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Supporting Information

Synthesis of Indole-annulated Sulfur Heterocycles using Copper-Catalysed C-N Coupling and Palladium-Catalysed Direct Arylation

Ganesh M. Shelke, Mukund Jhab, and Anil Kumar Anil Kuma

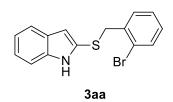
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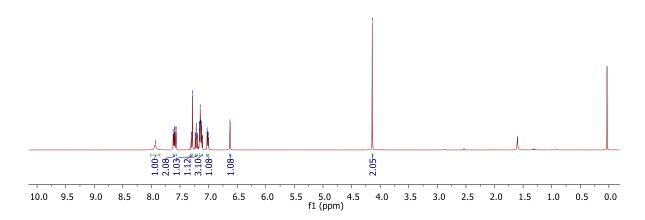
^bDepartment of Biology and Chemistry, Nipissing University, North Bay, ON P1B 8L7, Canada

E-mail: anilkumar@pilani.bits-pilani.ac.in; mukundj@nipissingu.ca

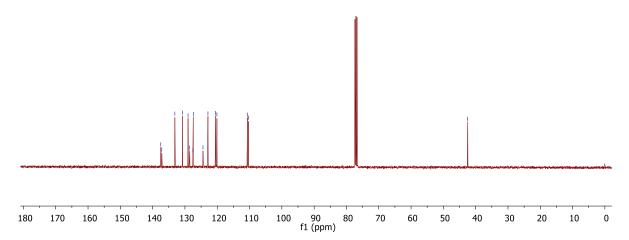
Copies of ^{1}H and ^{13}C NMR for compound 3, 4 and 5

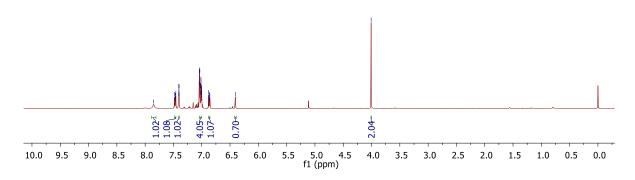






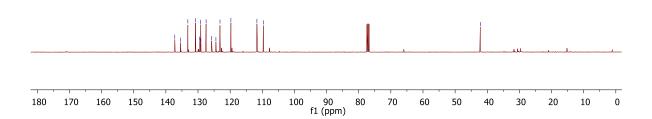


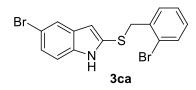


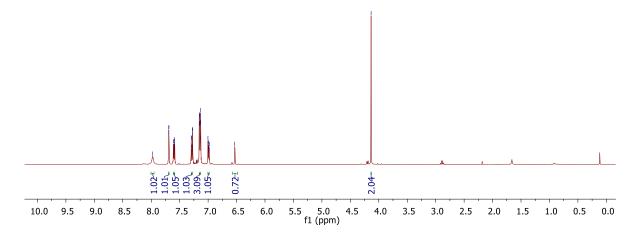


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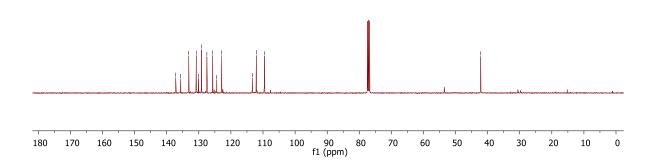


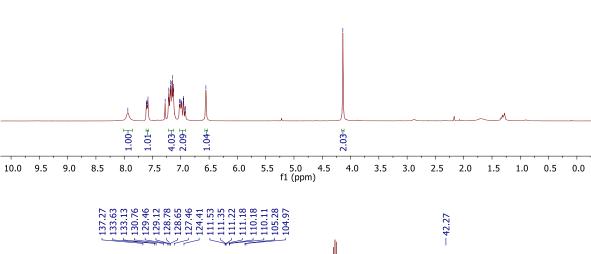


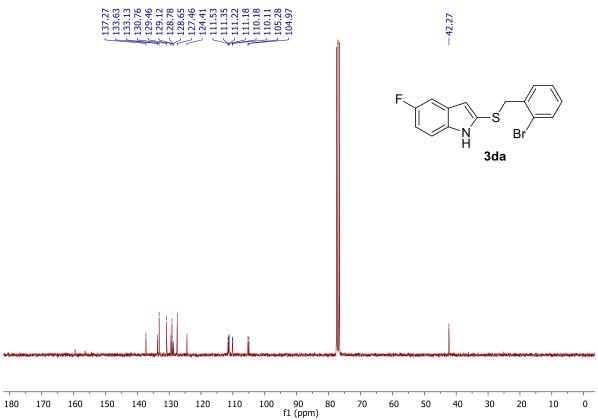


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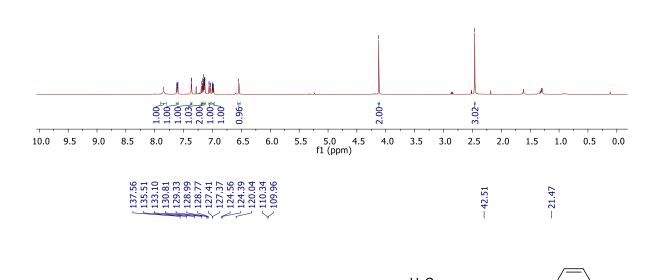
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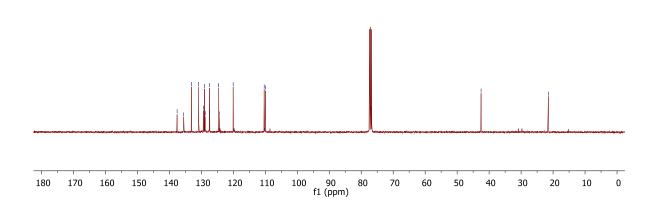




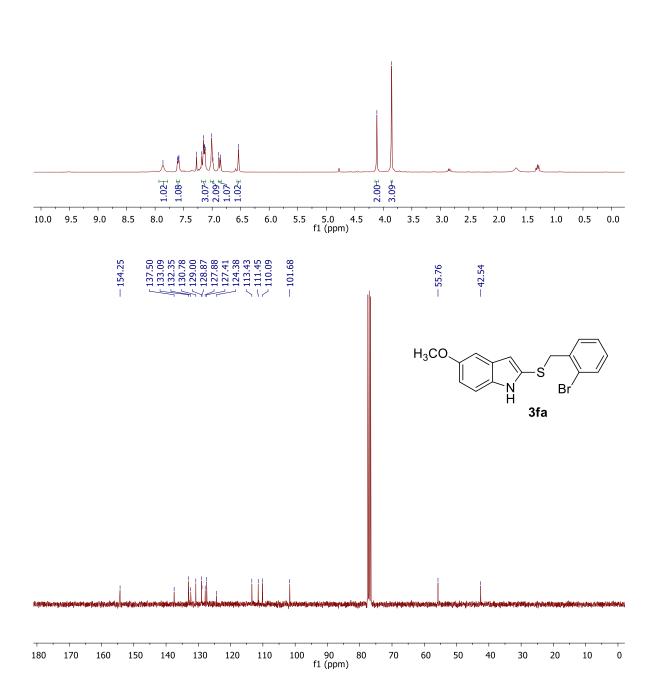


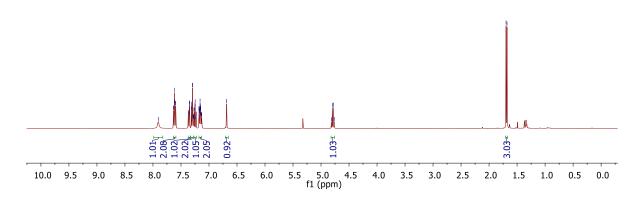






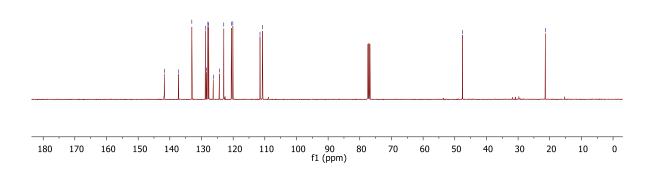
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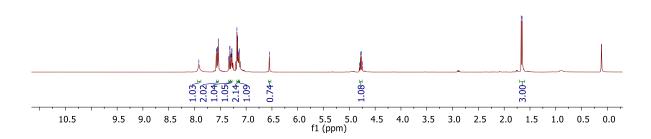




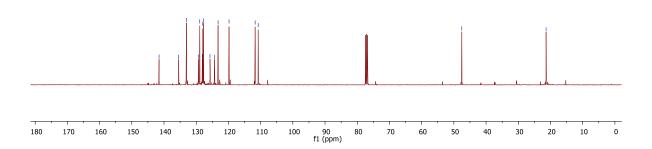
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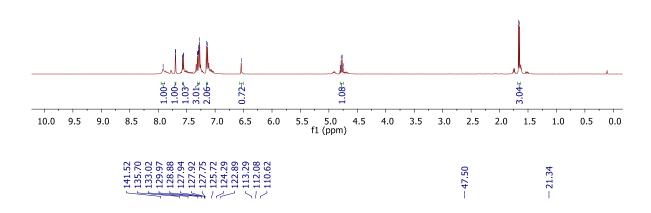
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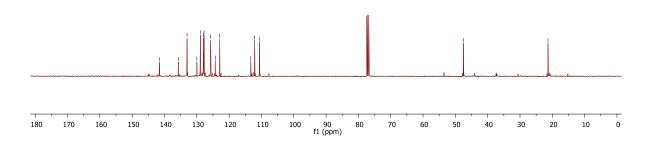






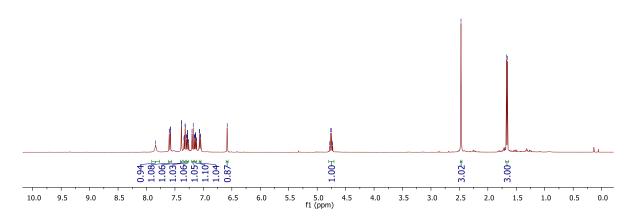






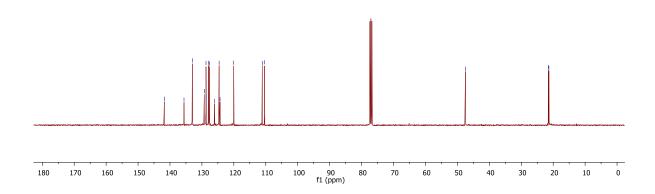


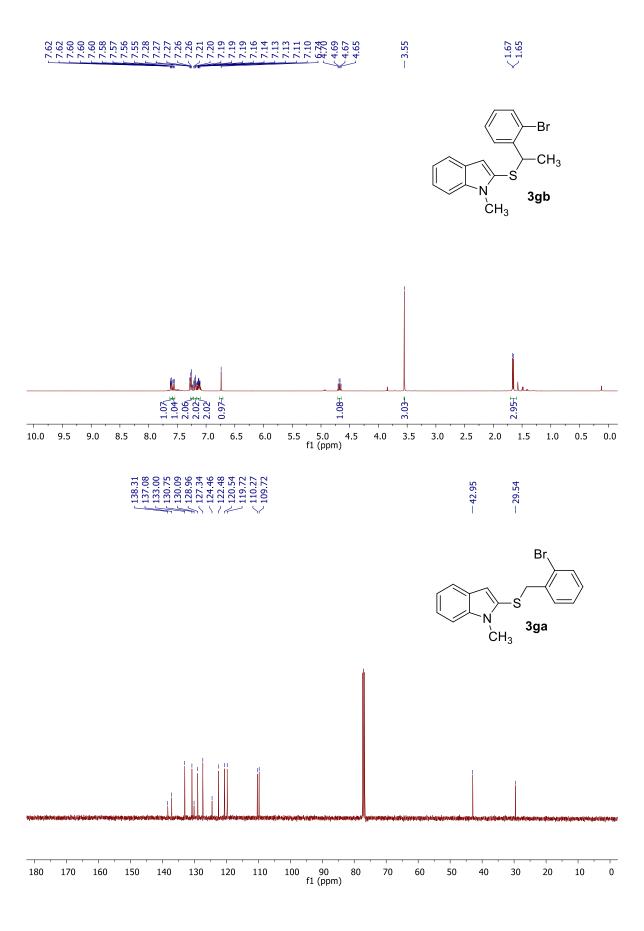
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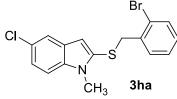


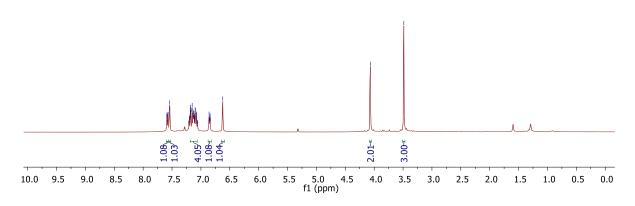
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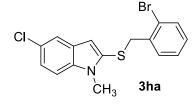
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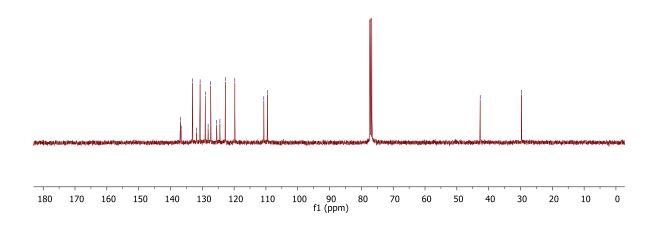


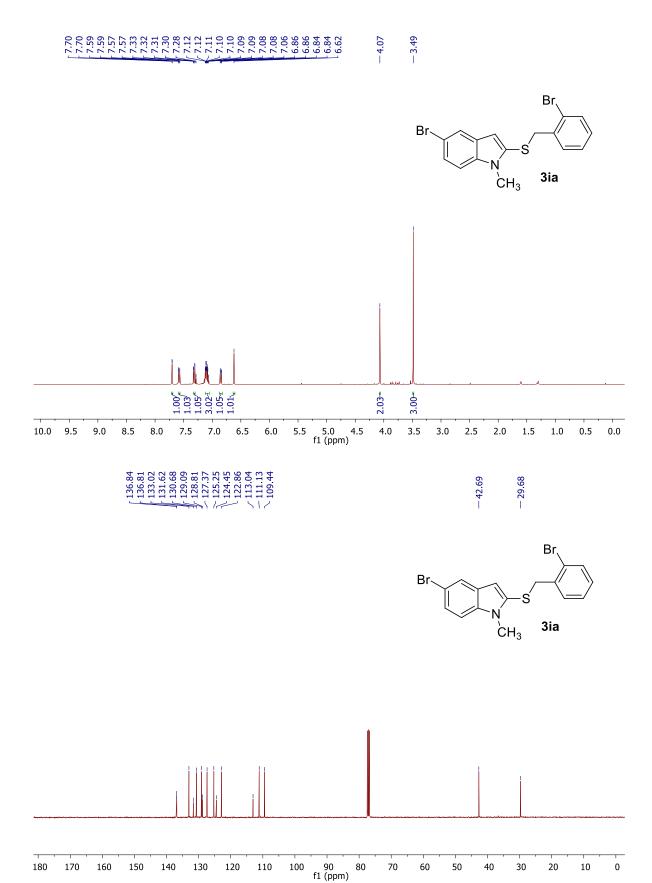


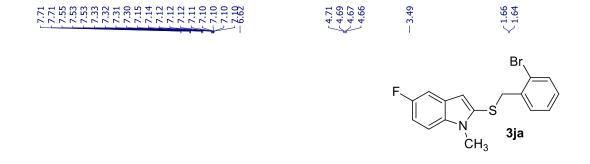


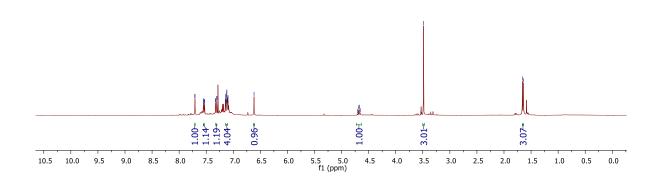


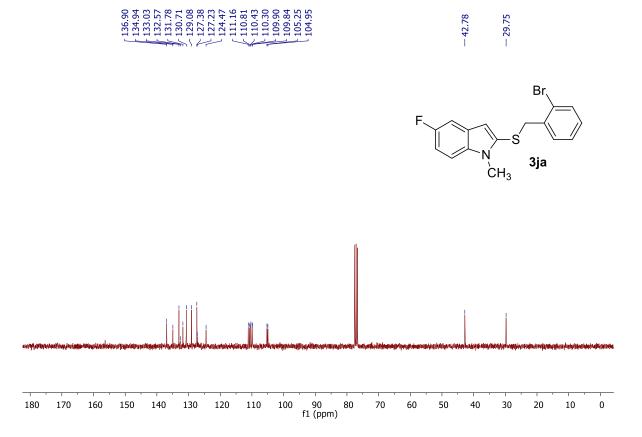
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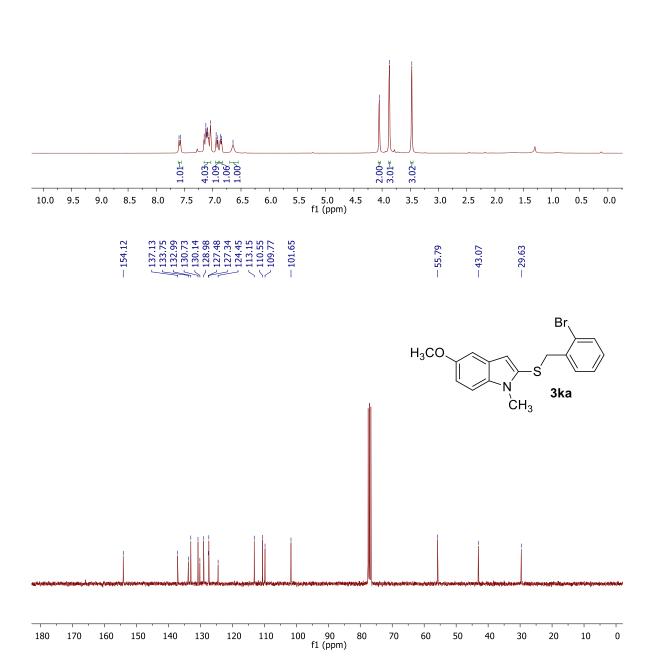


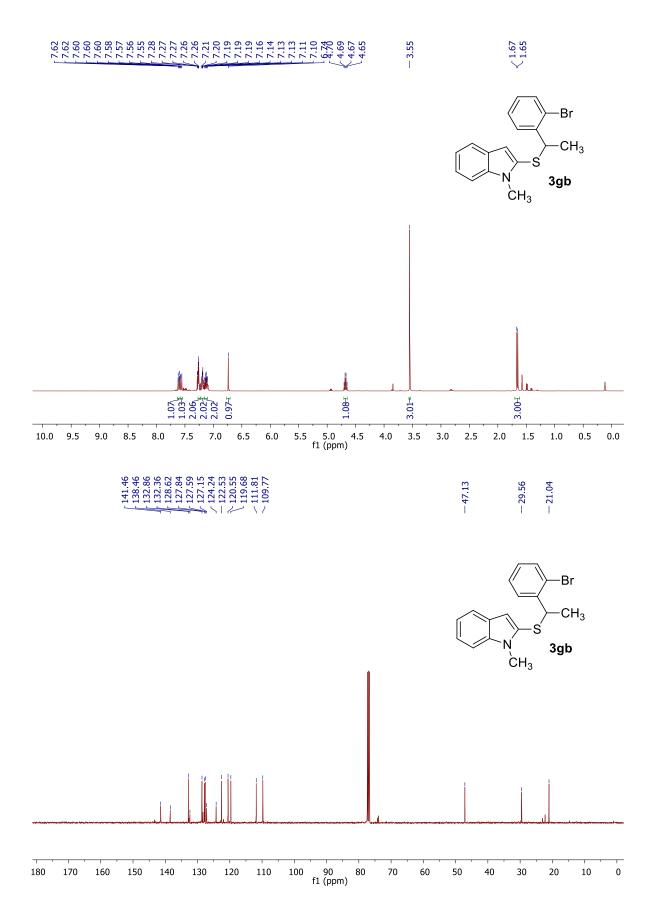


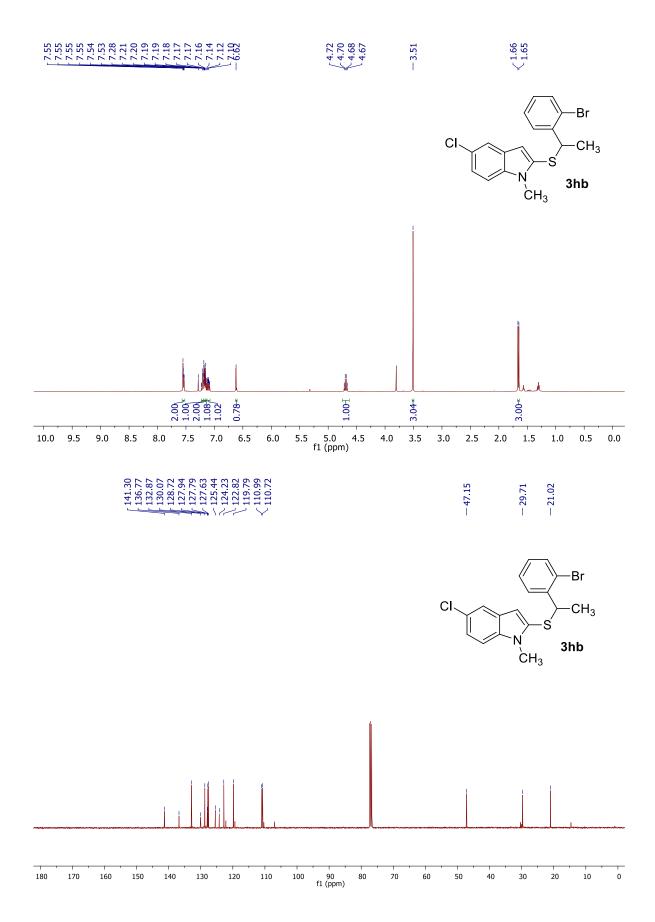


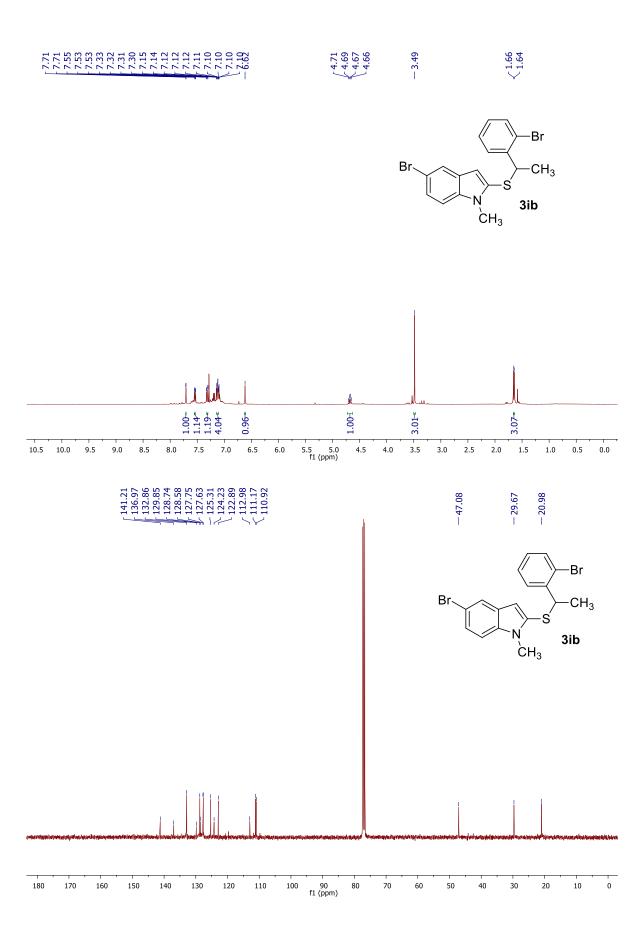


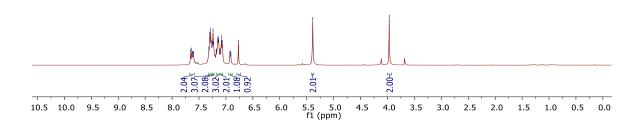


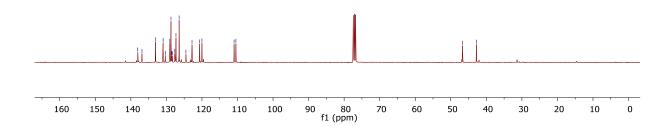


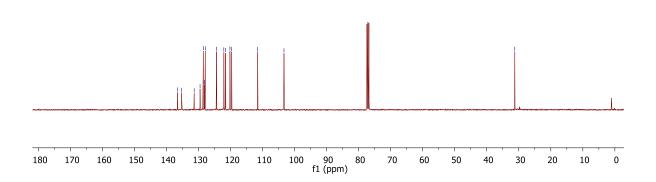


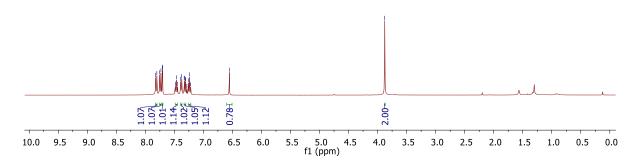






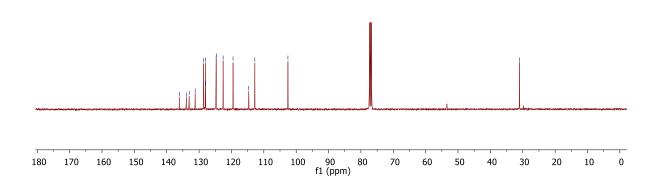


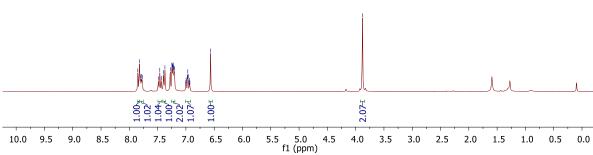


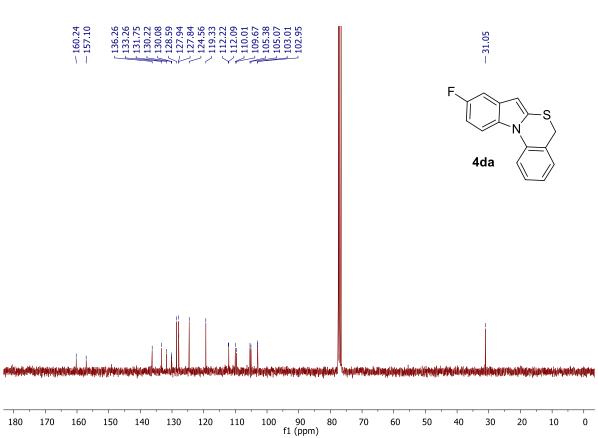


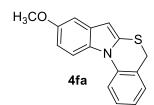
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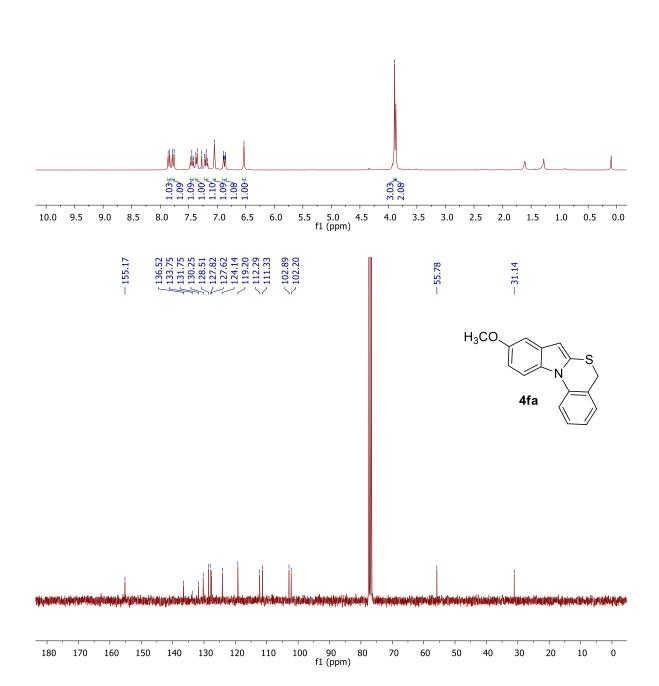
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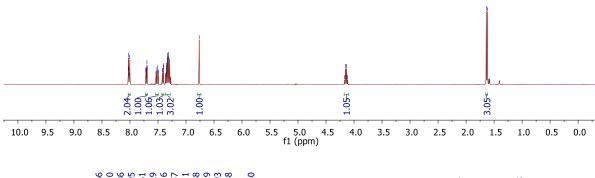






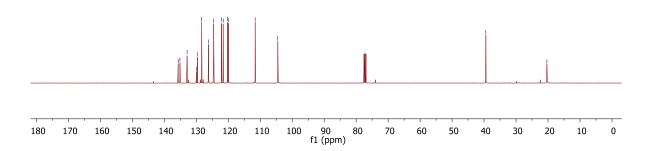


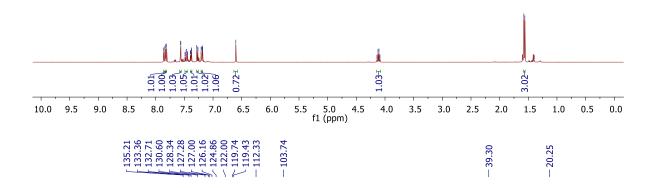
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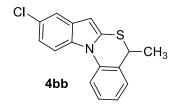


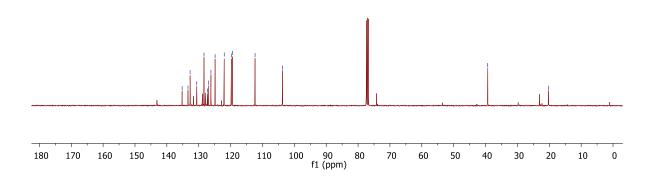
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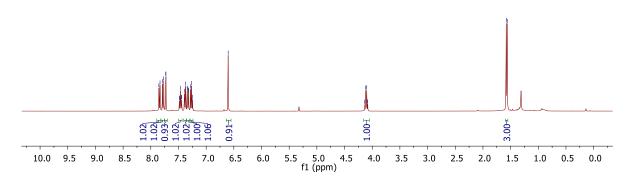
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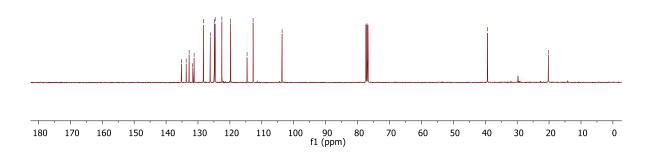






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-39.31 -20.23



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70

60

50

40

30

20

10

0

110

120

100

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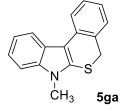
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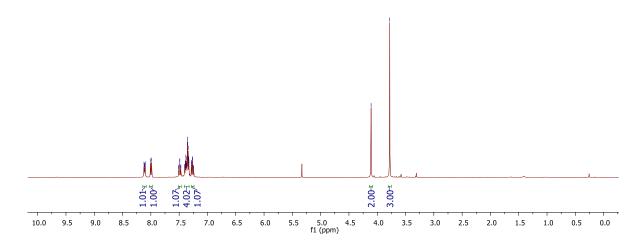
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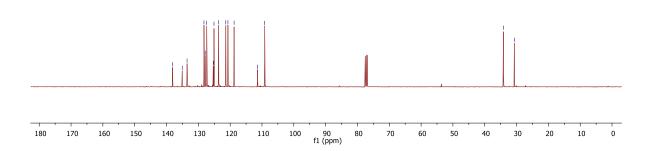
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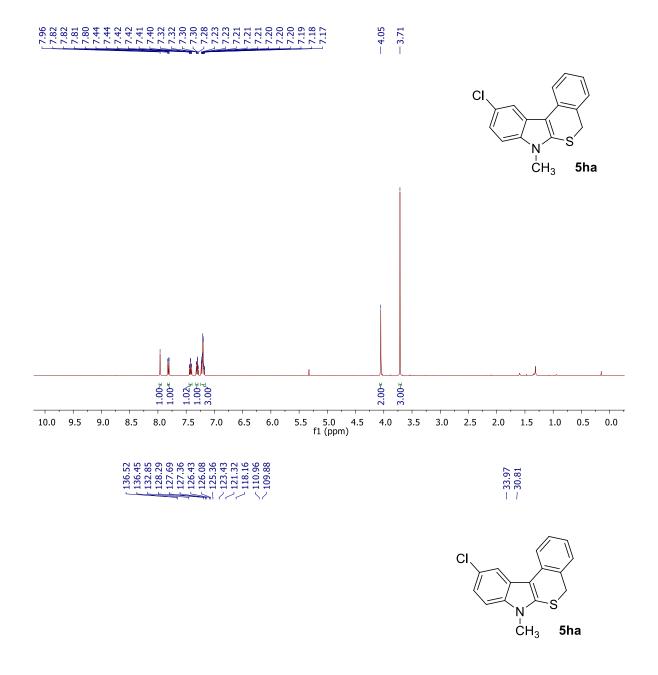


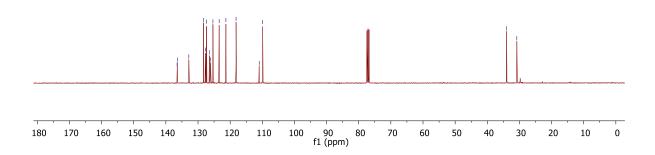


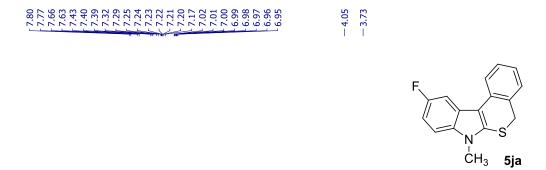
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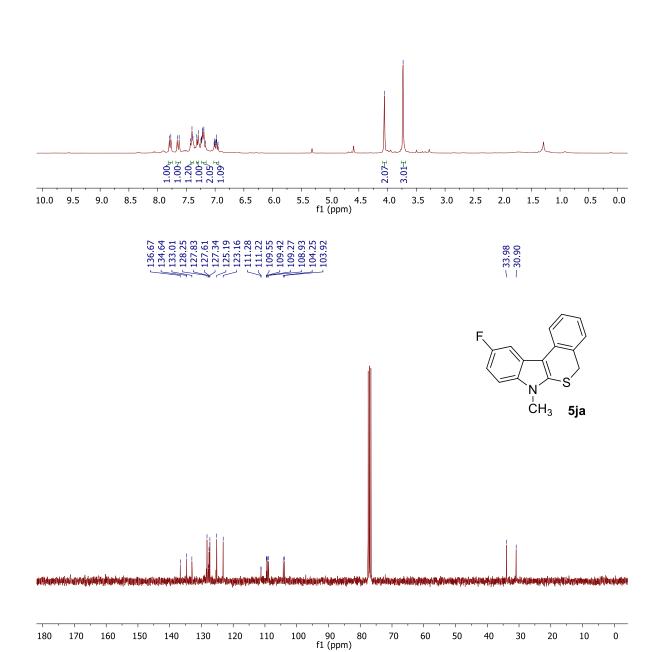
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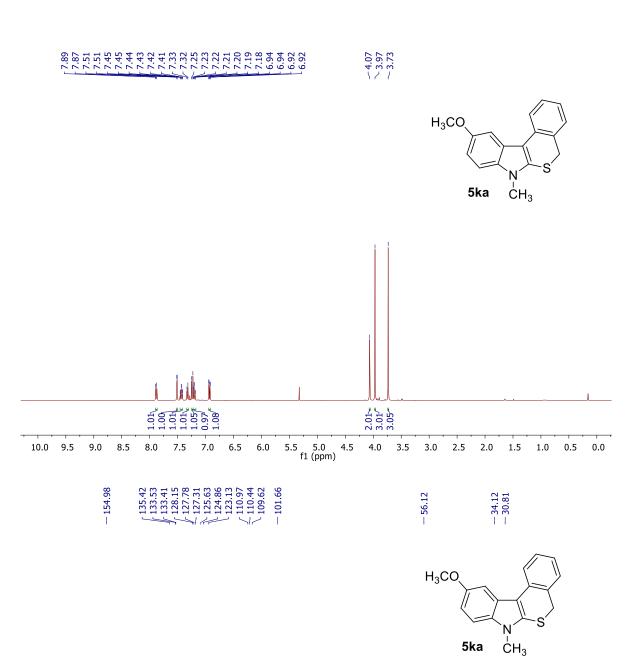


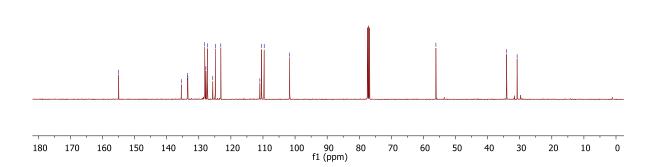












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