Supporting Information (Part A) for

Allenyl Azide Cycloaddition Chemistry. Exploration of the Scope and Mechanism

of Cyclopentennelated Dihydropyrrole Synthesis through Azatrimethylenemethane

(ATMM) Intermediates.

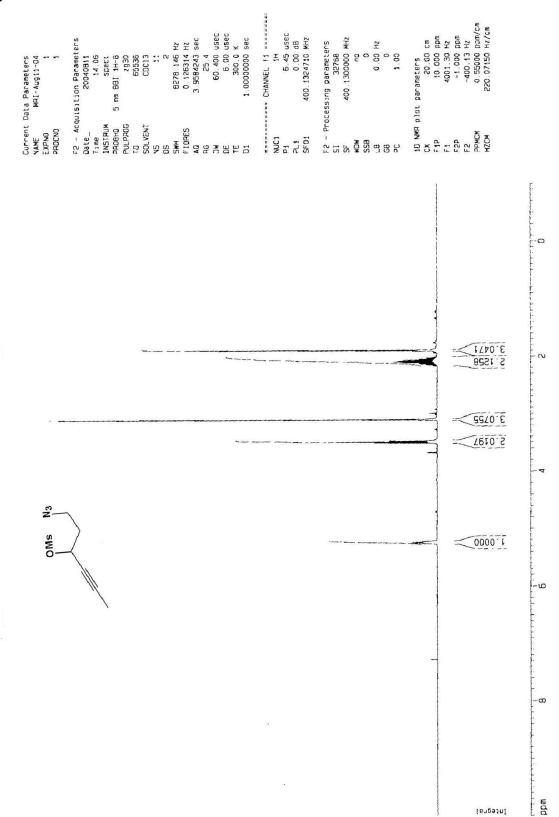
Ken S. Feldman, *[†]Malliga R. Iyer, [†] Carlos Silva López[§] and Olalla Nieto Faza[§]

Department of Chemistry, The Pennsylvania State University, University Park, Pennsylvania 16802, USA, Departmento de Quimica Organica, Universidade de Vigo,

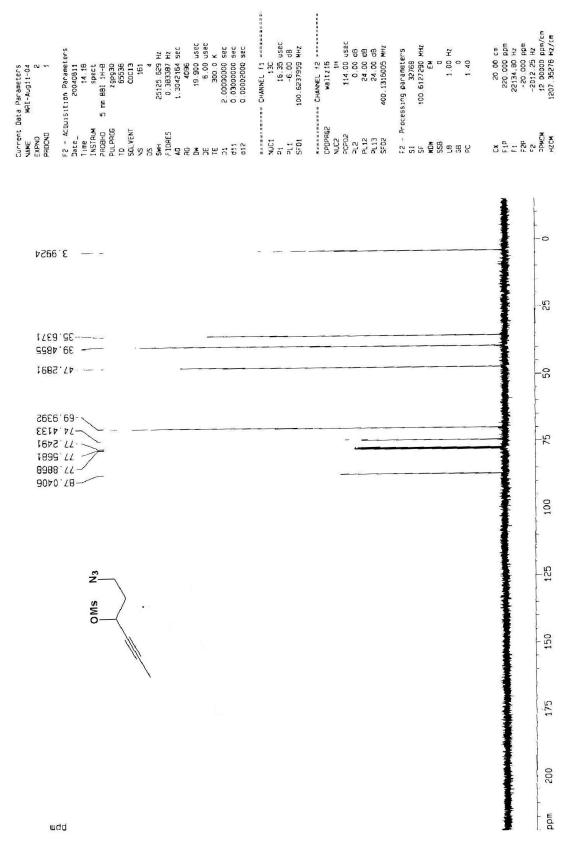
Lagoas Marcosende, 36200, Vigo, Galicia, Spain, and Department of Chemistry, University of Minnesota, 207 Pleasant St. SE, Minneapolis, Minnesota 55455-0431, USA

General Experimental	S 2
19 ¹ H NMR	S 3
19 ¹³ C NMR	S 4
20a ¹ H NMR	S 5
20a ¹³ C NMR	S 6
20b ¹ H NMR	S 7
20b ¹³ C NMR	S 8
20c ¹ H NMR	S 9
20c ¹³ C NMR	S 10
20d ¹ H NMR	S 11
20d ¹³ C NMR	S 12
20e ¹ H NMR	S 13
20e ¹³ C NMR	S14
23a ¹ H NMR	S15
23a ¹³ C NMR	S 16
23b ¹ H NMR	S 17
23b ¹³ C NMR	S 18
23c ¹ H NMR	S 19
23c ¹³ C NMR	S20
23d ¹ H NMR	S 21
23d ¹³ C NMR	S22

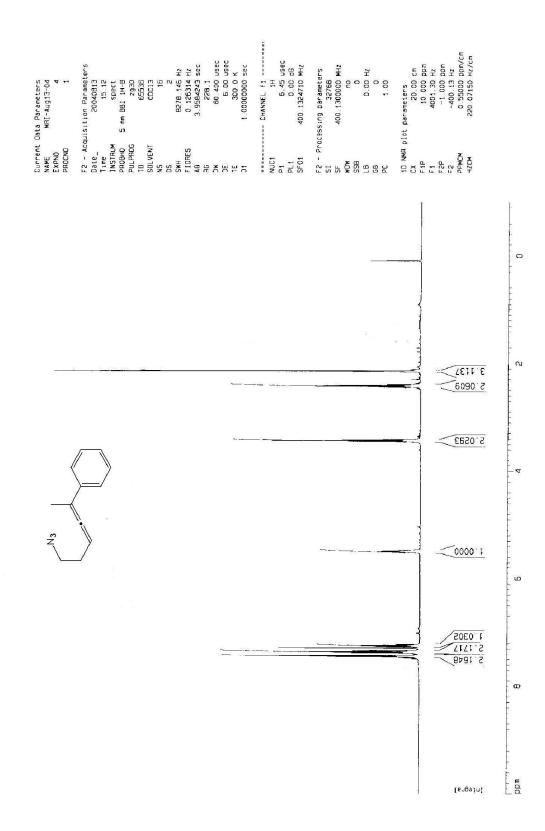
General Experimental. Moisture and oxygen sensitive reactions were carried out in flame-dried glassware under an argon or nitrogen atmosphere. Tetrahydrofuran (THF) was distilled from sodium benzophenone ketyl under an argon atmosphere, or passed through an activated alumina column, immediately before use. Dichloromethane (CH₂Cl₂) was distilled from calcium hydride (CaH₂) under an argon atmosphere, or passed through an activated alumina column, immediately before use. All organic reagents were used as purchased. Purification of products via flash chromatography was performed with 32-63 μ m silica gel and the solvent systems indicated. Hexanes, EtOAc and Et₂O used in flash chromatography were distilled from CaH₂, or passed through an activated alumina column, prior to use. Melting points are uncorrected. Low- and high-resolution mass spectra were obtained according to the specified technique and were performed at the Pennsylvania State University, University Park, PA. Copies of ¹H and ¹³C NMR spectra are supplied in the Supporting Information as criteria of purity.

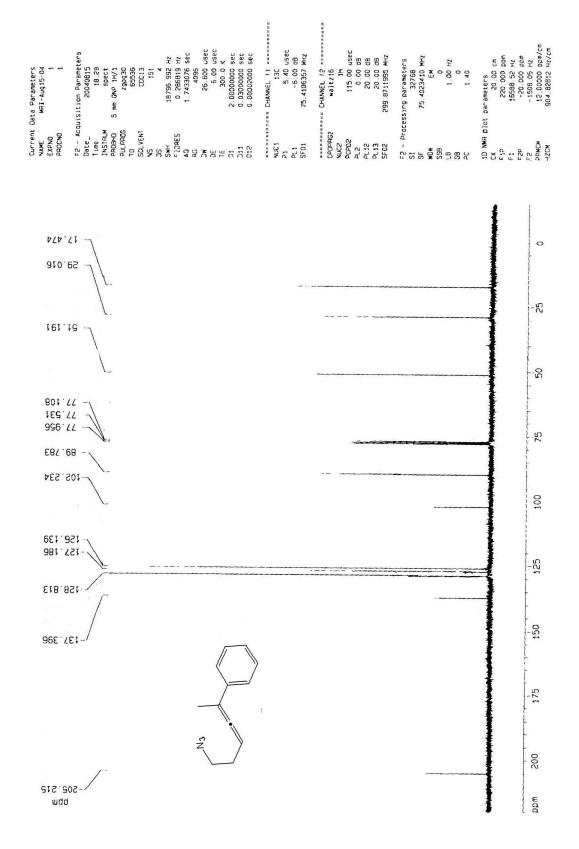


19

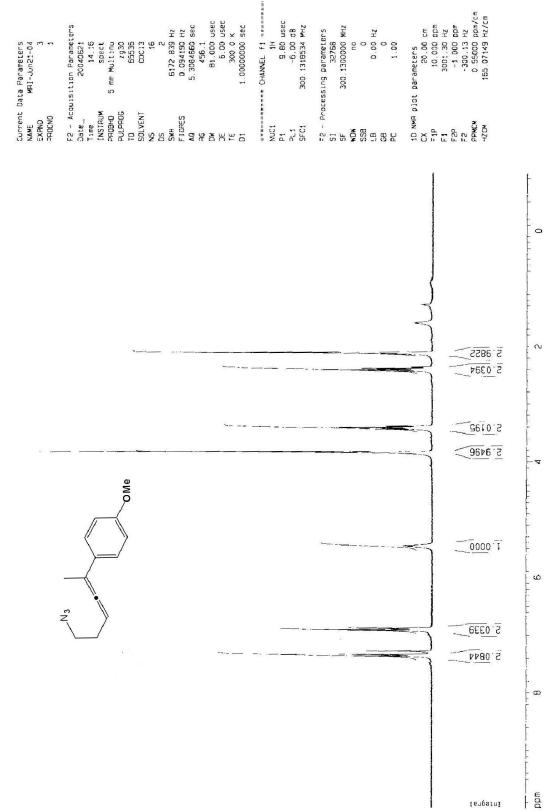


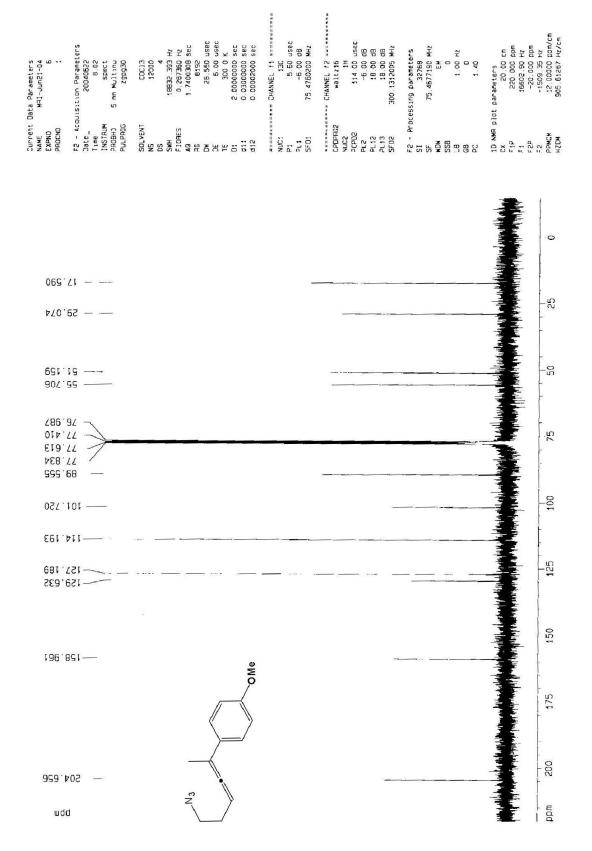
19

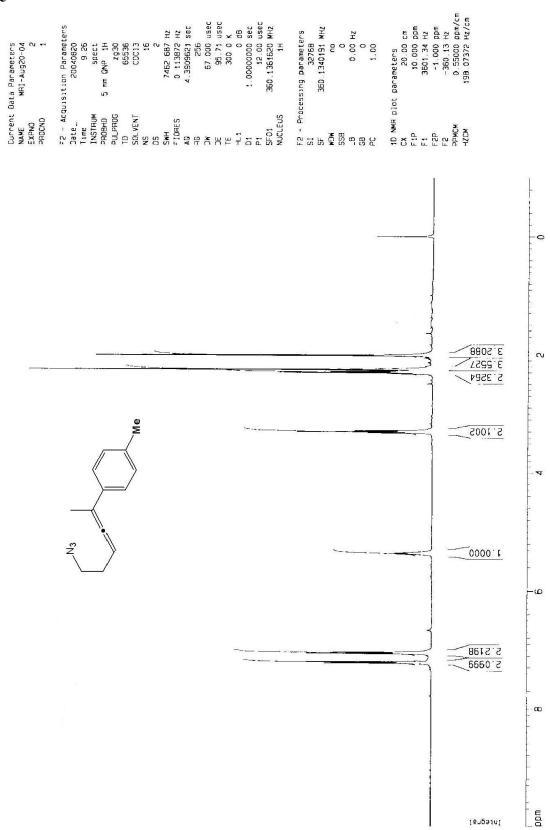




20a

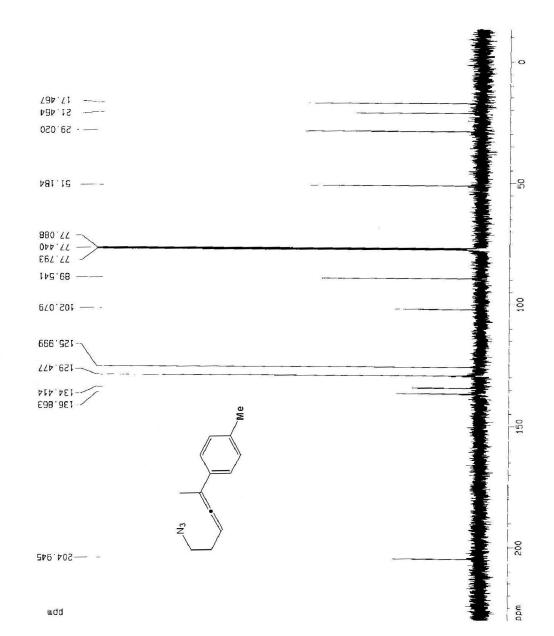




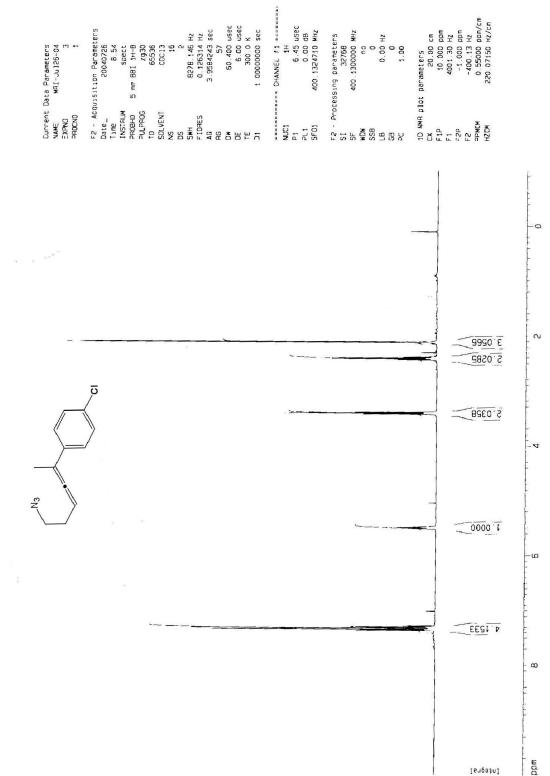


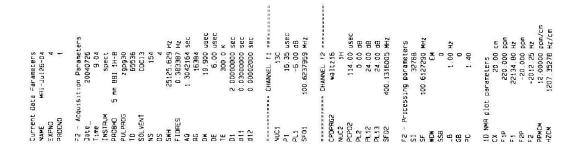
20c

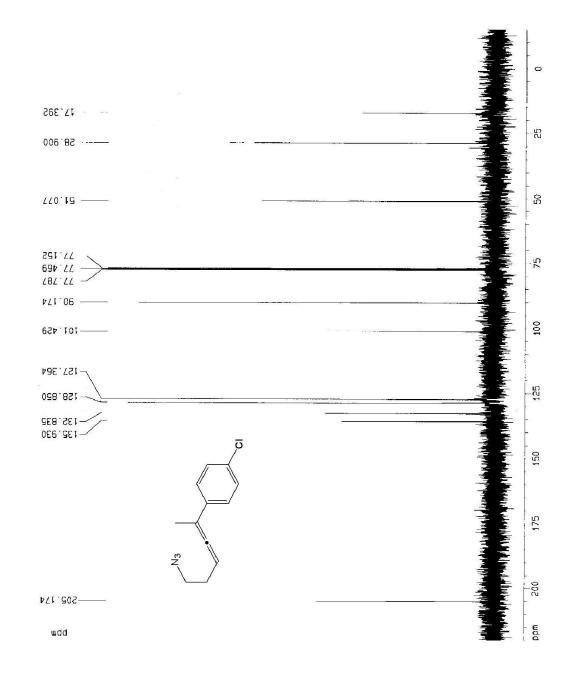


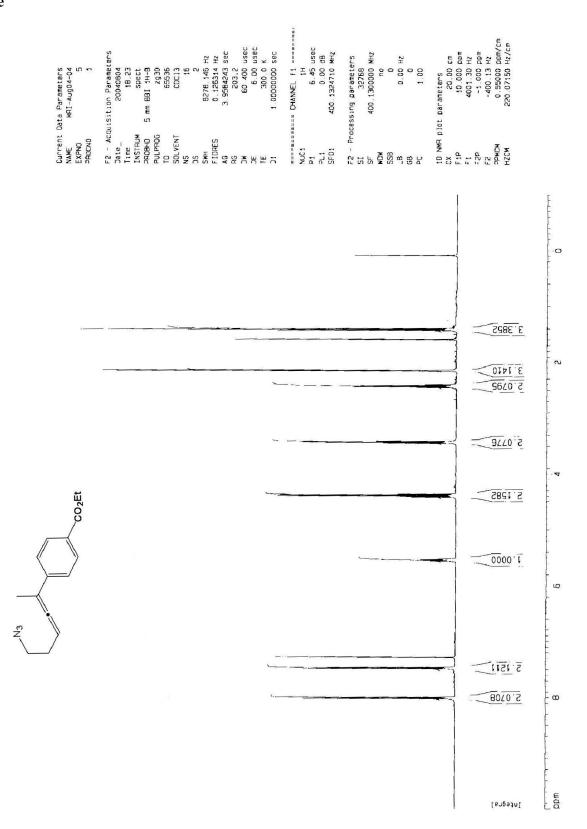


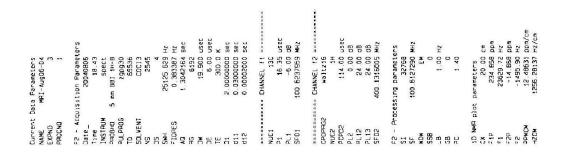
20c

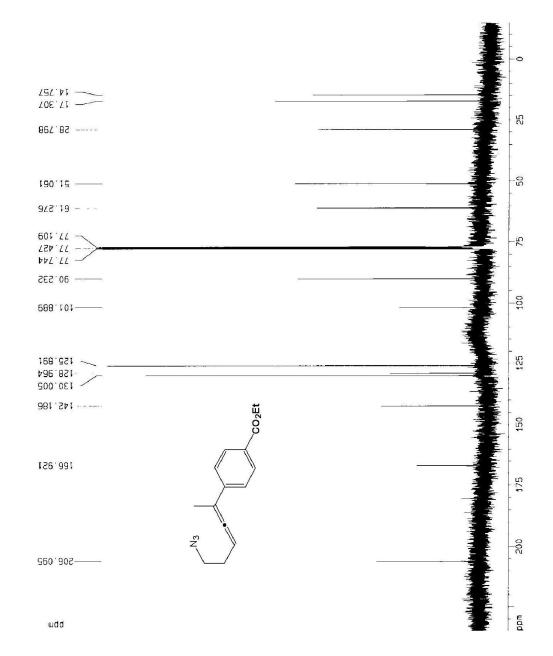




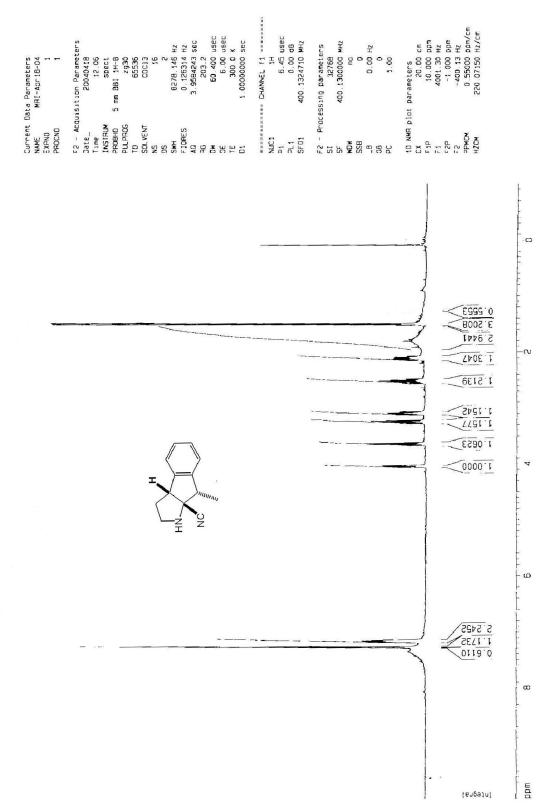




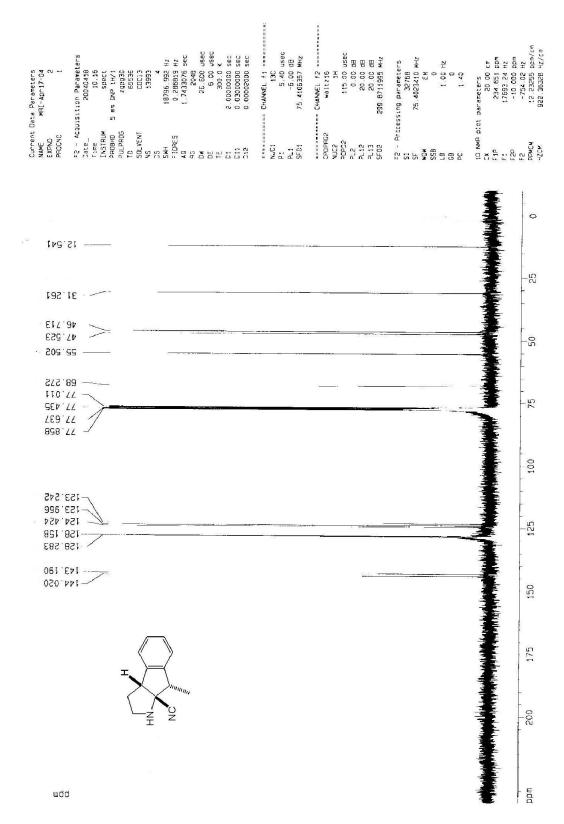




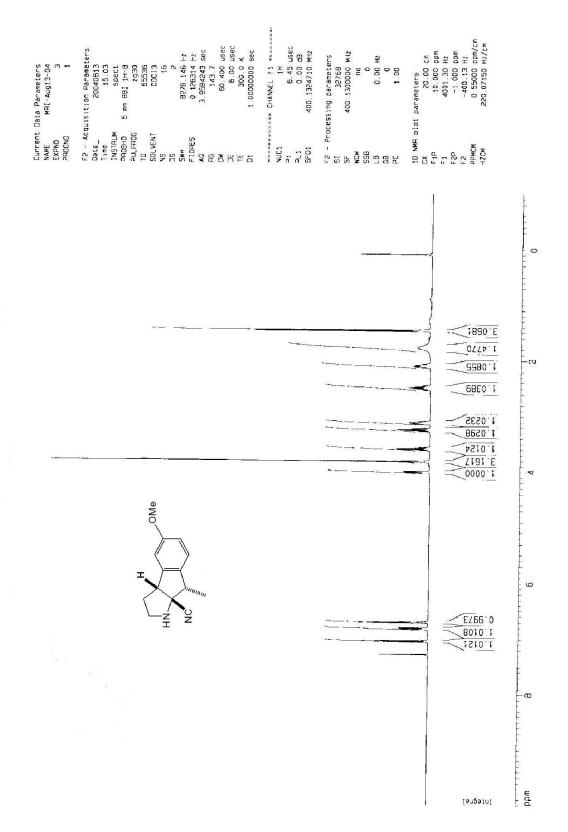
20e

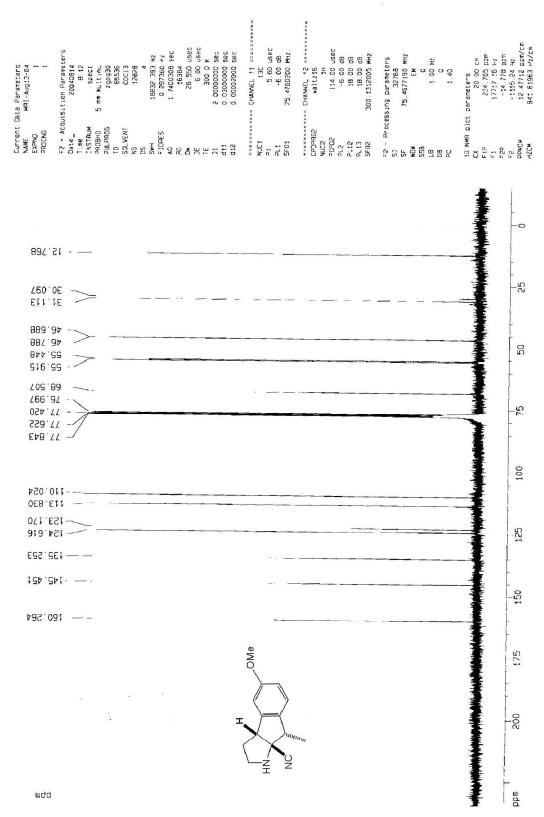


23a

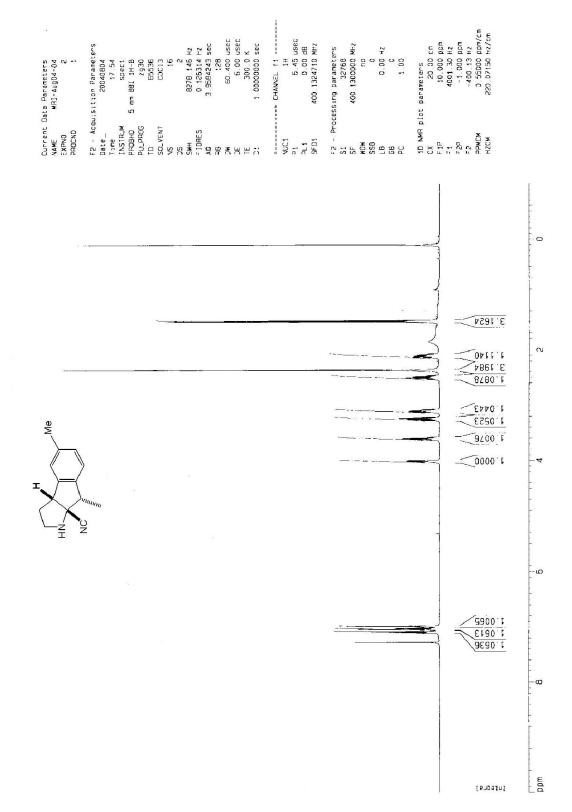


23a

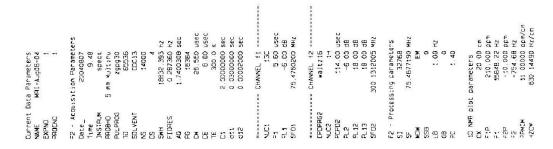


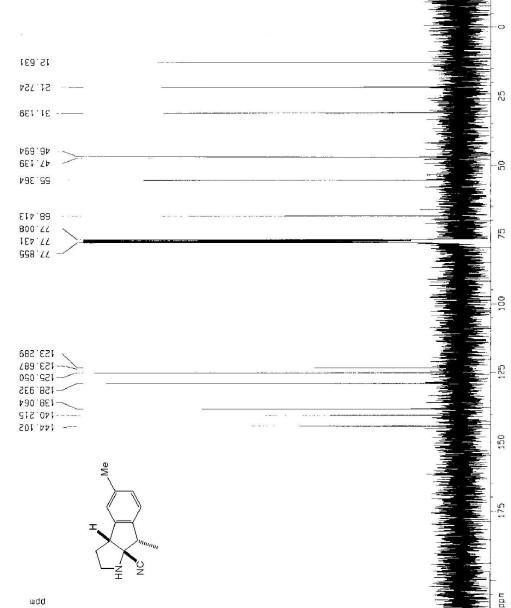


S18



23c





wdd

