Aims & Scope: Natural metabolites such as flavonoids or polyphenolic compounds are known to possess promising anti-inflammatory activity. Broad spectrum mode of actions of flavonoids has attributed them a wide therapeutic application. Chronic inflammation is found to be associated with a variety of genes that enhance the inflammatory signaling pathways leading to the expression of inflammatory cytokines and chemokines. It has been reported that polyphenolic compounds, present in fruits, tea, and in other vegetables may not only suppress the production of pro-inflammatory cytokines but may also up-regulate their natural cellular inhibitors. Studies have suggested the utilization of natural polyphenolic compounds instead of using steroidal anti-inflammatory drugs to possibly suppress the intensity of inflammation in various chronically inflamed patients with inflammatory diseases. These natural polyphenolic compounds can be metabolized by the phase I enzymes (cytochrome P-450 enzymes) and phase II protective enzymes. This special issue attempts to report the current progress of natural anti-inflammatory agents with special emphasis on recent published patent. The aims and scope for this special issue mainly focus on the important contributions of anti-inflammatory natural polyphenolic compounds. Specifically, we welcome submissions on discovery of natural anti-inflammatory molecules with strong history of patented applications. Meanwhile, we also encourage review articles which discuss the current progress of published patent, using polyphenolic drugs and inflammatory diseases.

Keywords: Flavanoids, Polyphenols, Patents, Inflammation,

Subtopics: The subtopics to be covered within this issue are listed below:

3. Curcumin and its derivative: A source of promising future medicine for inflammatory malignancy.
5. Recent advances in Chemico-Biological properties of Plant Polyphenols Hydroxybenzoic acids

Furthermore, Authors are welcome to submit natural anti-inflammatory molecules with strong history of patented applications.
### Schedule:
- Manuscript submission deadline: Sept 2018
- Peer Review Due: Oct 2018
- Revision Due: Nov. 2018
- Announcement of acceptance by the Guest Editors: Nov.-Dec 2018
- Final manuscripts due: Dec. 2018

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**Topics:**

1. **Anti-inflammatory potential of Fisetin and its derivatives: A Review of Research and Patents.**
   
   Ajay Sharma\(^1\), Sanjana Chauhan\(^1\), Dharambir Kashyap\(^2\), Hardeep Singh Tuli\(^3\), Katrin Sak\(^4\), Harpal Singh Buttar\(^5\)

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   \(^5\)Department of Pathology and Laboratory Medicine, Faculty of Medicine, University of Ottawa, Ontario, Canada. hsbutter@bell.net

2. **Apigenin: A flavone with promising anti-inflammatory activity.**
   
   Ajay Sharma\(^1\), Sanjana Chauhan\(^1\), Abhinay Thakur\(^2\), Hardeep Singh Tuli\(^3\), Mahmoud Youns\(^4\)

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3. **Curcumin and its derivative: A source of promising future medicine for inflammatory malignancy.**
   
   Mayank Kinger
4. **Flavopiridol: A CDK inhibitor with promising anticancer and anti-inflammatory potential.** Ashun Chaudhary\(^1\), Hardeep Singh Tuli\(^2\), Ajay Sharma\(^3\), Abhinay Thakur\(^4\)

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5. **Recent advances in Chemico-Biological properties of Plant Polyphenols Hydroxybenzoic acids**

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**Keywords:** Flavanoids, Polyphenols, Patents, Inflammation, Fisetin, Apigenin, Hydroxybenzoic acids, Flavopiridol, Curcumin

Any queries should be addressed to patents@benthamscience.org.