Tentative Outline

Special/Thematic Issue for the journal "Current Pharmaceutical Design - CPD"

Tentative Title: Recent Advances and Perspectives in Cancer Drug Design Guest Editor: Irena Kostova & Dileep Kumar

Scope of the Thematic Issue:

Cancer is the pivotal cause of mortality and morbidity across the globe. Although academic and industry collaboration has augmented their significant research to tackle the specter of this disease, cancer research remains a significantly challenging field. And therapeutic innovations have failed miserably in clinical trials. With the advent in understanding its physiology and discovery of novel molecular targets has opened a new window for research yet the destination is at the logger end.

- Cancer drug design
- Collateral sensitivity
- Drug resistance
- Discovery of novel molecular targets
- Drugs with innovative mechanisms of action.

Keywords: Cancer drug design; Metal-based drugs; Nanomaterials; Natural products; Radiotherapy; Drug resistance; Mechanism of action.

Sub-topics:

- 1. Metal-based anticancer drugs;
- 2. Nanomaterials for cancer treatment;
- 3. Natural products as anticancer agents;
- 4. Drug resistance;
- 5. Collateral sensitivity;
- 6. Discovery of novel molecular targets;
- 7. Nrf2 inhibitors as antineoplastic drugs;
- 8. Radiotherapy in cancer diagnosis and treatment;
- 9. Drugs with innovative mechanisms of action.

Tentative titles:

- Design of NRF2 inhibitors as antineoplastic drugs
- Cancer Radiotherapy
- Basic aspects as coordination or structural chemistry for designing platinum cancer drugs
- Recent advances in nanomaterials of group 14 (Carbon family) for breast cancer treatment
- Design of modified titanocene compounds supported onto mesoporous silica nanoparticles: Study of their biological potential against breast cancer
- Role of Natural Products in developing Novel Anti-Cancer Agents
- Radiolabeled drug Compounds for Diagnosis and treatment of Bone cancer: Therapeutic advances and challenges
- Isatin: a promising scaffold for anticancer agents
- Bioinformatic identification of therapy resistance genes and its prognostic value in cervical cancer
- Opuntia ficus-indica A Natural Remedy for the Prevention and Cure of Cancer
- Fungal Metabolites and Their Anti-cancerous Properties

- Smac mimetics for the treatment of lung carcinoma: present development and future prospects
- Quinolines: A privileged scaffold for anticancer drug designing'
- Mechanism of action of Novel therapeutic drugs for the treatment of cancer"
- Role of the Wnt/β-catenin signaling pathway in human malignancies; emphasis on molecular mechanisms
- The impact of marine phenolic on therapeutics target for cancer therapy
- Multifunctional ole of natural products for therapeutics approaches to prostate cancer

Schedule

Complete Thematic issue submission deadline: December 2022

Details of Guest Editors:

Name: Irena Kostova

Affiliation: Professor, Faculty of Pharmacy, Medical University Sofia, Bulgaria.

Email: <u>irenakostova@yahoo.com</u>

Co-Guest Editor

Name: Dileep Kumar

Affiliation: Assistant Professor, Poona college of Pharmacy, Bharati Vidyapeeth University