

Institute of Advanced Sciences

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## Date: May 10, 2016 Seminar Announcement

## Topic

Natural products-inspired discovery and development of anti-microbial, anti-inflammatory and antiplatelet agents

## Speaker

Virinder S. Parmar. PhD

Bioorganic Laboratory, Department of Chemistry, University of Delhi, India

Date and Time Friday, May 13, 2016, 10 AM

## Venue

Institute of the Advanced Sciences
427 Plymouth Avenue, Fall River, MA 02721

Exit 7 on I-195, the building- red brick building - is across from the Stop & Shop. Parking is on the street in front of the building, also behind the building. The entrance of the building has some chess club signboards.

Abstract: We have extensively worked on several plant species and isolated a large number of novel compounds belonging to different classes (alkaloids, polyphenols, steroids, amides, terpenoids, etc.). Several of these compounds have shown interesting biological activities, remarkable of them has been our extensive work on polyphenol acetates leading to the discovery of a fundamental biochemical pathway involving acetyl CoA-independent enzymatic protein acetylation. Our seminal investigations have highlighted the unique biochemical and pharmacological action of polyphenol acetates. These act as the substrates for the well-known protein calreticulin and transfer acetyl groups to certain receptor enzymes, and were found to be good anti-inflammatory & anti-asthmatic agents. Acetyl polyphenols and several other classes of natural products were also found to be excellent inhibitors of chemical and radiation induced clastogenecity, and antifungal agents against various deadly lung fungal infections.

Details of these studies will be discussed in the presentation

Professor Virinder S. Parmar is former Head of the Department of Chemistry at the University of Delhi. He is a prominent synthetic and natural products chemist with hundreds of articles to his credit. He continues to maintain active chemist life even after his retirement, and spends his time traveling between Delhi and New York City.