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This **new** international journal, which commenced publication in 1991, represents an exciting and radical new publishing initiative on the part of the RSC. It breaks away from the traditional divisions of inorganic, organic and physical chemistry, by recognizing the interdisciplinary nature of materials research.

The **Journal of Materials Chemistry** contains original research reports (both full-length papers and short communications), occasional review articles, book reviews, details of forthcoming conferences and a cumulative author index, together with colour photographs and diagrams where appropriate. It has an International Advisory Editorial Board consisting of some of the world's leading authorities on materials chemistry.

The areas to be covered in the **Journal of Materials Chemistry** include:

### MATERIALS

#### Inorganics:

ceramics; layered materials; microporous solids and zeolites; silicates and synthetic minerals; biogenic minerals.

#### Organics:

organometallic precursors for thin films/ceramics; novel molecular solids and synthetic polymers with materials applications; polymer composites; biopolymers; biocompatible and biodegradable polymers; liquid crystals (both lyotropic and thermotropic); Langmuir-Blodgett films.

### PROPERTIES AND APPLICATIONS

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#### Magnetic properties:

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#### Chemical properties:

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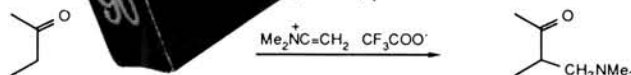
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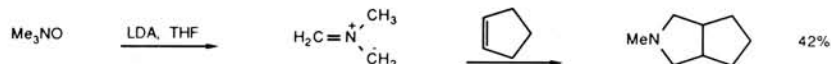
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*Bull.Soc.Chim.Fr.*, 2707 (1970). Compare dimethyl-  
*J.Chem.Soc.*, 0131, p.423:

Deprotonation by lithium diisopropylamide at low temperature gives the unstable azomethine ylide, which undergoes 1,3-dipolar addition even with unactivated alkenes, to give pyrrolidines: *J.Chem.Soc., Chem. Commun.*, 31 (1983):



Compare also N-methylmorpholine-N-oxide, 5957, p.710.

## Nickel acetylacetonate hydrate

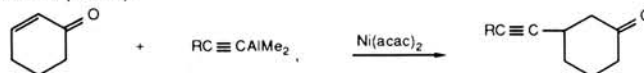
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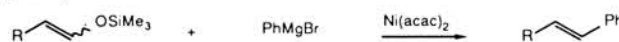
Conjugate addition of alkynylaluminium reagents to enones: *J.Am.Chem.Soc.*, 100, 2244 (1978):



Conjugate addition of cis-alkenylzirconium reagents, from the hydrozirconation of alkynes, to Michael acceptors, with retention of configuration: *J.Am.Chem.Soc.*, 102, 1333 (1980).

Coupling of Grignard reagents to give biaryls: *J.Org.Chem.*, 41, 2252 (1976).

Coupling of Grignard reagents with silyl enol ethers of both aldehydes and ketones, to give alkenes. In contrast to dichlorobis(triphenylphosphine)nickel, this reagent gives the thermodynamically more stable alkene: *Tetrahedron*, 36, 225 (1980):



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