

## Tentative Outline

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

**Tentative Title: Lyophilization/freeze drying for the stabilization of biotherapeutics**

**Guest Editor: Arun Butreddy**

#### Scope of the Thematic Issue:

The scope of this issue is to enumerate the Lyophilization process in Protein/small molecule Product development. Over the years, lyophilization process has been an emerging technology for the stabilization of bio-therapeutics including vaccines, monoclonal antibodies, enzymes, anti-body drug conjugates, gene therapy products, and small molecule drug products. This issue will largely focus on emergence of Lyophilization process in Pharmaceutical product development prospective from protein formulation development, process analytical techniques, excipients, scale-up considerations, recent advances in lyophilization process.

**Keywords:** Lyophilization, scale-up, stabilization, proteins, small molecules, Process analytical tools, excipients.

#### Sub-topics:

- Stabilization of protein formulations via lyophilization process
- Scale-up considerations for lyophilization
- Process analytical tools in optimization of lyophilization
- Excipients for use in lyophilized formulations
- Anti-body drug conjugates: Lyophilization considerations

#### Tentative titles of the articles:

- Stabilization of protein formulations via lyophilization process: Advances, challenges
- Excipients for use in lyophilized formulations
- A review on analytical techniques in lyophilized proteins formulations
- Scale-up considerations of lyophilization process
- Lyophilization of exosomal formulations
- Stabilization of nanoparticles loaded proteins/peptides.

#### Schedule:

- ✧ Complete Thematic issue submission deadline: 30.12.2022

#### Details of Guest Editors:

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