

# 4<sup>th</sup> World Congress on Virology

October 06-08, 2014 Hilton San Antonio Airport, TX, USA

## Synthesis and antimicrobial evaluation of a new class of Pyrido[1,2-a]thieno[3,2-e]pyrimidine

Haider Behbehani  
Kuwait

Multisubstituted 2-aminothiophenes 1a-c can be readily cyanoacetylated via reaction with cyanoacetic acid in presence of acetic anhydride under microwave irradiation to form the corresponding cyanoacetamides 2a-c, which condensed with DMF-DMA to form the corresponding enamines 3. Moreover the cyanoacetamides 2a-c reacted with a variety of aryliden malononitriles to afford novel pyrido[1,2-a]thieno[3,2-e]pyrimidine derivatives 4a-o. In addition the enamines 3 reacted with malononitrile to afford the pyrido[1,2-a]thieno[3,2-e]pyrimidine derivatives 5a,b. The X-ray crystallographic analyses of seven products could be obtained thus establishing with certainty the proposed structures in this work. Most of the synthesized compounds in this investigation were tested and evaluated as antimicrobial agents; the results of biological evaluations demonstrate that members from these compounds have promising antimicrobial activities against Gram negative bacteria, Gram positive bacteria.

### Biography

Haider Behbehani has completed his PhD at the age of 31 years from Bath University. He is a member of the Royal Society of Chemistry and American Chemical Society from 1996- to date. He is the head of Chemistry Department, Faculty of Science, Kuwait University. He has published more than 30 papers in reputed journals and has been serving as a reviewer for many journals.

[hidar@bahbahani.com](mailto:hidar@bahbahani.com)