Licensing and Technology Transfer Opportunity: Manipal University

Title of Technology Available: Novel molecule with promising antioxidant and anti-inflammatory activity.

Brief Description of Invention: Flavonol synthesized in the present invention is identified as 2-(4-benzyloxyphenyl)-3-hydroxy-chromen-4-one and is characterized for the various physical properties. Further, flavonol synthesized in the present invention is also analyzed for anti-inflammatory activity. The results showed that flavonol at a dose of 2000 mg/kg body weight did not induce any toxicity in female Wistar rats. The administration of flavonol at a dose level of 200 mg/kg showed significant reduction in paw edema after 2 hours of carrageenan induction in rat model. The results showed that flavonol is effective in reducing inflammation in rats. Flavonol administration at a concentration of 200 mg/kg reduced the paw volume, protected the elevation of WBC (White Blood cell) count in rats.

Brief Background of Invention: The invention relates to a process for chemical synthesis of a flavonol from an aromatic ketone and an aromatic aldehyde. In the invention, flavonol is synthesized using a two-step process of Claisen–Schmidt condensation process followed by AFO (Algar-Flynn-Oyamada) process. The invention further discloses the anti-inflammatory activity of the synthesized flavonol.

Describe the final product: Anti-inflammatory Drug molecule

Technological Domain (Keywords): Anti-inflammatory drug

Proof of Concept:

Stage of Development:
Ideation/Prototype/Advanced Prototype/Ready to Market technology

Provide Information on Competitors who manufacture and/or sell similar products: NA

What are the unique advantages your innovation has compared to the competition:

A few potential companies who might be interested in this technology:
No idea

Intellectual Property Status: Indian Patent application with number 20174100864 filed in 2017.