Assurance (Dr. Khagga Bhavyasri, Dr. Uttam Prasad Panigrahy, Dr. M. Akiful Haque, Dr. Heena Farooqui.)

DOI

Dr. Khagga Bhavyasri, Dr. Uttam Prasad Panigrahy, Dr. M. Akiful Haque, Dr. Heena Farooqui.

Edition / Volume

I

Hard Copy

$ 0.00
(INR 548.00)

Add to Cart

Pages

256

DESCRIPTION

Unit Title Page No. I Quality Assurance (QA) 1 II Organization Structure 51 III Introduction 113 IV Product Complaint 151 V Calibration 211

CHAPTERS

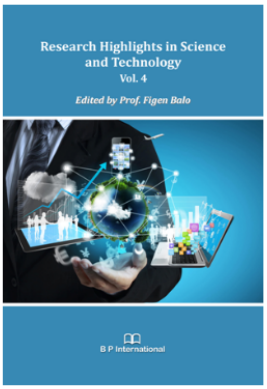
Research Highlights in Science and Technology

Vol. 4

Edited by Prof. Figen Balo

B P International

Research Highlights in Science and Technology Vol. 4



Hyphenated Technique - Thermogravimetry-Differential Scanning Colorimetry Coupled to Mass Spectroscopy

K. Bhavyasri

Research Highlights in Science and Technology Vol. 4, 17 June 2023, Page 43-59
https://doi.org/10.9734/bpi/rhst/v4/19445D
Published: 2023-06-17

Abstract

A thermo-analytical approach which is known as thermogravimetric analysis uses weight changes that occur whena sample is heated to a consistent pace to ascertain a material thermal balance & percentage of the unstable additives present. DSC analysis is used for measuringa variety of quantities, including melting temperature, latent melting warmth, fusion warmth, reaction power, and many more.Mass spectrophotometry is a potent analytical tool containing numerous uses in the biomedical & pharmaceutical industries. A device's increased sensitivity and resolution have opened up new avenues for the examination of prescribed medications and complex organic structure metabolites. The chemical properties and thermal stability of plant-based polymers isolated from chemically unique soils were revealed using thermogravimetry in conjunction with DSC, quadrupole mass spectrometry, and other techniques. TGA/DSC, when used in conjunction along with MS, isolates several ions from the pattern under study in accordance with a specific mass-to-charge ratio.The linked instrument is used to evaluate the powder coating's physical characteristics and degradation balance while also identifying organic components.

Keywords: Mass spectroscopy; differential scanning calorimetry; thermogravimetry; quadrupole; additives; resolution

Hyphenated Technique - Thermogravimetry-Differential Scanning Colorimetry Coupled to Mass Spectroscopy

K. Bhavyasri [a++*]

DOI:

ABSTRACT

A thermo-analytical approach which is known as thermogravimetric analysis uses weight changes that occur whena sample is heated to a consistent pace to ascertain a material thermal balance & percentage of the unstable additives present. DSC analysis is used for measuringa variety of quantities, including melting temperature, latent melting warmth, fusion warmth, reaction power, and many more.Mass spectrophotometry is a potent analytical tool containing numerous uses in the biomedical & pharmaceutical industries. A device's increased sensitivity and resolution have opened up new avenues for the examination of prescribed medications and complex organic structure metabolites. The chemical properties and thermal stability of plant-based polymers isolated from chemically unique soils were revealed using thermogravimetry in conjunction with DSC, quadrupole mass spectrometry, and other techniques. TGA/DSC, when used in conjunction along with MS, isolates several ions from the pattern under study in accordance with a specific mass-to-charge ratio.The linked instrument is used to evaluate the powder coating's physical characteristics and degradation balance while also identifying organic components.

Keywords: Mass spectroscopy; differential scanning calorimetry; thermogravimetry; quadrupole; additives; resolution.

1. INTRODUCTION

1.1 Thermogravimetric Analysis

TG analysis is a method where a mass of a substance is tracked as a key of time/temperature because the sample is put through regulated temperature software in a controlled environment.

[a] *Department of Pharmaceutical Analysis, RBVRR Women'sCollege of Pharmacy, Barkatpura, Hyderabad-500027, India.*

[++] *Associate Professor and Head;*

**Corresponding author: E-mail: bhavya.khagga@gmail.com;*

Indexing and Abstracting in Following Databases

1. Bowker: A ProQuest Affiliate

2. Crossref

₹ 737 US$ 16

Published by
Integrated Publications,
H. No. 3, Pocket - H34, Sector - 3
Rohini, Delhi - 110085, India
Toll Free (India): 18001234070
Email: printintegrated@gmail.com

RECENT RESEARCH TRENDS IN PHARMACEUTICAL SCIENCE

Volume - 3

CHIEF EDITOR
DR. KRATIKA DANIEL
CO-EDITOR
PROF. M. DEEPA

Integrated Publications - New Delhi

integratedpublications.in/books/1703241728-recent-research-trends-in-pharmaceutical-science-volume-3

LOGIN | SIGNUP | CART - 0

INTEGRATED PUBLICATIONS

HOME | BUY BOOKS | PUBLISH BOOK | PUBLISH BOOK CHAPTER | MAKE PAYMENT | CONTACT US

PUBLISH BOOK AND BOOK CHAPTER

COVER ALL SUBJECTS

Search by ISBN, Title or Author's Name

Recent Research Trends in Pharmaceutical Science (Volume - 3)

₹ 737.00

Chief Editor	:	Dr. Kratika Daniel
Co-editor	:	Prof. M. Deepa
ISBN	:	978-93-5834-761-6
Language	:	English
Pages	:	127
Publication Year	:	2023
Binding	:	Paper Back

Contents

Chapter - 1

Isothermal Microcalorimetry

Dr. K. Bhavya Sri, M. Nandhini and Mogili Sumakanth

Abstract

Isothermal microcalorimetry (IMC) is an analytical technique for studying and assessing synthetic, physical and microorganisms responsible in real-time basis. IMC analyses the commencement, rate, extent and energetics of these phenomena for samples in tiny ampoules (e.g., 3-20 ml) at a steady specified temperature (ca. 15 °C-150 °C) over hours or days. IMC performs this dynamic simulation by recording and measuring the net rate of heat flow (J/sec = W) to or from the specimen ampoule, in addition to the cumulative quantity of energy (J) absorbed or created, vs. time elapsed. For four connected reasons, IMC is a powerful as well as adaptable analytical technique: All physical and chemical processes either are exothermic or endothermic, indicating they can generate or consume heat.

Keywords: Cumulative energy, real time basis, isothermal microcalorimetry, exothermic and endodermic

Introduction

The technique of detecting heat generated by chemical processes as well as other physical effects is termed calorimetry. A device known as calorimeter is employed to perform calorimetry. A device known as calorimeter is employed to perform calorimetry. measure the accumulating quantity of heat (J) that such a sample inserted inside an IMC apparatus consumes or produces under virtually fixed temperature in real-time. These alterations inside a specimen's chemical or physical component are what are causing heat. The thermal transfer varies with direct proportion to the total pace of changes occurring in any moment. The total number of aggregate changes that have taken place during a certain period of time are inversely related to the entire quantity of heat generated throughout that period. Current IMC equipment are generally semi-adiabatic, which means that heat exchange among both its specimen and also its environment is not zero (adiabatic), as IMC determination for heat transfer is dependent upon

Recent Advances in Pharmaceutical Sciences

(Volume 11)

Dr. ANJU GOYAL

Chapter-16

REVIEW: HYPERTROPHIC CARDIOMYOPATHY

P. Soni Dixitha, Dr. M. Vijaya bhargavi, Prof. M. Sumakanth
Department of Pharmaceutical Chemistry, RBVRR women's college of pharmacy, Barkatpura, Hyderabad, India

ABSTRACT: Hypertrophic cardiomyopathy (HCM) is a genetic disorder that is characterized by left ventricular hypertrophy unexplained by secondary causes and a nondilated left ventricle with preserved or increased ejection fraction [1] . It is commonly asymmetrical with the most severe hypertrophy involving the basal interventricular septum. The histological features of HCM include myocyte hypertrophy and disarray, as well as interstitial fibrosis. Hypertrophy is also frequently associated with left ventricular diastolic dysfunction. It is also an important cause of sudden cardiac death, particularly in adolescents and young adults. Non-sustained ventricular tachycardia, syncope, a family history of sudden cardiac death, and severe cardiac hypertrophy are major risk factors for sudden cardiac death. Atrial fibrillation is also a common complication and is not well tolerated. Mutations in over a dozen genes encoding sarcomere-associated proteins cause HCM. *MYH7* and *MYBPC3*, encoding β-myosin heavy chain and myosin-binding protein C, respectively, are the 2 most common genes involved.

INTRODUCTION

Hypertrophic cardiomyopathy (HCM) is a heterogeneous myocardial disease, most often caused by autosomal dominant sarcomeric gene mutations, representing the most common monogenic cardiomyopathy in humans. It is characterized by increase in left ventricular wall thickness (hypertrophy) which causes left ventricular outflow obstruction, diastolic dysfunction, myocardial ischemia, and mitral regurgitation, hyper myocardial contractility, and reduced compliance, myofibrillar disarray, and fibrosis [2,3]. These structural and function abnormalities can produce fatigue, dyspnoea, chest pain,