



## Synthesis and Characterization of Sandwiched and Multidecker Iron Organometallic Compounds of 2, 6-diethyl-4, 8-dimethyl-1, 5-dihydro-s-Indacene

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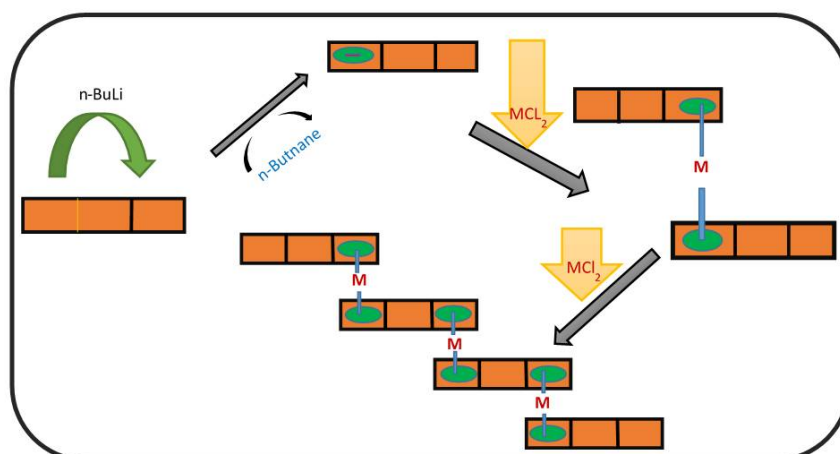
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### ABSTRACT

Synthesis and characterization sandwich and multidecker iron organometallic complexes are achieved by employing the partially alkylated s-indacene, the synthesis of new organometallics are based on 2, 6-diethyl-4, 8-dimethyl-1, 5-dihydro-s-indacene ( $\mathbf{Ic'H}_2$ ), the synthesis of multidecker organometallic compounds of type  $L_4M_3$  where L refers to the partially alkylated ligand and M to the transition metal. The compound  $L_4M_3$  was obtained in a good yield. All complexes reported were characterized by means of  $^1\text{H}$ ,  $^{13}\text{C}$  NMR, elemental analysis,

### Graphical Abstract



### Highlights:

- Multidecker organometallic synthesis was carried out.
- Synthesized organometallic complexes were characterized by spectroscopic techniques.
- Synthesized complex may have the applicability in the field of magnetic materials and or conductivity applications.

**Keywords:** Ethyl-indacene, Organometallics, Multidecker complex's.