

Method for the synthesis of chromenopyrimidine-fused azoles by copper-catalyzed intramolecular hetero-Diels–Alder reaction

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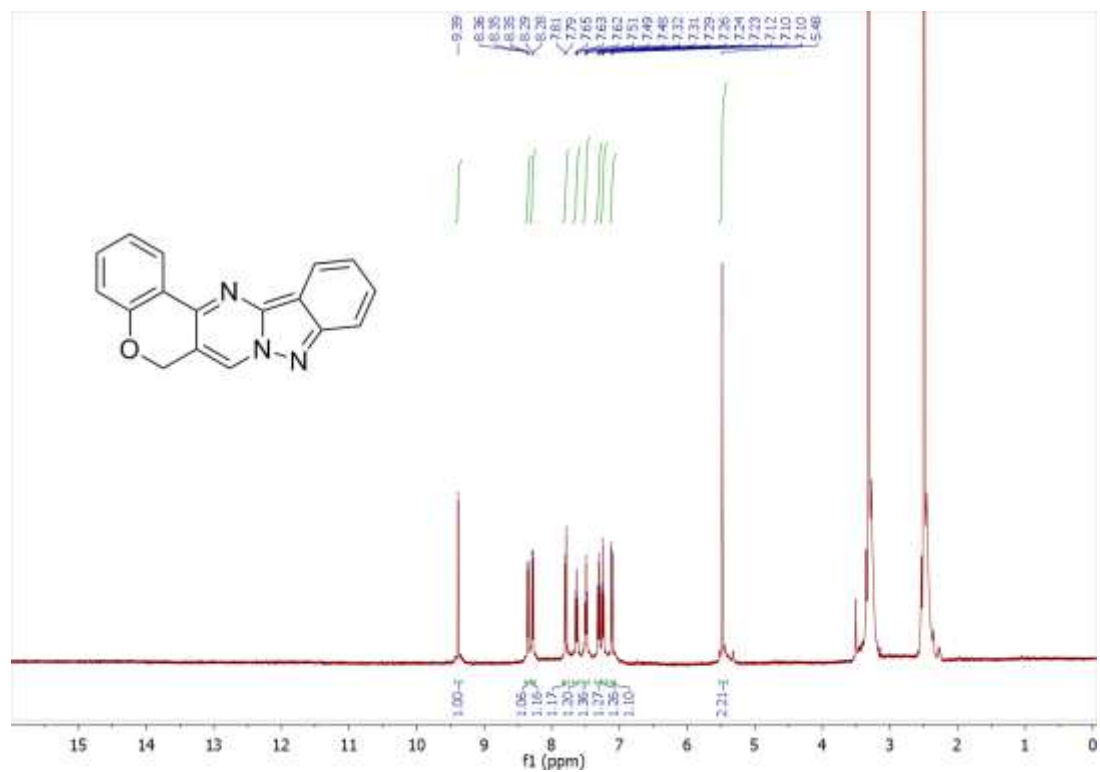
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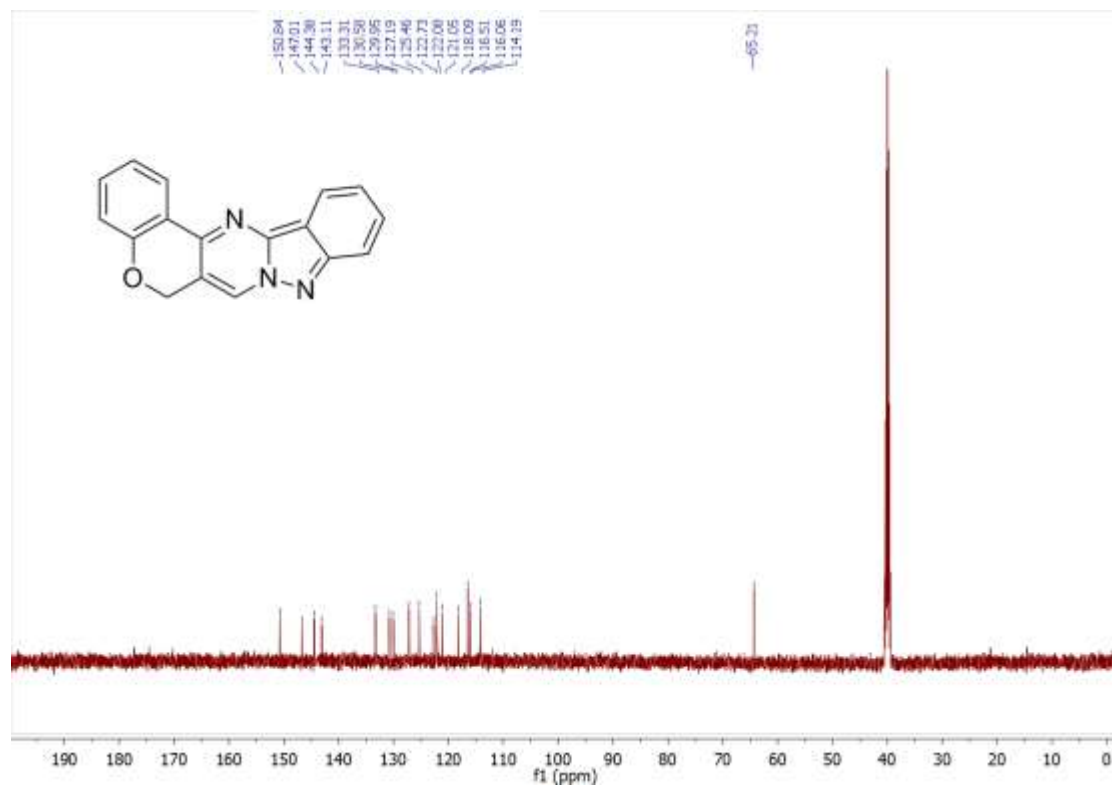
³ *Shahid Beheshti University of Medical Sciences, Tehran, Iran*

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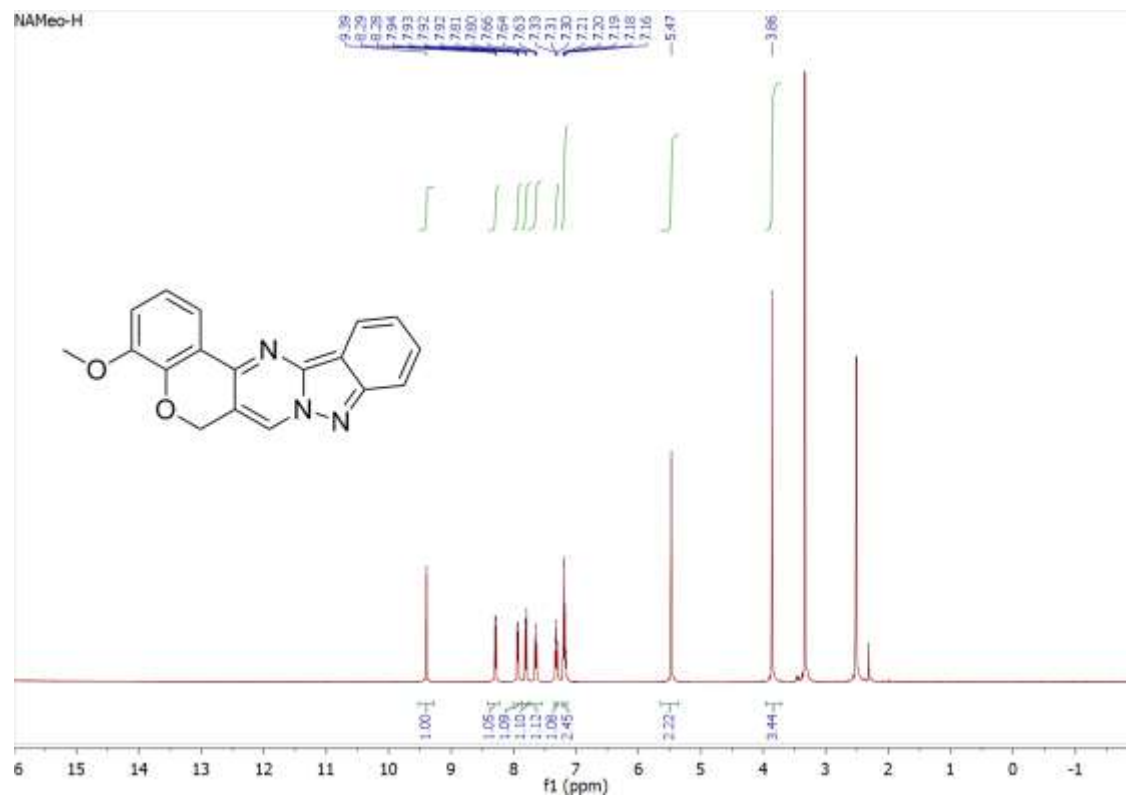
Copies of ^1H NMR and ^{13}C NMR spectra

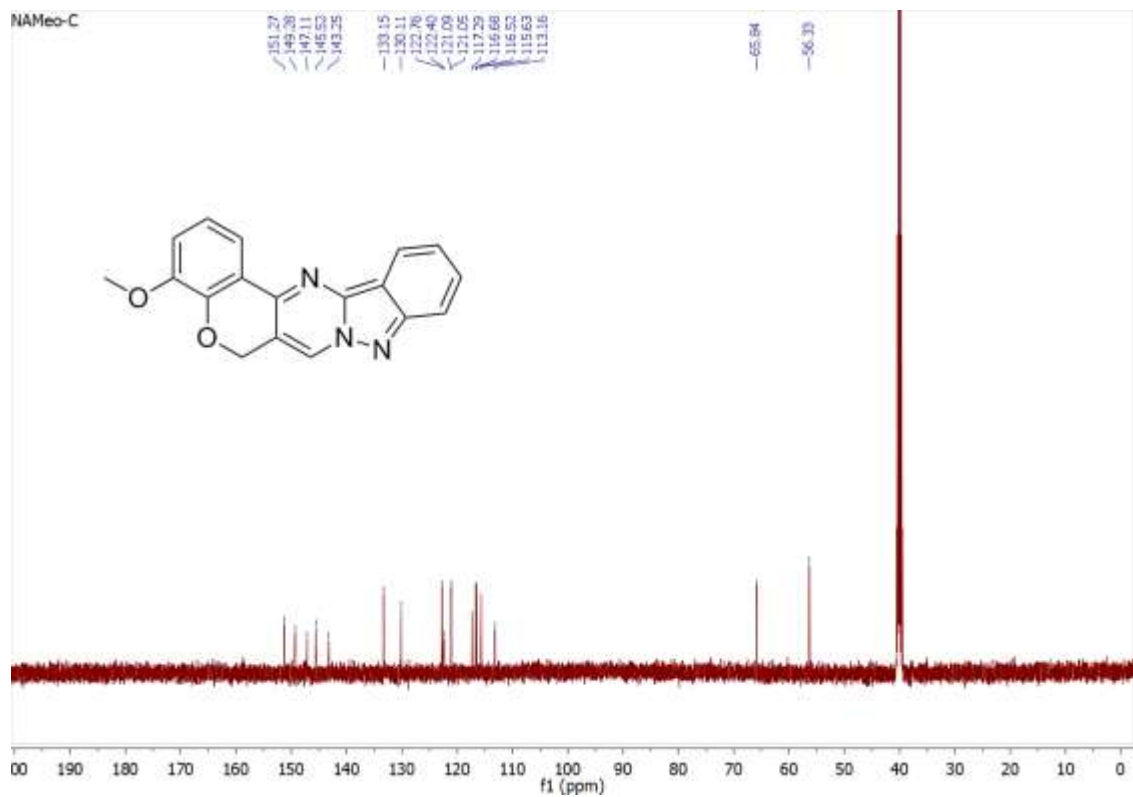
6H-chromeno[4',3':4,5]pyrimido[1,2-b]indazole **4a**



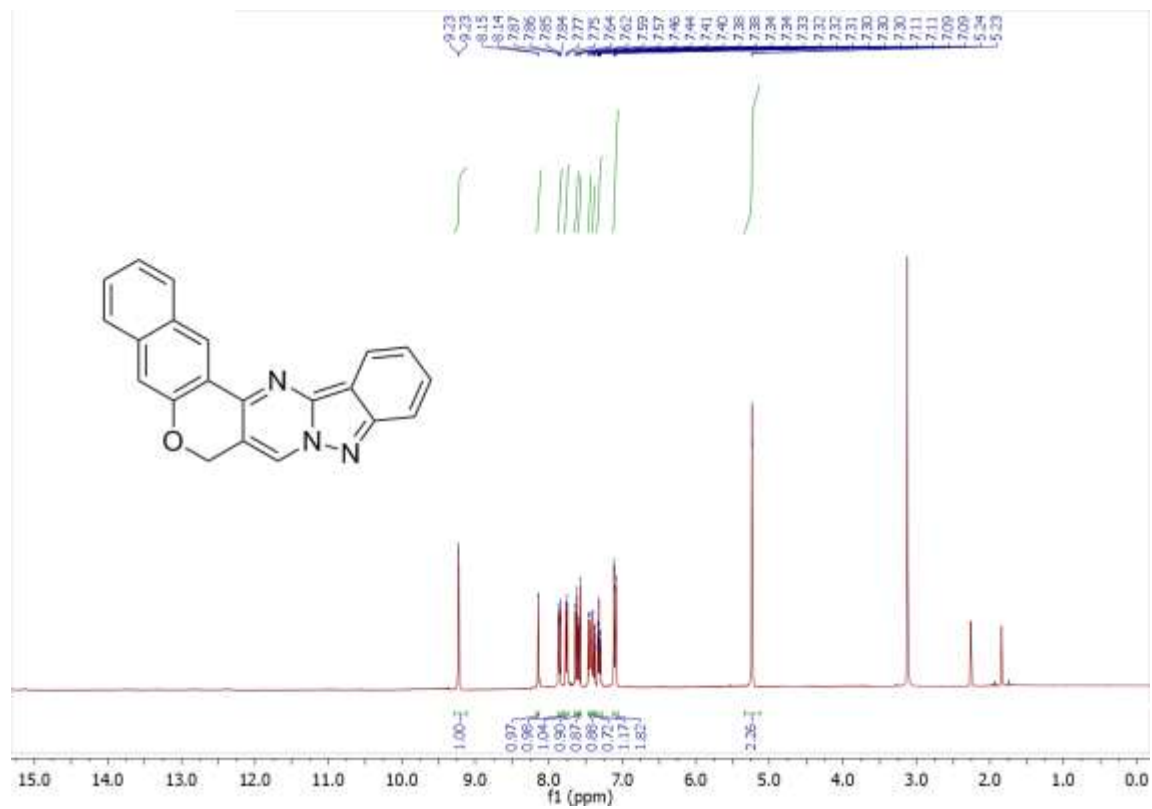


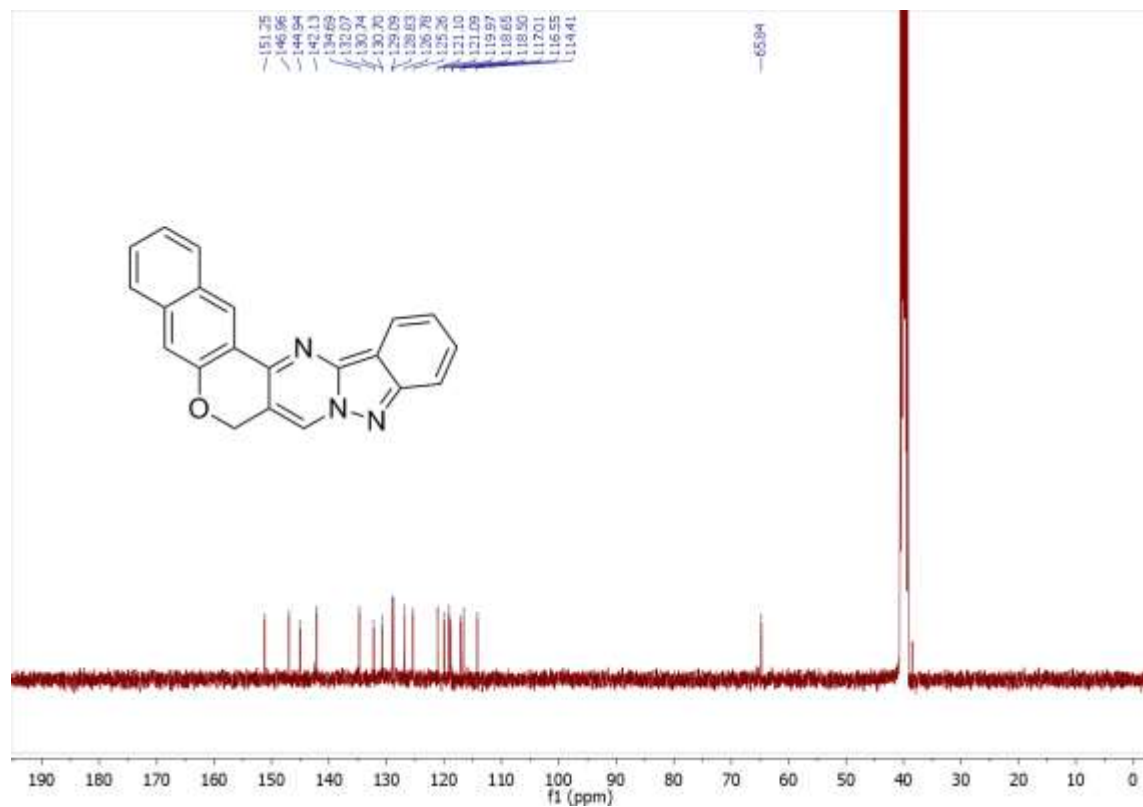
4-methoxy-6H-chromeno[4',3':4,5]pyrimido[1,2-b]indazole **4b**



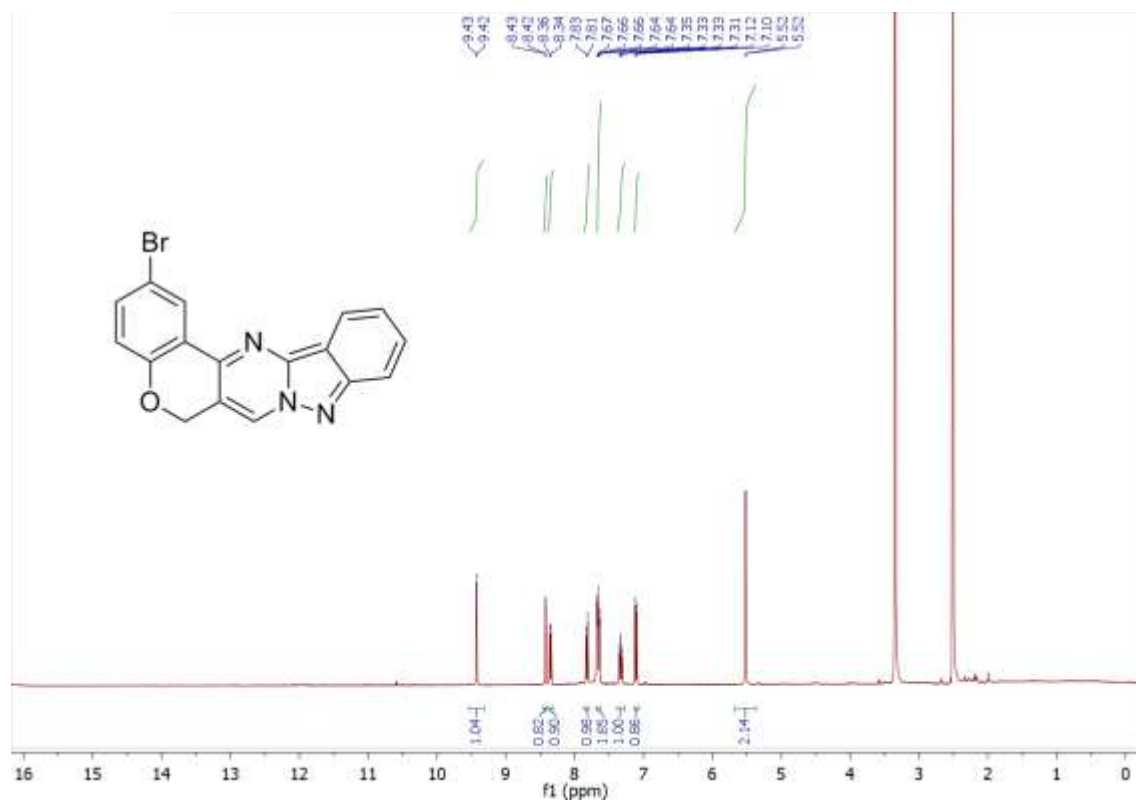


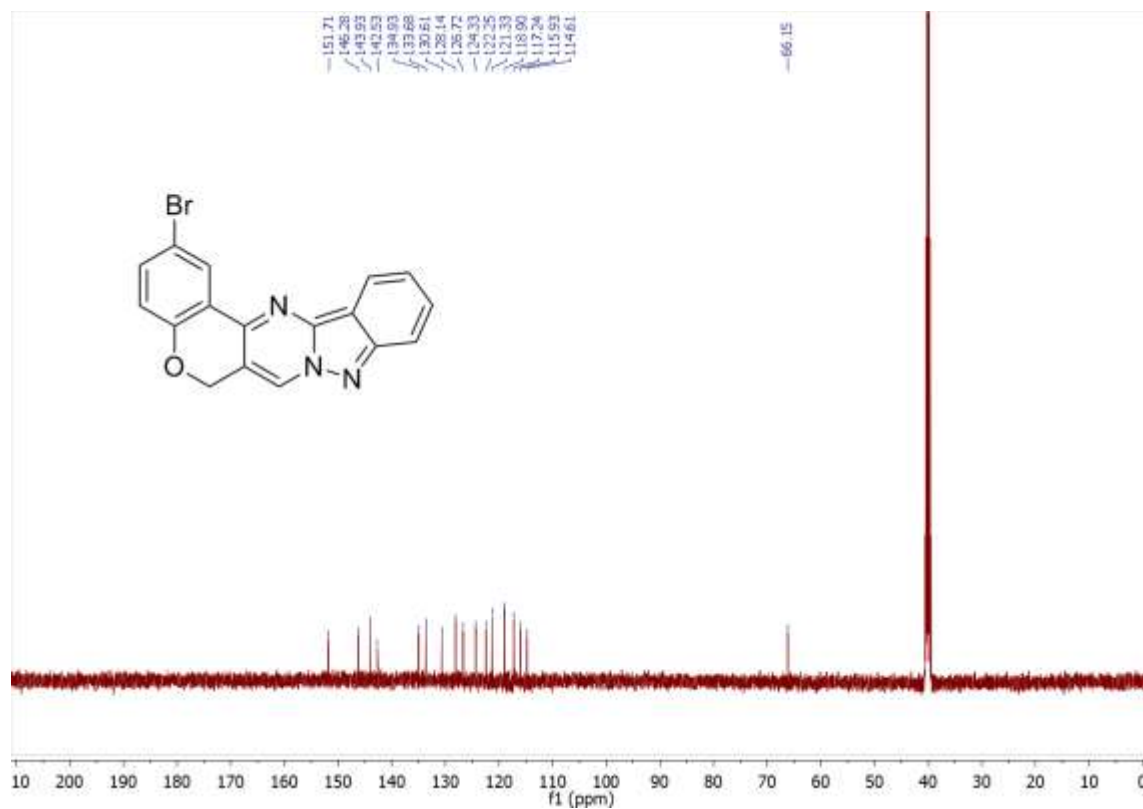
7H-benzo[6',7']chromeno[4',3':4,5]pyrimido[1,2-b]indazole **4c**



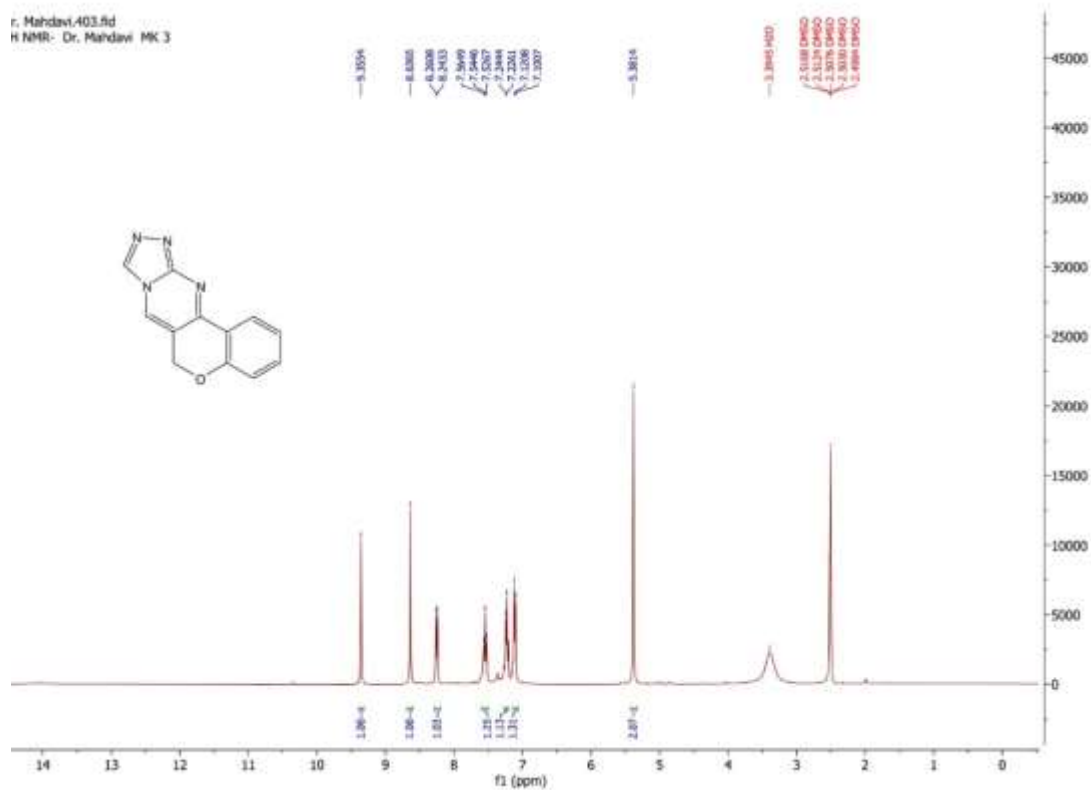


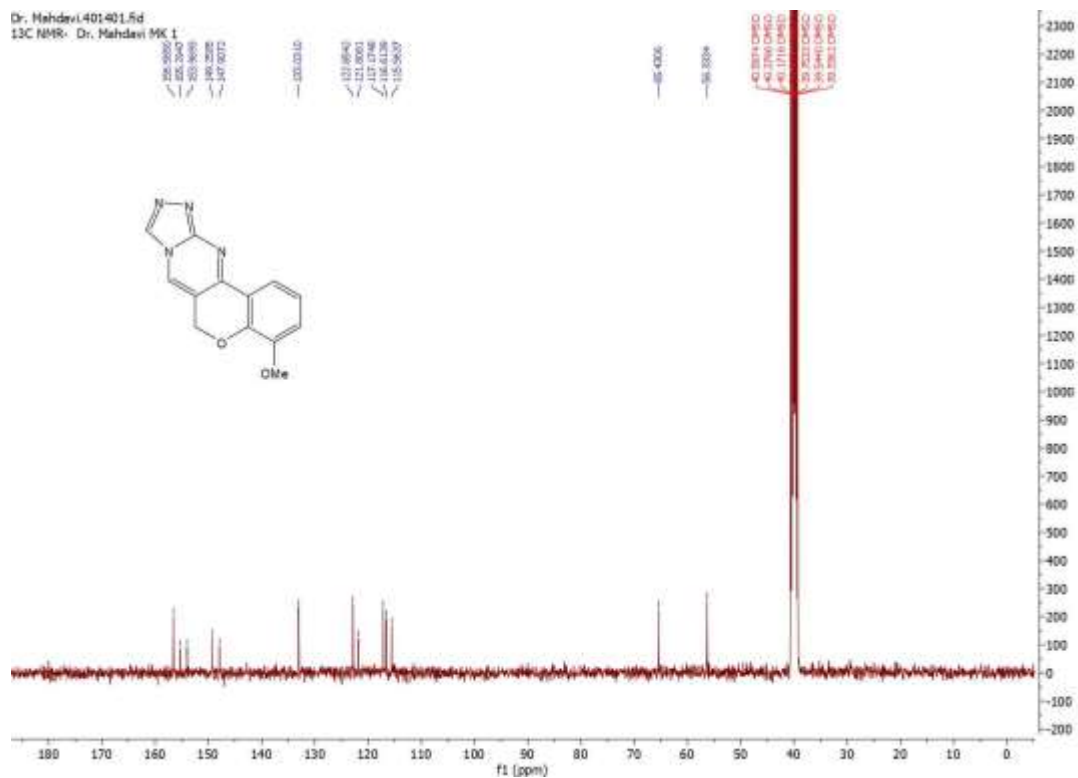
2-bromo-6H-chromeno[4',3':4,5]pyrimido[1,2-b]indazole **4d**



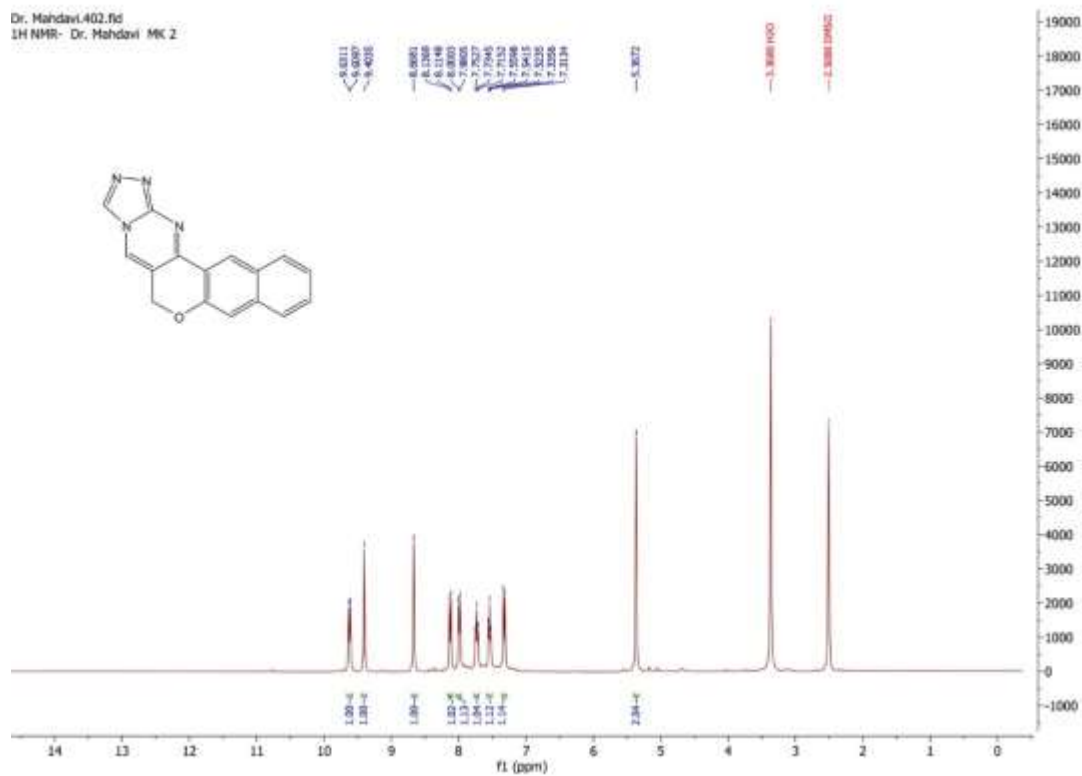


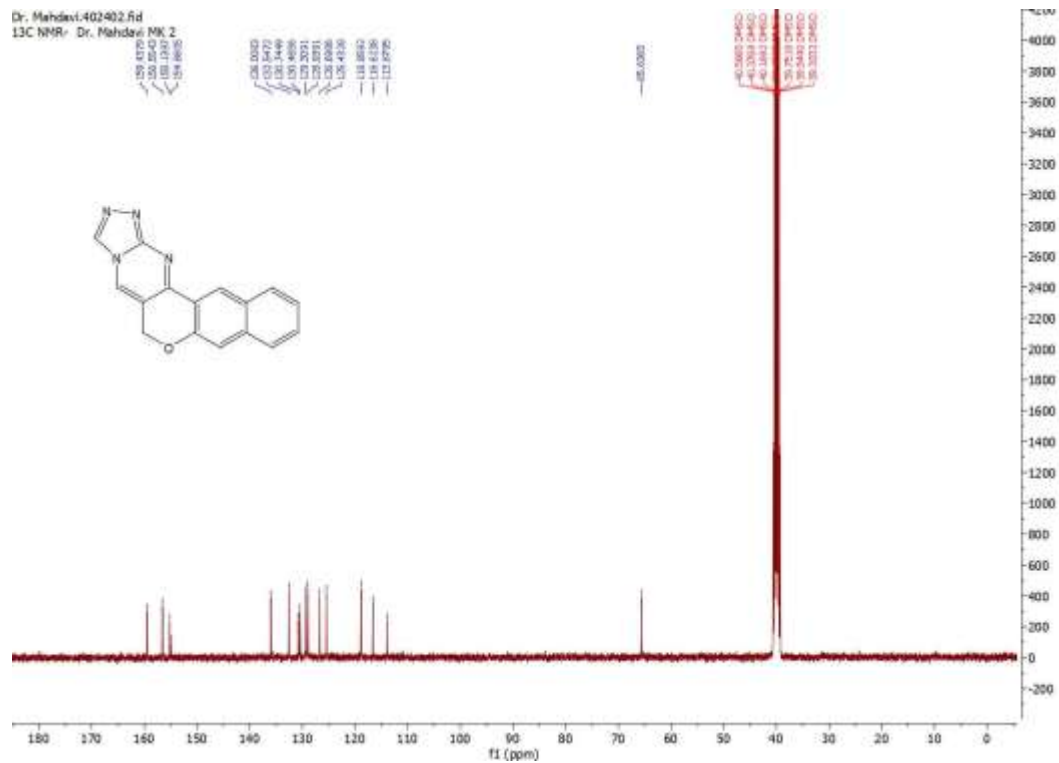
6H-chromeno[4,3-d][1,2,4]triazolo[4,3-a]pyrimidine **6a**





6H-benzo[6,7]chromeno[4,3-d][1,2,4]triazolo[4,3-a]pyrimidine 6c





2-bromo-6H-chromeno[4,3-d][1,2,4]triazolo[4,3-a]pyrimidine **6d**

