

THE HEBREW UNIVERSITY OF JERUSALEM האוניברסיטה העברית בירושלים



Institute of Chemistry המכון לכימיה



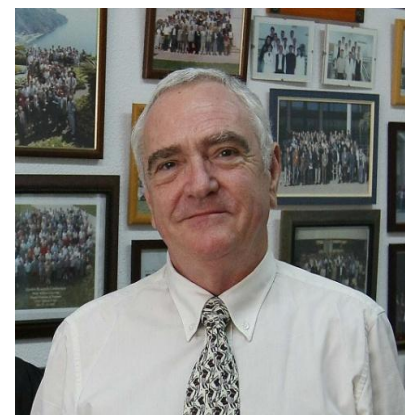
## ORGANIC SEMINAR ANNOUNCEMENT

# Prof. Miguel Yus

*Departamento de Química Orgánica and Centro de Innovación en  
Química Avanzada , Universidad de Alicante, Spain*

## Enantioselective Addition of Organomagnesium Reagents to Carbonyl Compounds

**Thursday, May 25<sup>rd</sup> 2017, at 14:30**  
**Seminar Hall, Los Angeles Building**



# Abstract

One of the most useful methodologies to create carbon-carbon bonds is the addition of organometallic reagents to carbonyl compounds. The asymmetric version of this reaction allows the generation of a stereocenter and at the same time of an alcohol functionality .

However, the use of Grignard reagents in this process has been explored with limited success. As chiral ligands, TADDOL or BINOL derivatives have been reported to be useful for the mentioned transformation, being so far only efficient for the addition to aldehydes. In the last few years we have used new ligands for the enantioselective addition of Grignard reagents to aliphatic and aromatic aldehydes and ketones in the presence of titanium tetrakisopropoxide to yield chiral alcohols.