

# ChemistryOpen

Supporting Information

## **Selective Synthesis of Tetrahydroisoquinoline and Piperidine Scaffolds by Oxidative Ring Opening/Ring Closing Protocols of Substituted Indenes and Cyclopentenenes**

Anas Semghouli, László Drahos, Jianlin Han, Loránd Kiss,\* and Melinda Nonn\*

## SUPPORTING INFORMATION

### Selective synthesis of tetrahydroisoquinoline and piperidine scaffolds by oxidative ring opening/ring closing protocols of substituted indene and cyclopentenones

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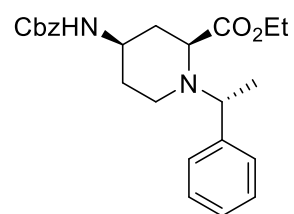
<sup>4</sup>*Jiangsu Co-Innovation Center of Efficient Processing and Utilization of Forest Resources, College of Chemical Engineering, Nanjing Forestry University, Nanjing 210037, China*

E-mail: [nonn.melinda@ttk.hu](mailto:nonn.melinda@ttk.hu)

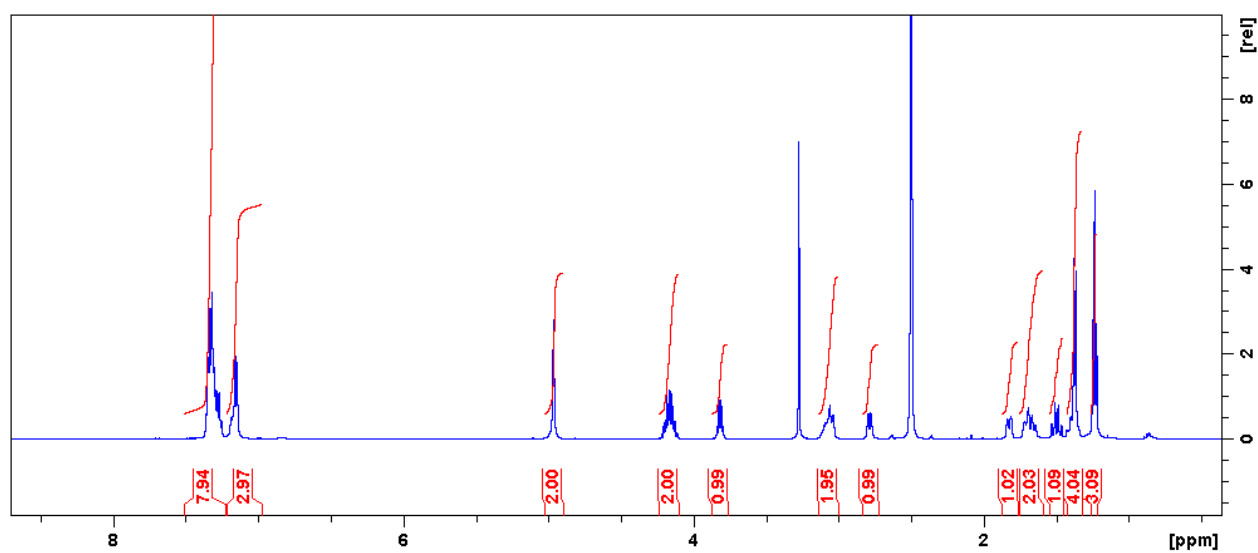
[kiss.lorand@ttk.hu](mailto:kiss.lorand@ttk.hu); [kiss.lorand00@gmail.com](mailto:kiss.lorand00@gmail.com)

Tel: +36-30-1600354

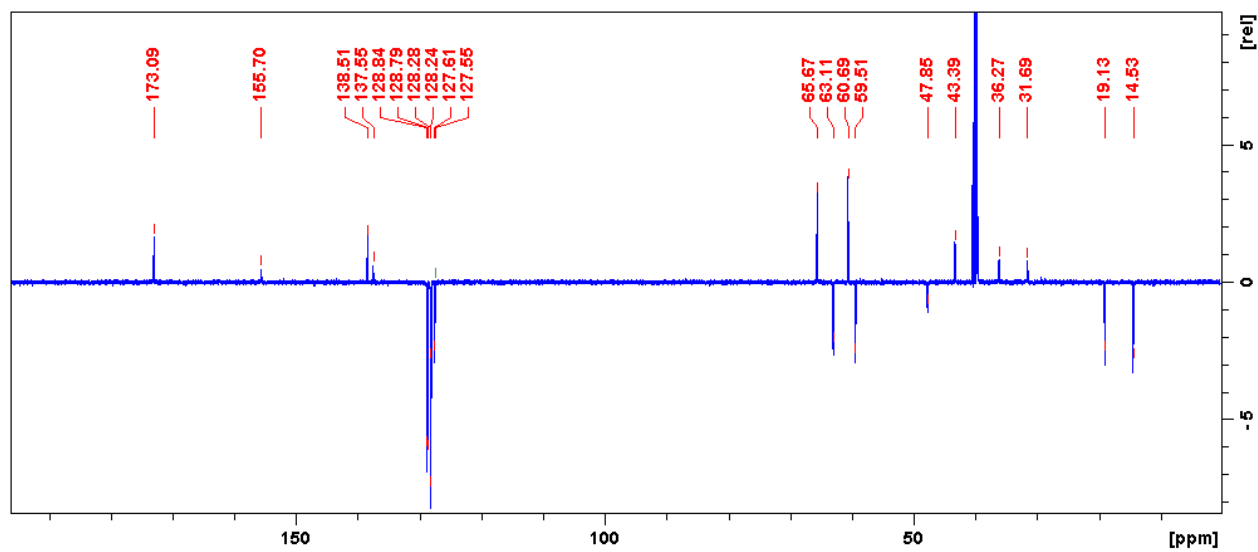
## NMR spectra of the newly synthesized compounds

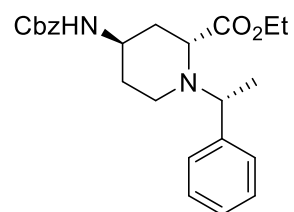
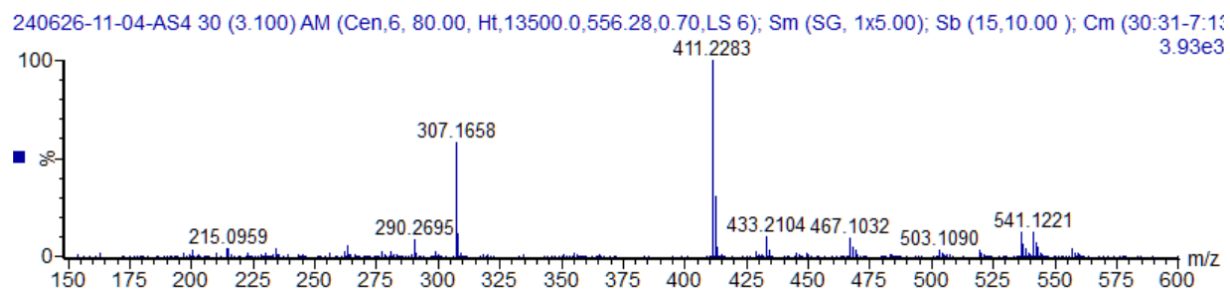


**Ethyl (2S, 4R)-4-(((benzyloxy)carbonyl)amino)-1-((R)-1-[phenylethyl])piperidine-2 carboxylate, 13**

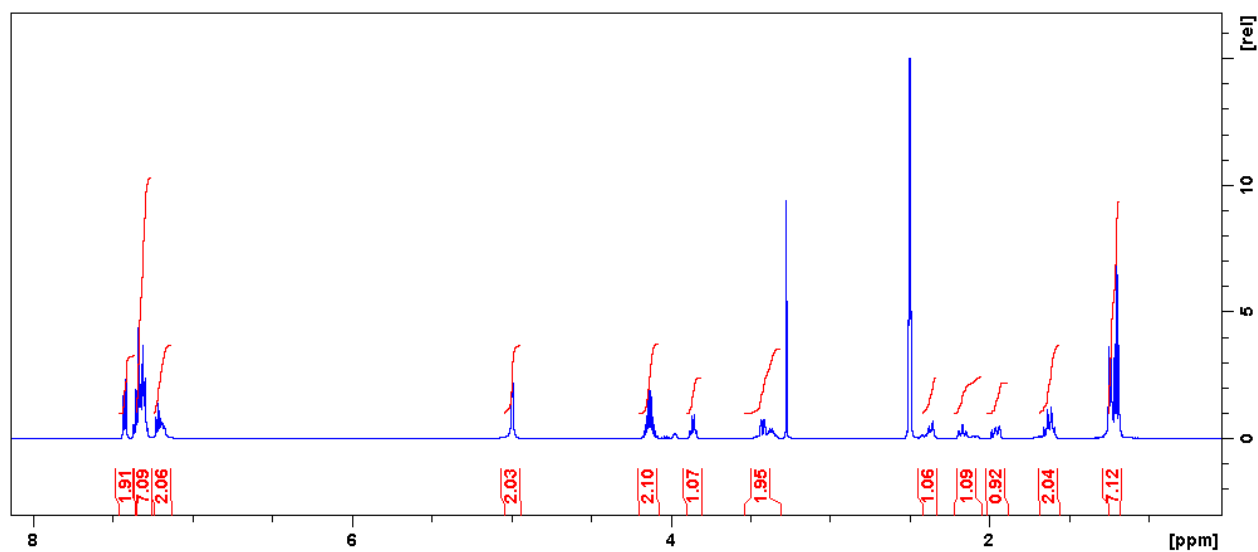


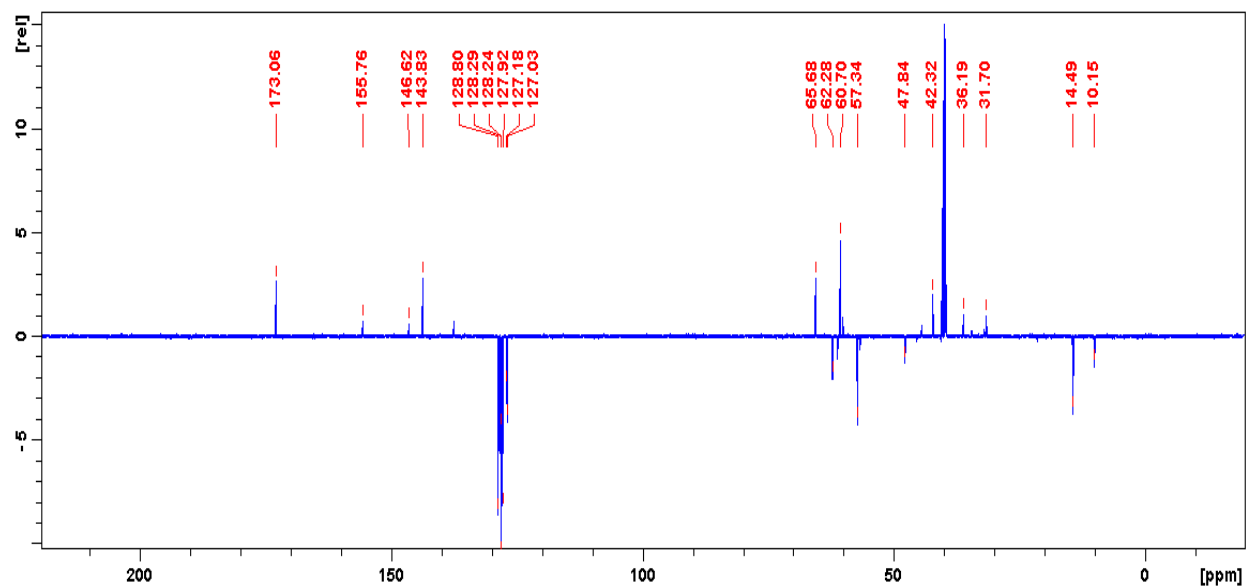
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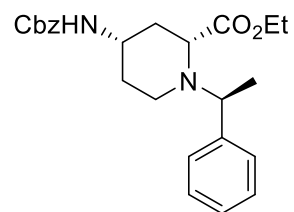
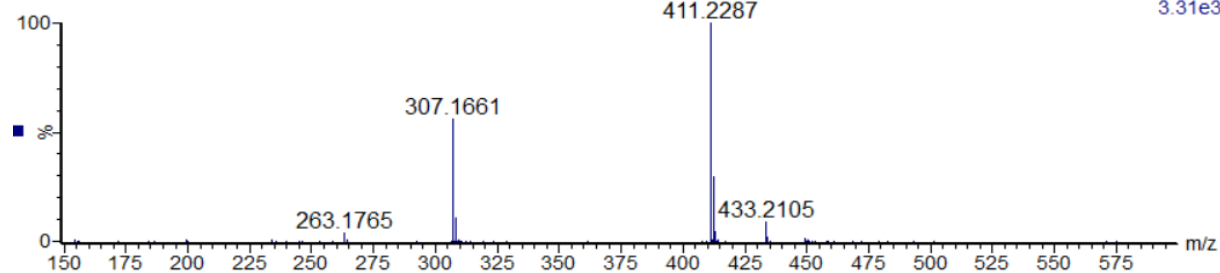


**Ethyl (2R, 4R)-4-(((benzyloxy)carbonyl)amino)-1-((R)-1-[phenylethyl]piperidine-2-carboxylate, 14**

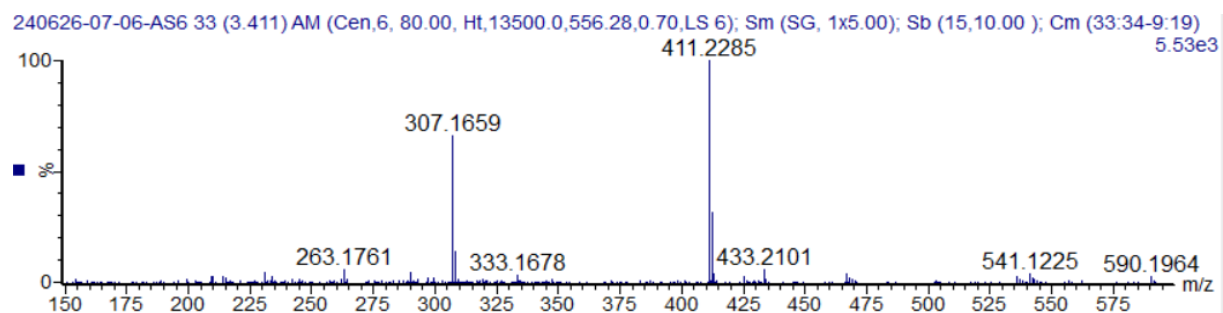
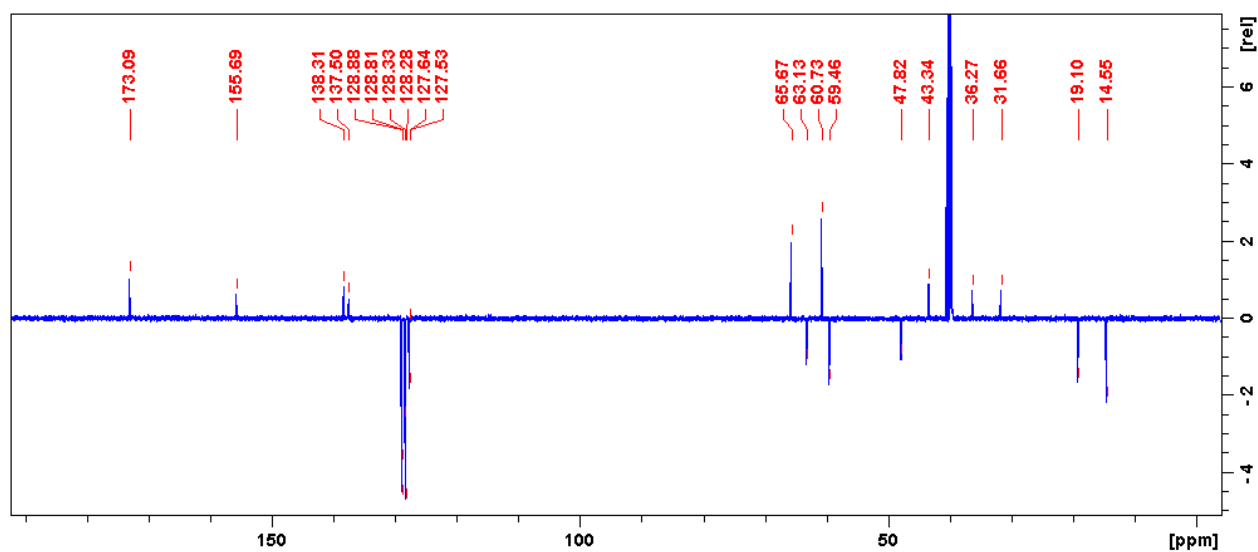
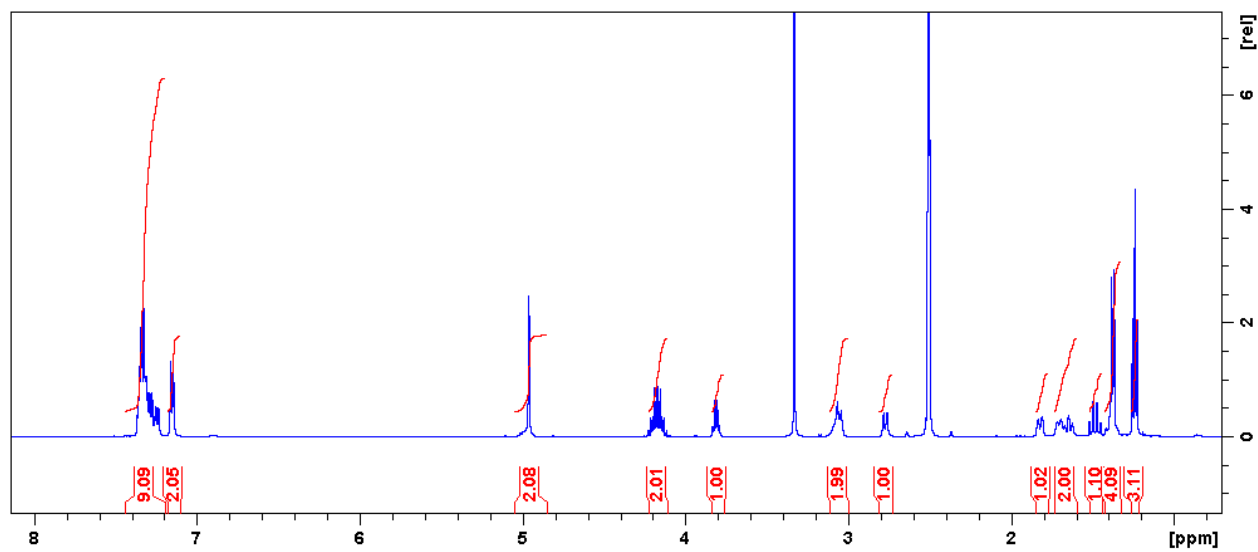


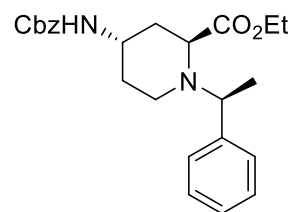


240701-03-05-AS5 33 (3.411) AM (Cen,6, 80.00, Ht,13500.0,556.28,0.70,LS 6); Sm (SG, 1x5.00); Sb (15,10.00 ); Cm (33:35-4:13) 3.31e3

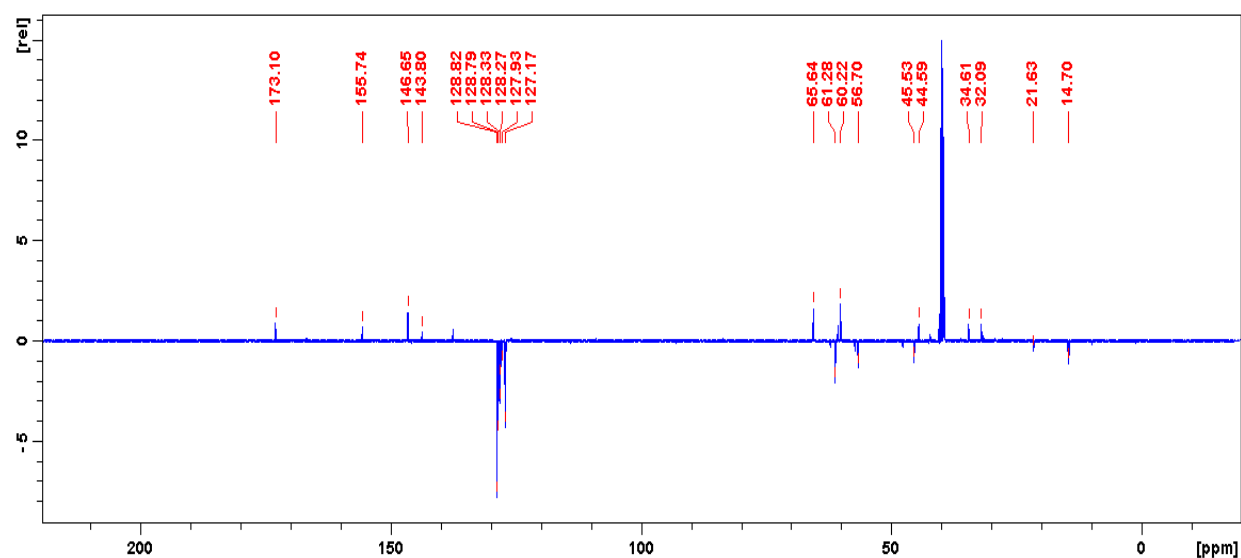
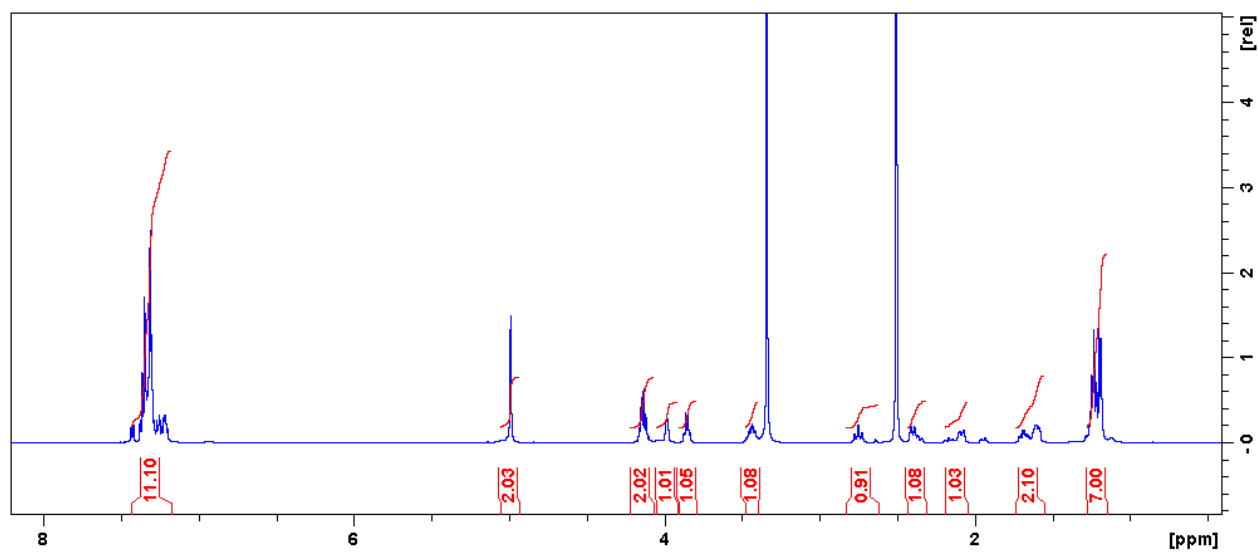


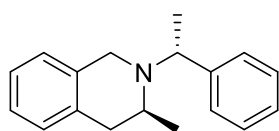
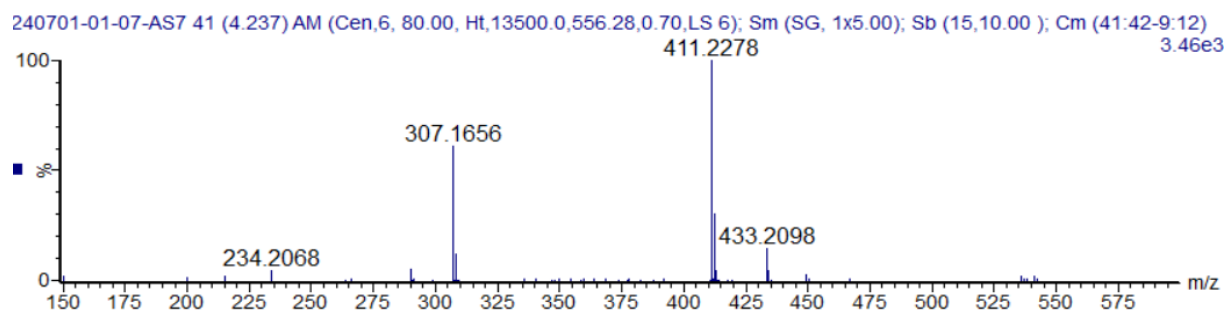
**Ethyl (2R, 4S)-4-(((benzyloxy)carbonyl)amino)-1-((S)-1-phenylethyl)piperidine-2-carboxylate, 15**



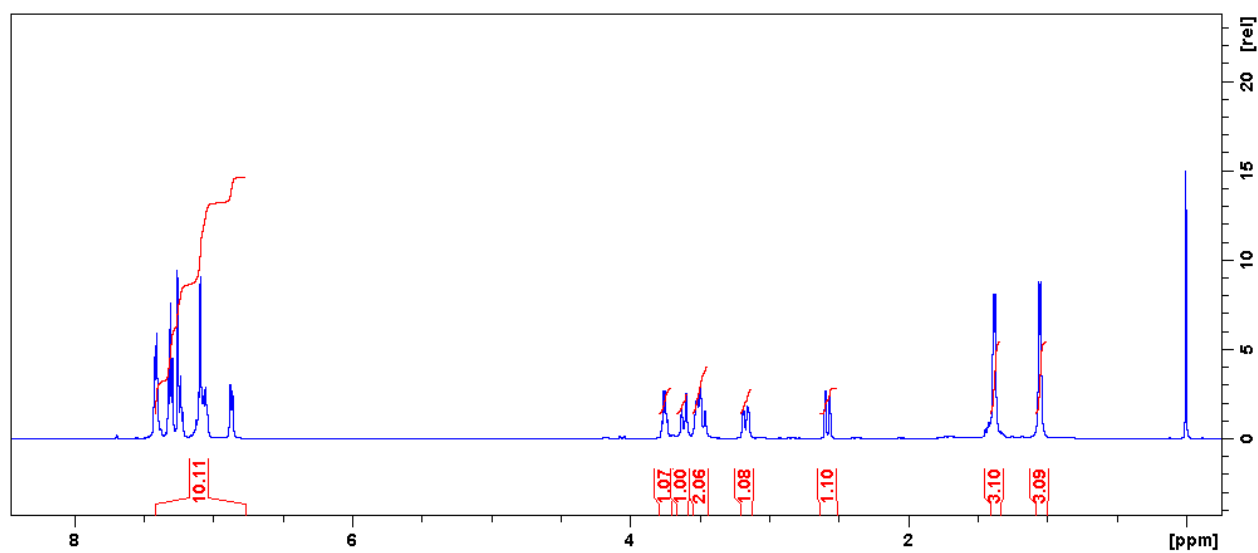


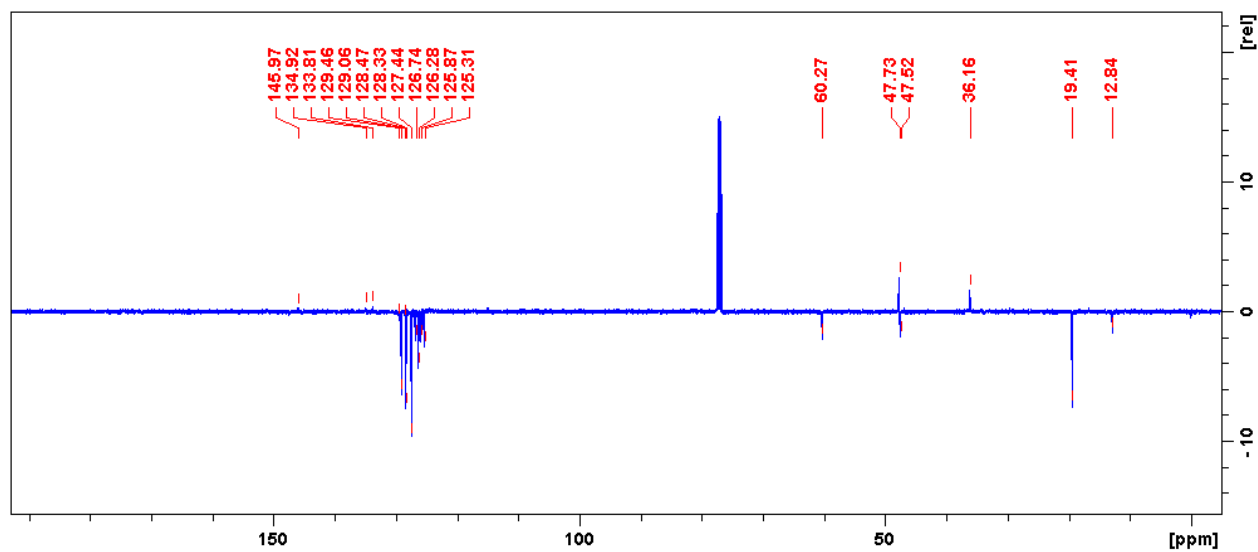
**Ethyl (2*S*, 4*S*)-4-(((benzyloxy)carbonyl)amino)-1-((*S*)-1-phenylethyl)piperidine-2-carboxylate, 16**



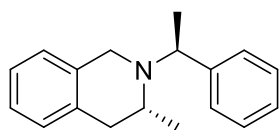
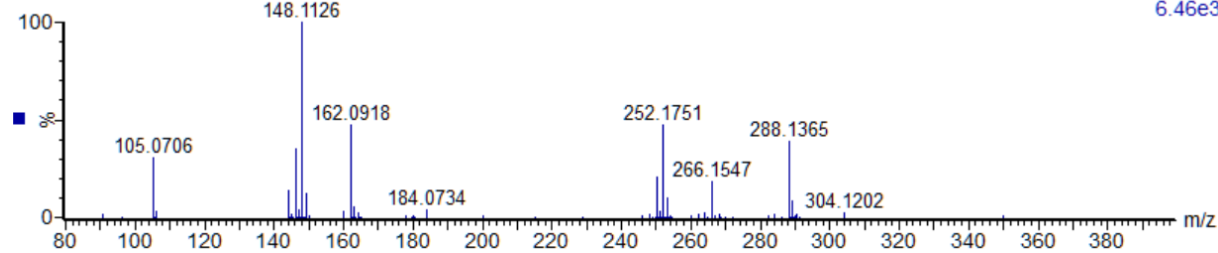


**(S)-3-methyl-2-((R)-1-phenylethyl)-1,2,3,4-tetrahydroisoquinoline, 19**

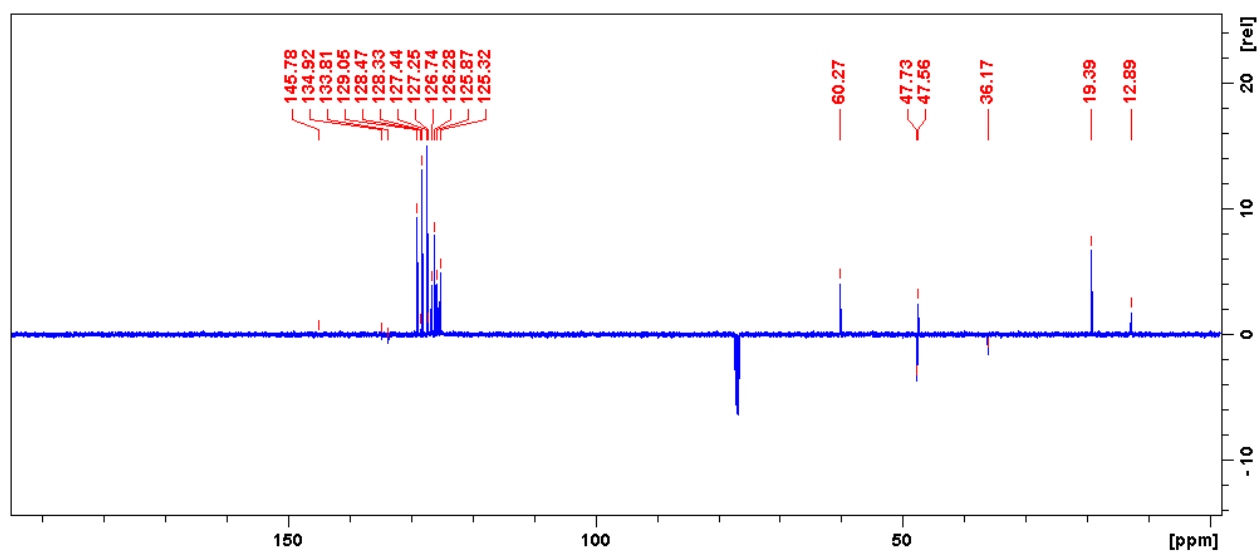
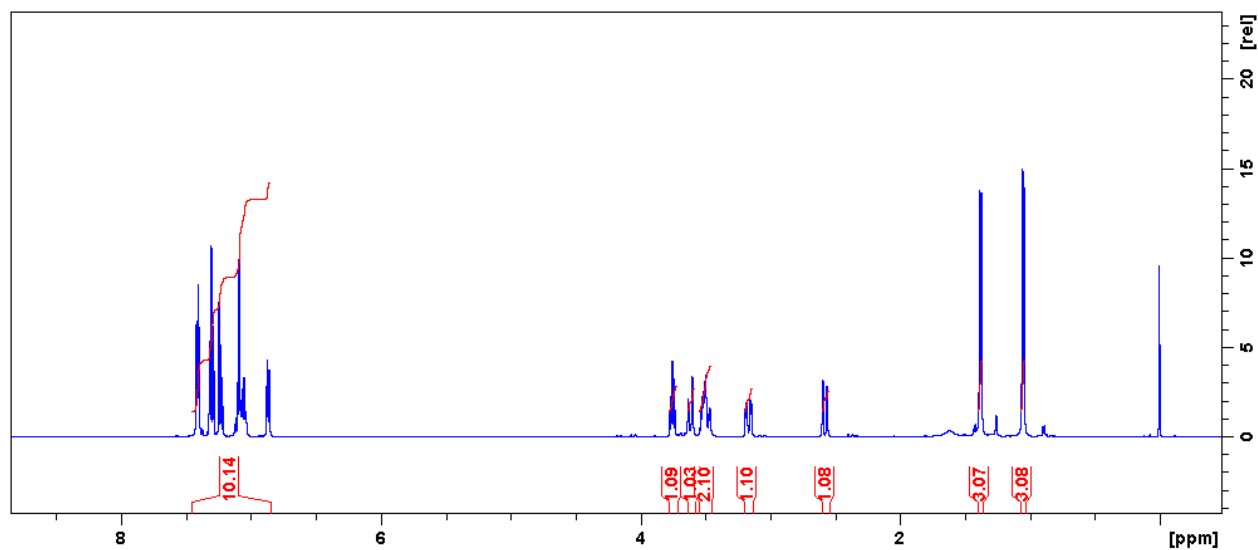




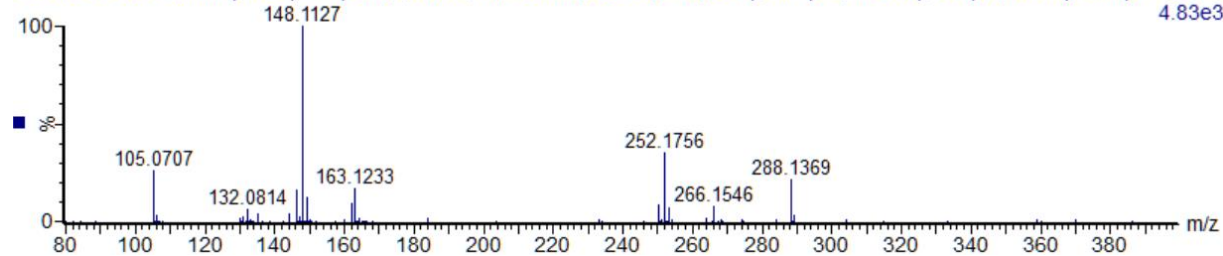
240626-10-02-AS2 66 (6.821) AM (Cen,6, 80.00, Ht,13500.0,556.28,0.70,LS 6); Sm (SG, 1x5.00); Sb (15,10.00 ); Cm (66:69-8:1) 6.46e3

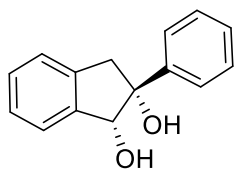


**(R)-3-methyl-2-((S)-1-phenylethyl)-1,2,3,4-tetrahydroisoquinoline, 20**

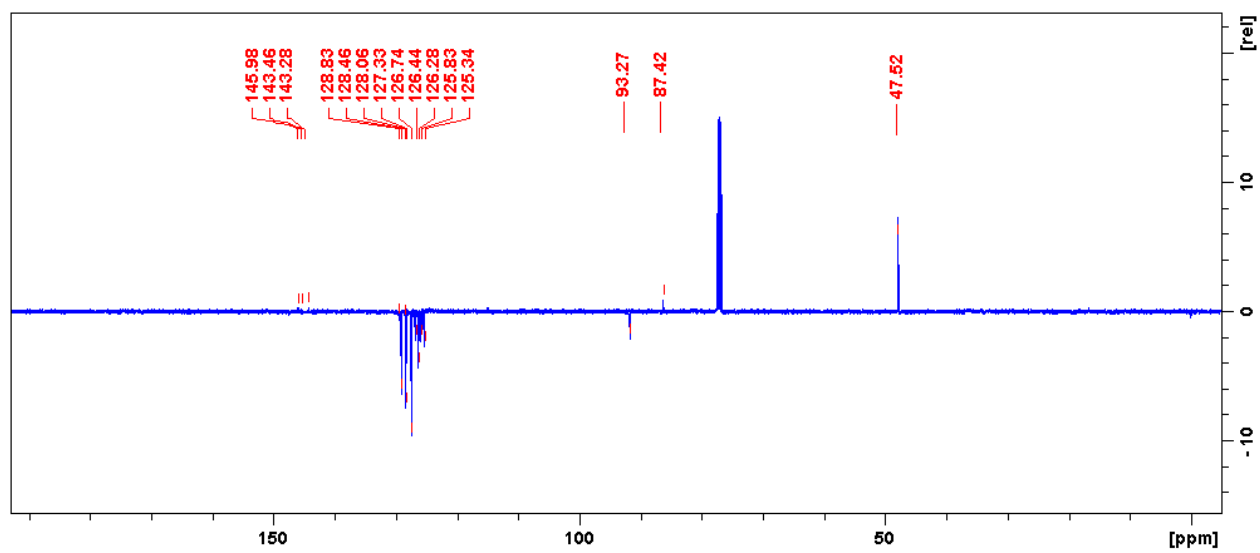
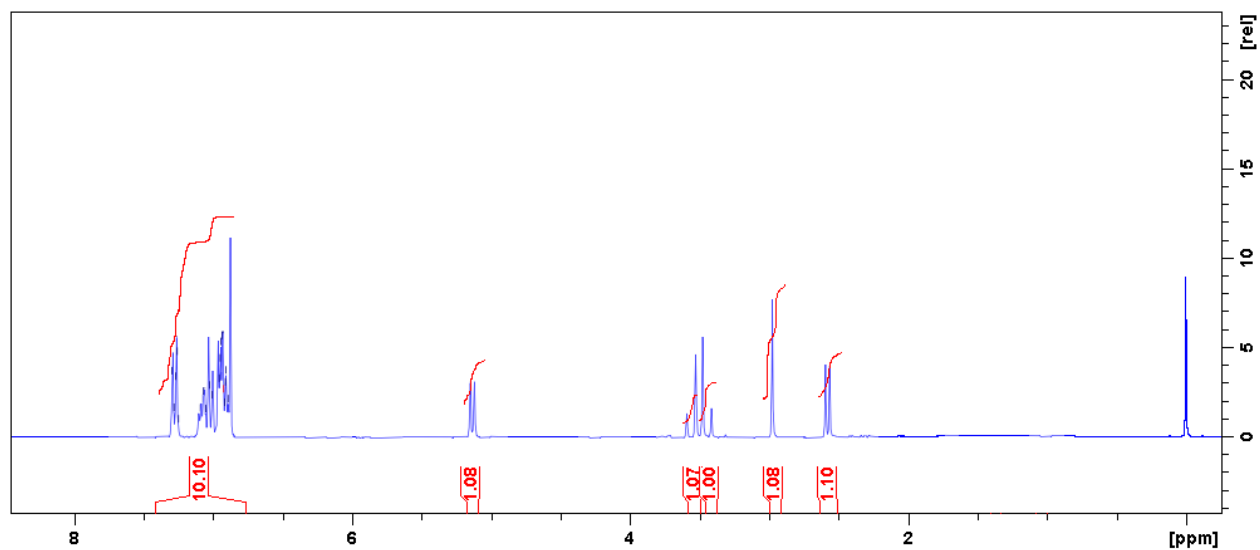


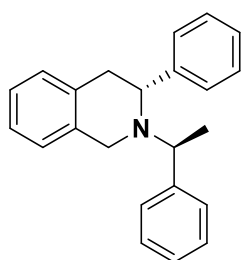
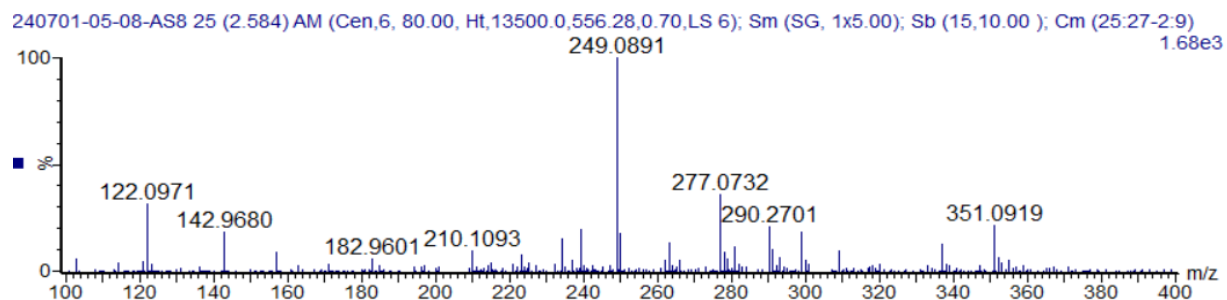
240626-08-03-AS3 37 (3.824) AM (Cen,6, 80.00, Ht,13500.0,556.28,0.70,LS 6); Sm (SG, 1x5.00); Sb (15,10.00 ); Cm (37:39-4:14 4.83e3



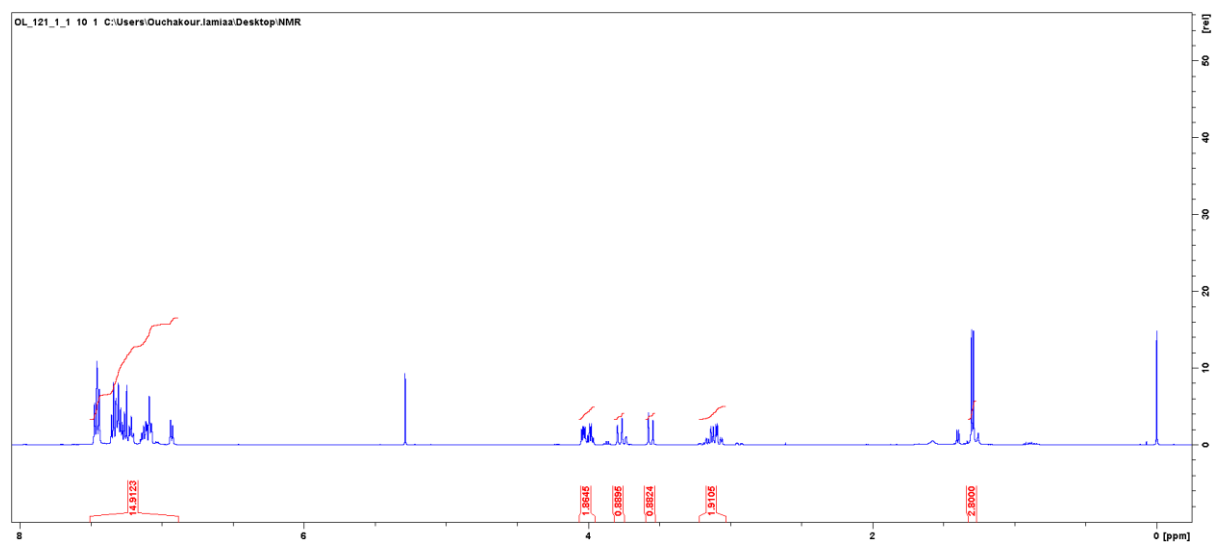


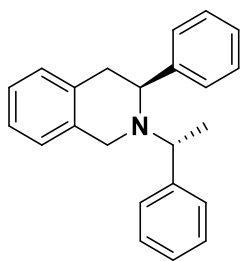
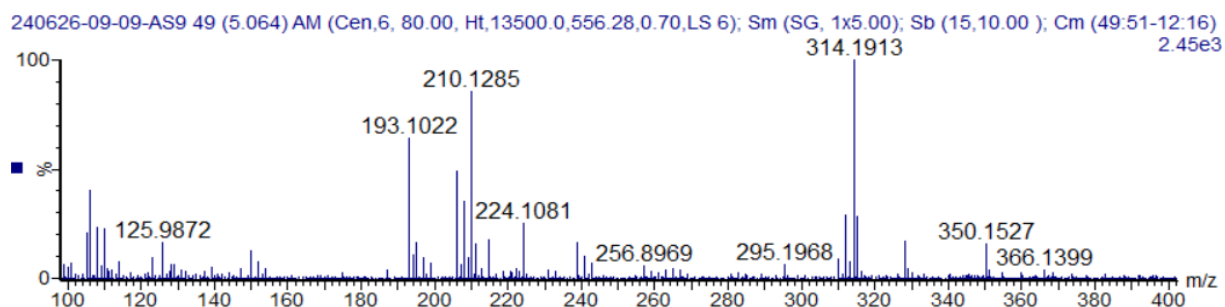
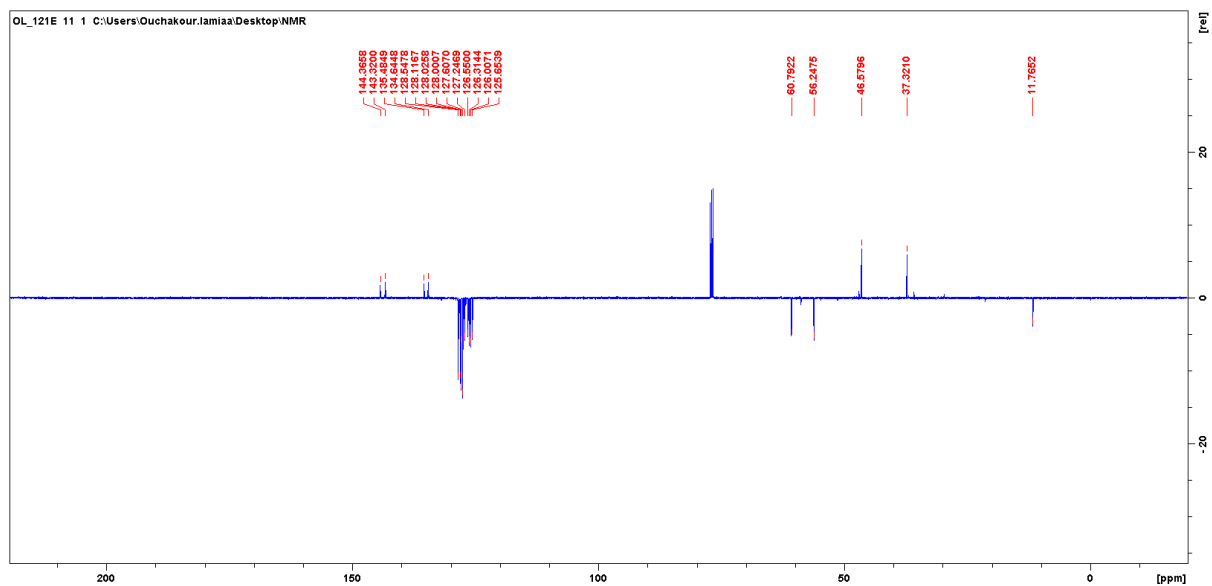
**(1R, 2R)-2-phenyl-2,3-dihydro-1H-indene-1,2-diol, 22**



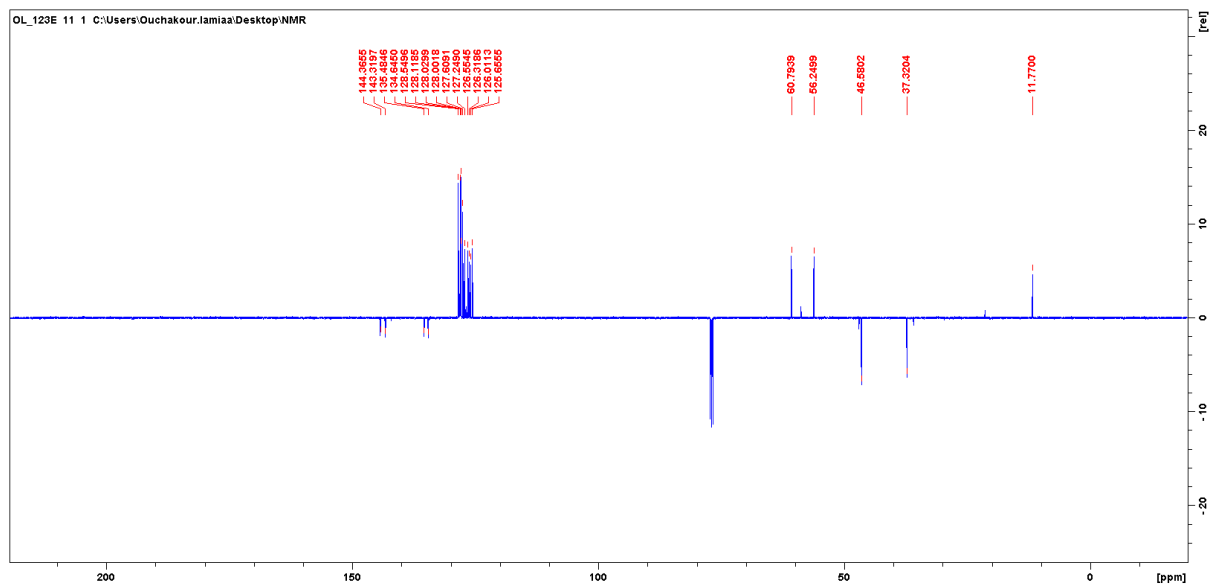
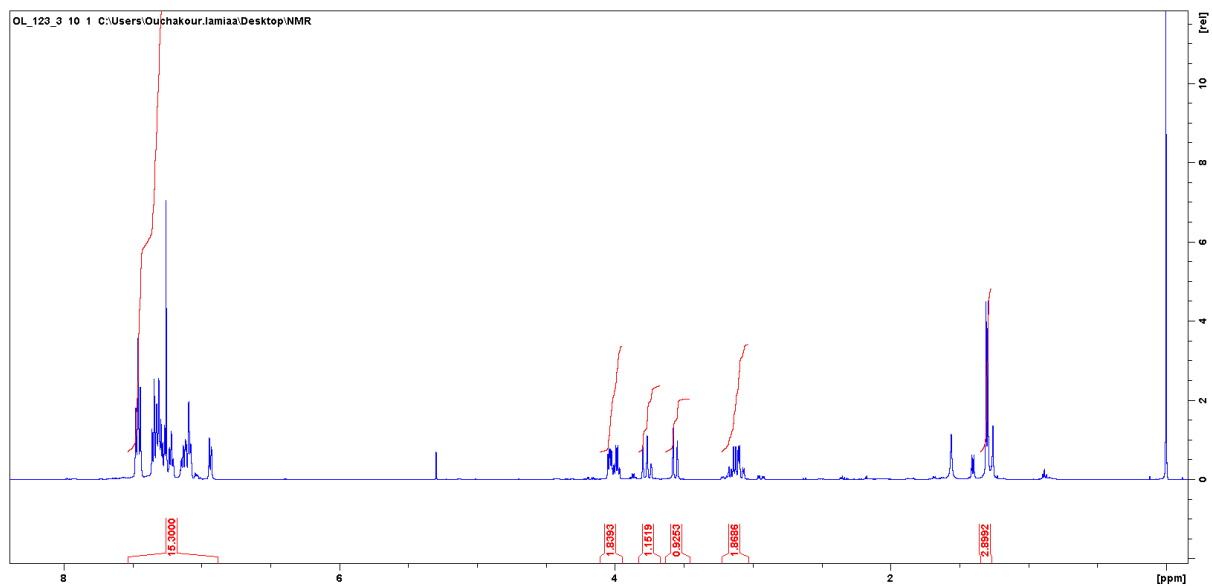


**(R)-3-phenyl-2-((S)-1-phenylethyl)-1,2,3,4-tetrahydroisoquinoline, 23**





**(S)-3-phenyl-2-((R)-1-phenylethyl)-1,2,3,4-tetrahydroisoquinoline, 24**



240701-02-10-AS10 30 (3.100) AM (Cen,6, 80.00, Ht,13500.0,556.28,0.70,LS 6); Sm (SG, 1x5.00); Sb (15,10.00 ); Cm (30:31-6: 4.20e3

