

**Supporting Information**  
**for**  
**Convergent synthesis of a tetrasaccharide repeating unit of the O-**  
**specific polysaccharide from the cell wall lipopolysaccharide of**  
***Azospirillum brasilense* strain Sp7**

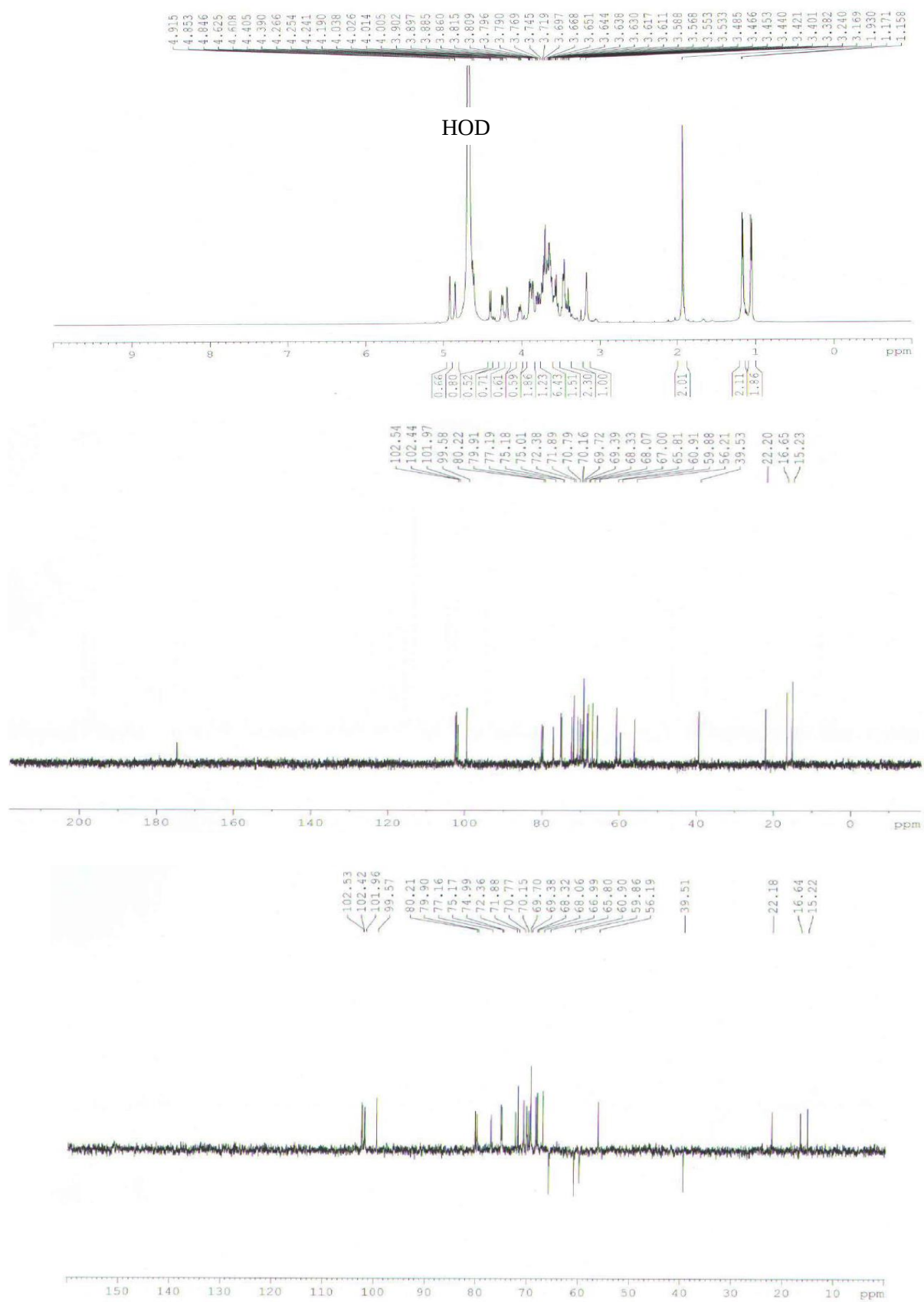
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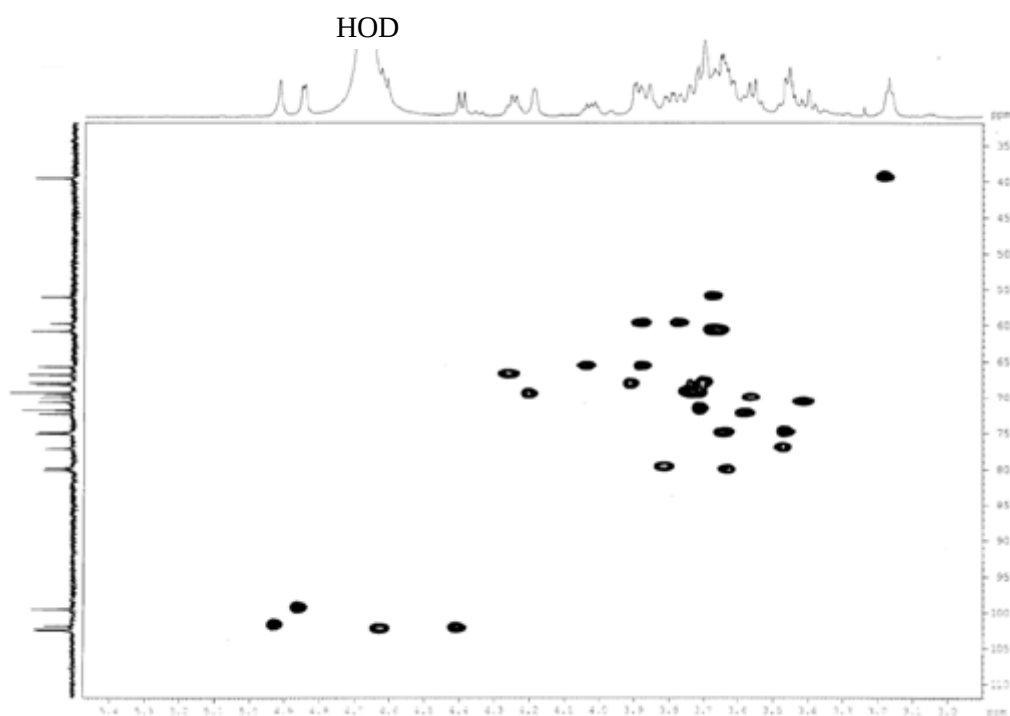
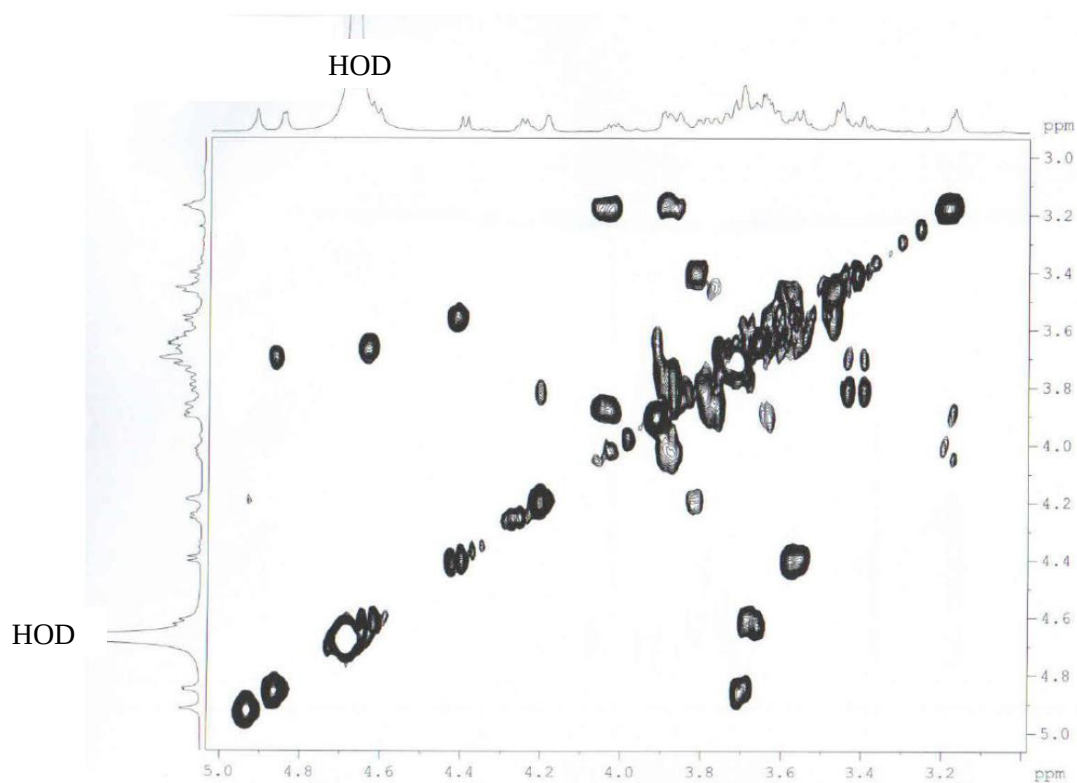
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\*Corresponding author

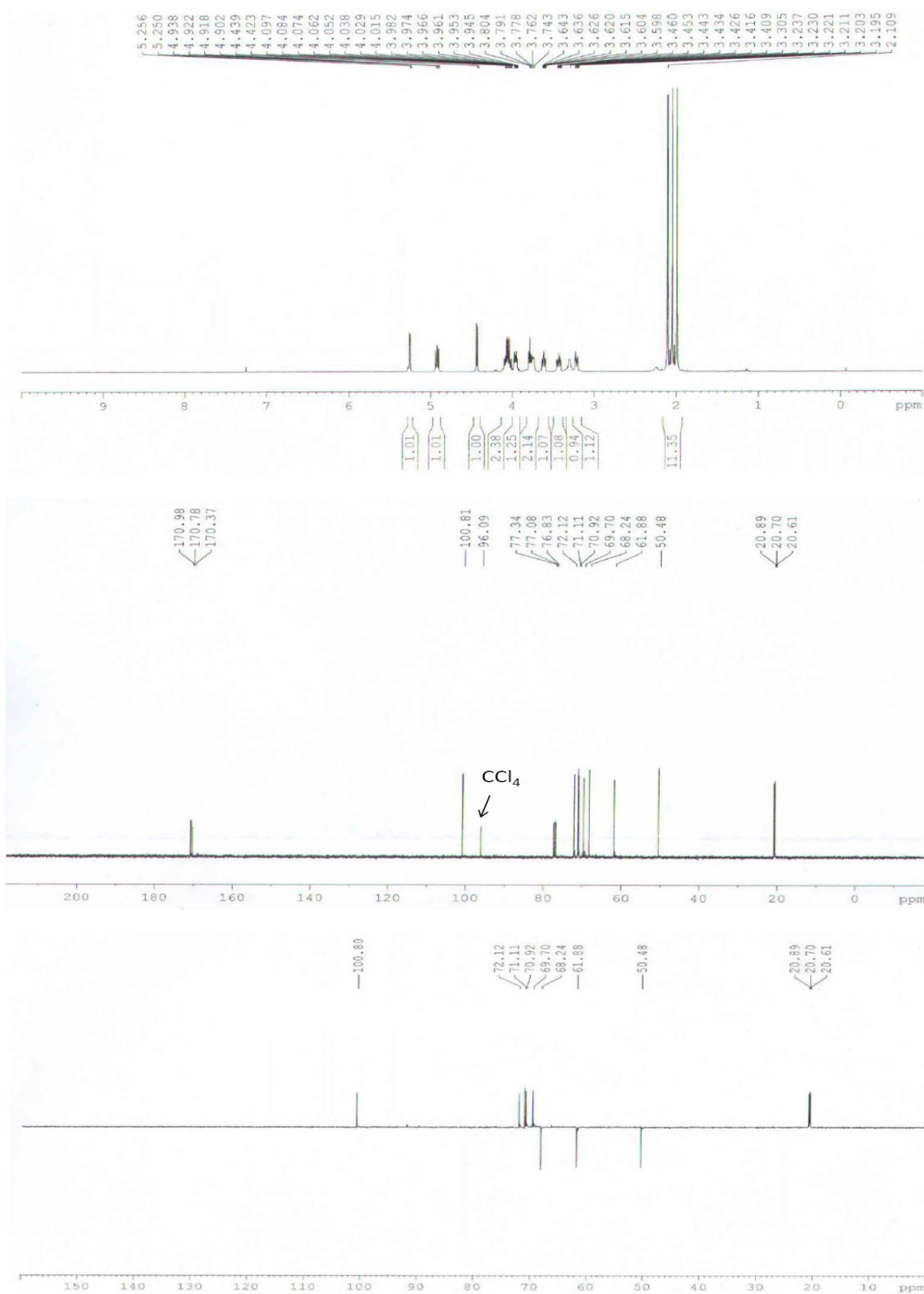
1D and 2D NMR spectra of compounds **1, 2, 7, 8, 9, 10**



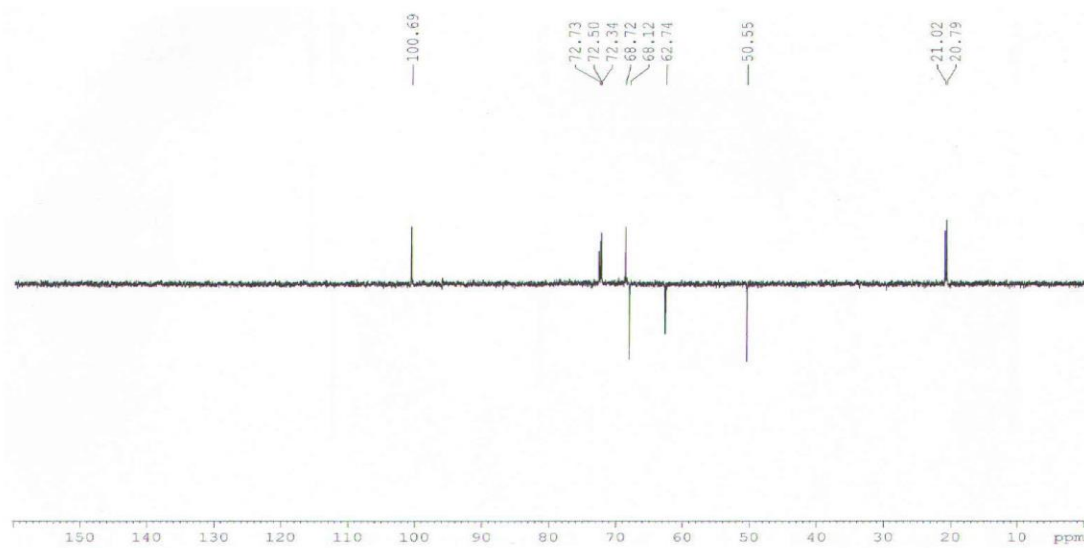
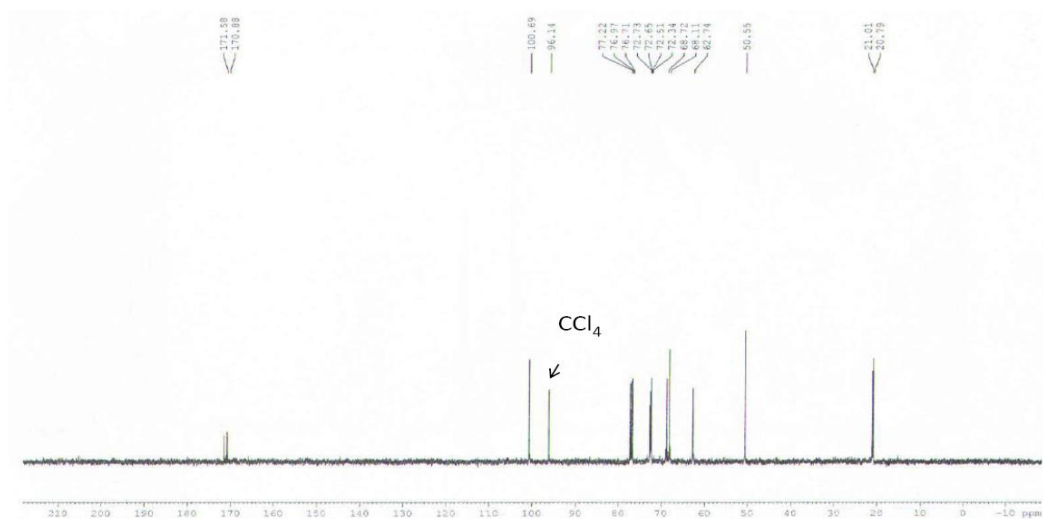
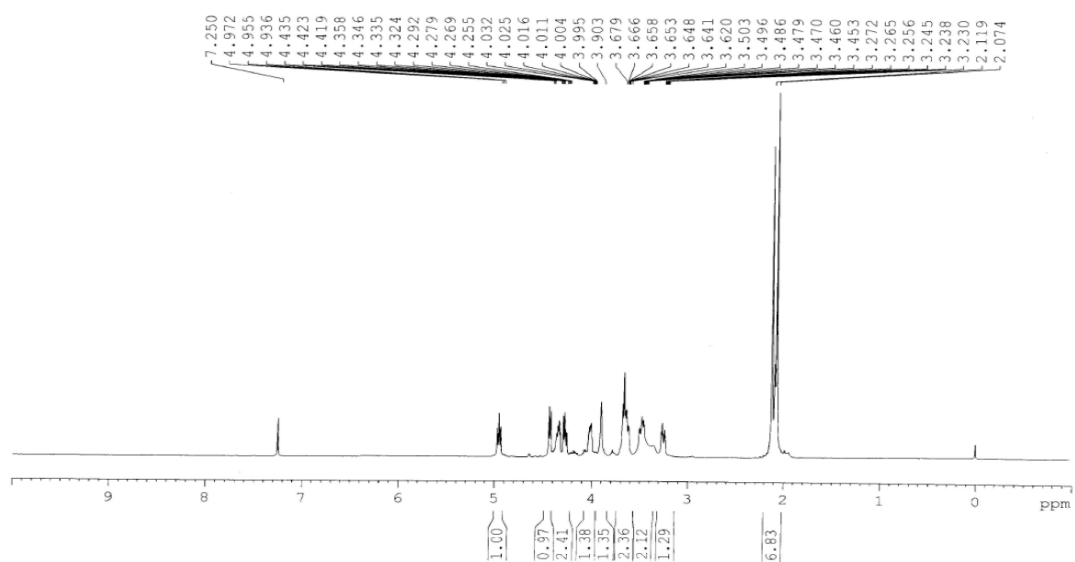
<sup>1</sup>H, <sup>13</sup>C and DEPT 135 NMR spectra of 2-aminoethyl ( $\alpha$ -L-fucopyranosyl)-(1 $\rightarrow$ 4)-(2-acetamido-2-deoxy- $\beta$ -D-glucopyranoside)-(1 $\rightarrow$ 3)-( $\alpha$ -L-rhamnopyranosyl)-(1 $\rightarrow$ 3)- $\beta$ -D-galactopyranoside (**1**) (D<sub>2</sub>O).



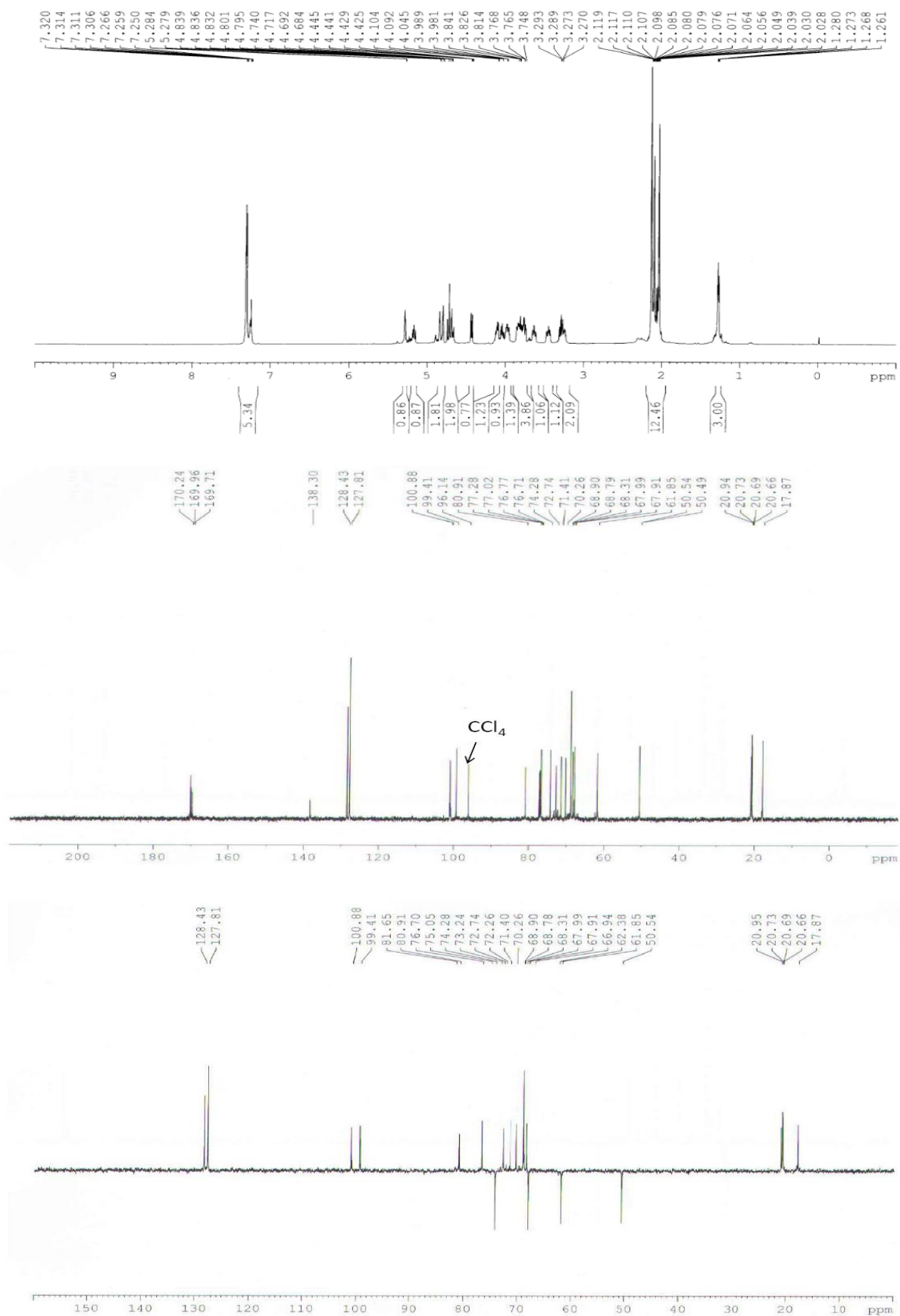
2D COSY and HSQC NMR spectra (selected regions) of 2-aminoethyl ( $\alpha$ -L-fucopyranosyl)-(1 $\rightarrow$ 4)-(2-acetamido-2-deoxy- $\beta$ -D-glucopyranoside)-(1 $\rightarrow$ 3)-( $\alpha$ -L-rhamnopyranosyl)-(1 $\rightarrow$ 3)- $\beta$ -D-galactopyranoside (**1**) (D<sub>2</sub>O).



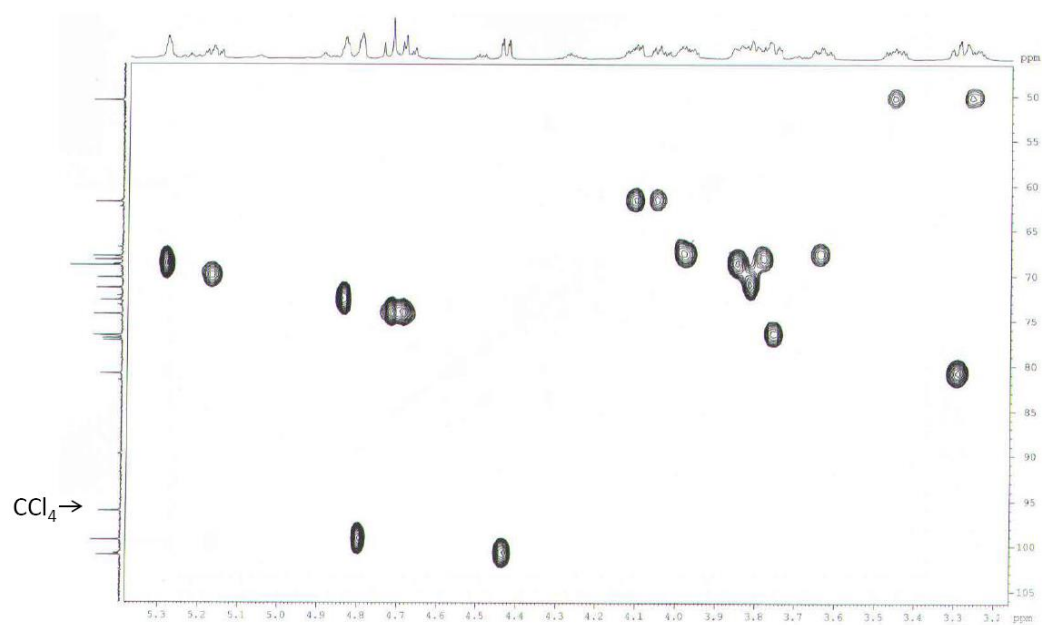
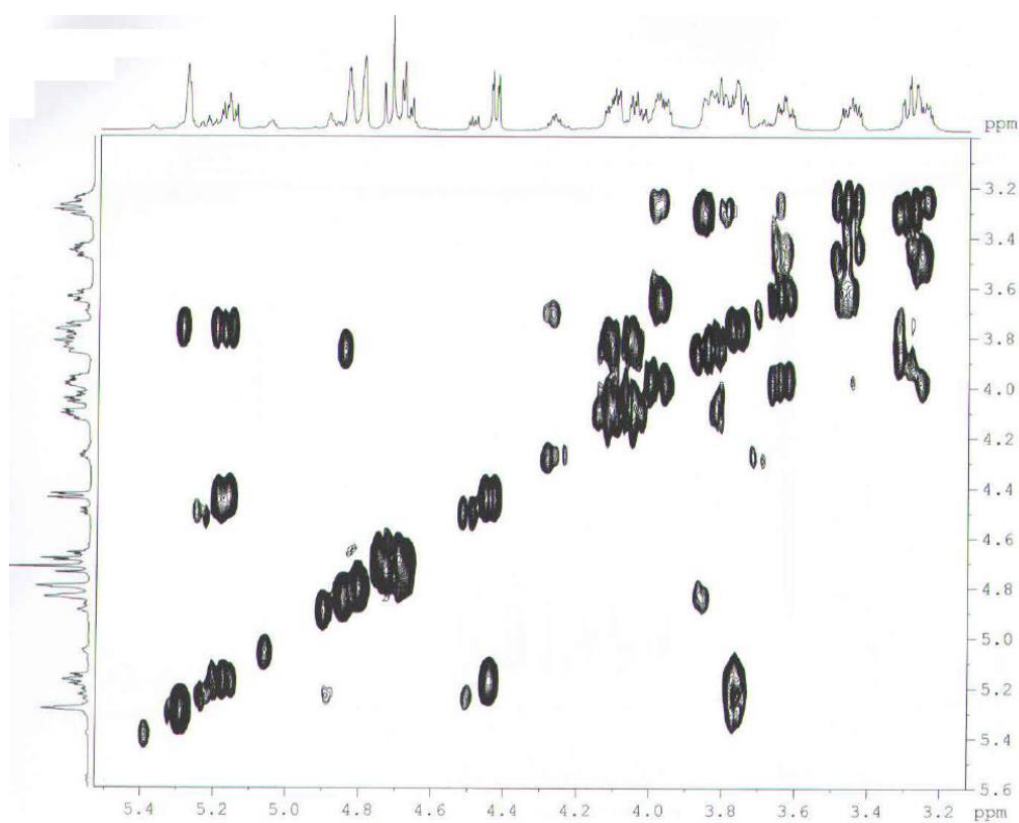
<sup>1</sup>H, <sup>13</sup>C and DEPT 135 NMR spectra of 2-azidoethyl 2,4,6-tri-O-acetyl-β-D-galactopyranoside (**2**) (CDCl<sub>3</sub> + CCl<sub>4</sub>).



<sup>1</sup>H, <sup>13</sup>C and DEPT 135 NMR spectra of 2-azidoethyl 2,6-di-O-acetyl-β-D-galactopyranoside (7) (CDCl<sub>3</sub> + CCl<sub>4</sub>).

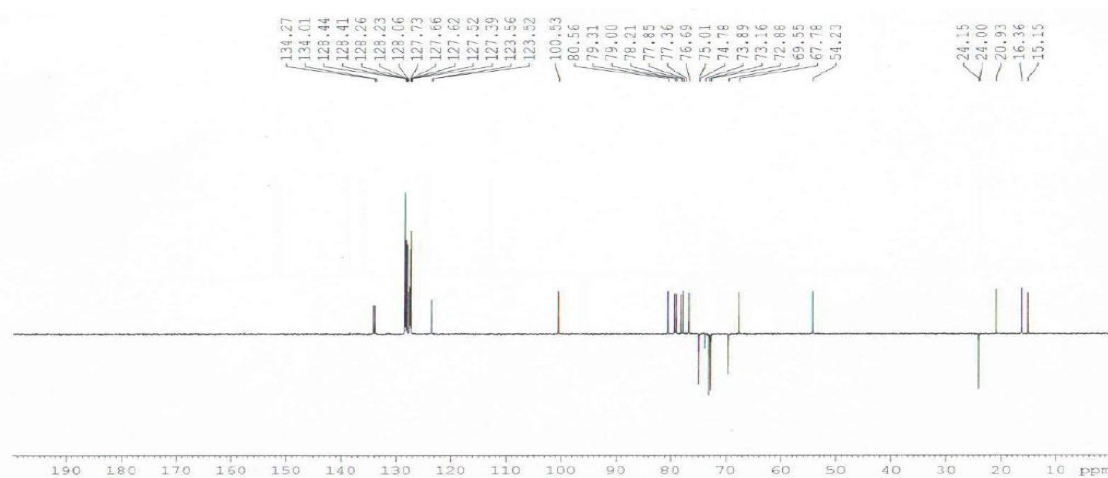
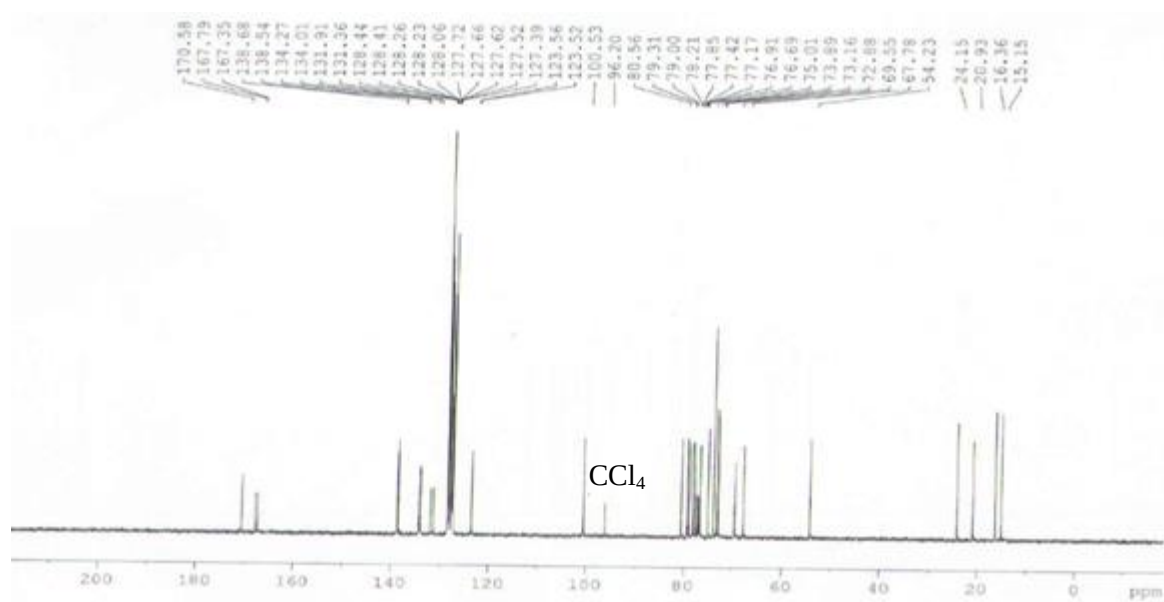
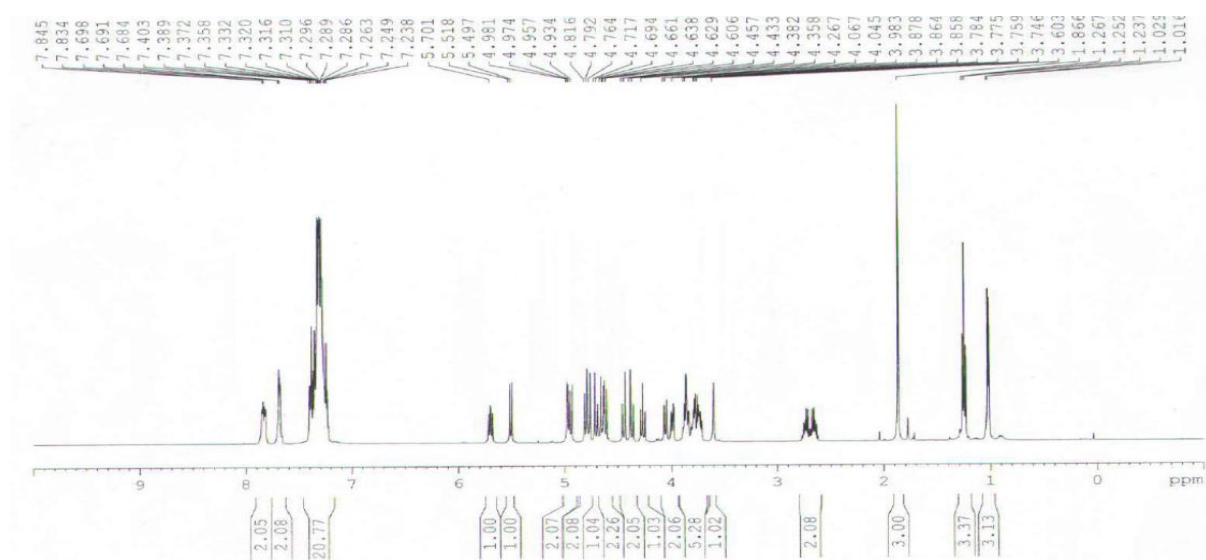


$^1\text{H}$ ,  $^{13}\text{C}$  and DEPT 135 NMR spectra of 2-azidoethyl (2-O-acetyl-4-O-benzyl- $\alpha$ -L-rhamnopyranosyl)-(1 $\rightarrow$ 3)-2,4,6-tri-O-acetyl- $\beta$ -D-galactopyranoside (**8**) ( $\text{CDCl}_3 + \text{CCl}_4$ ).



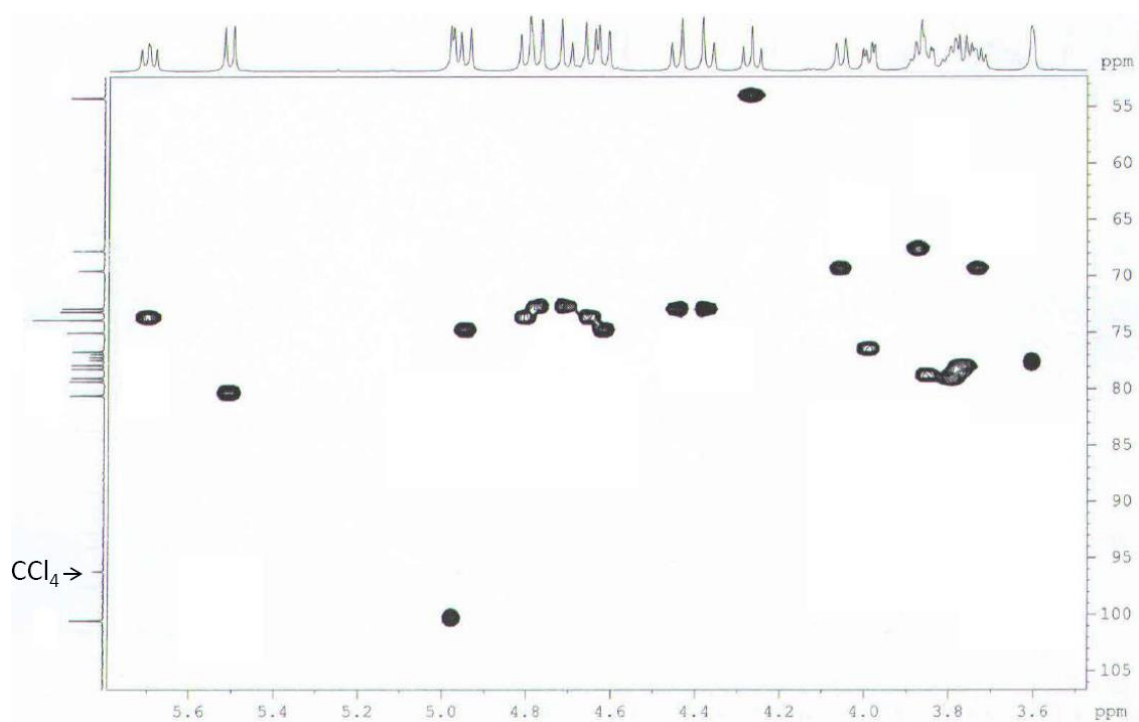
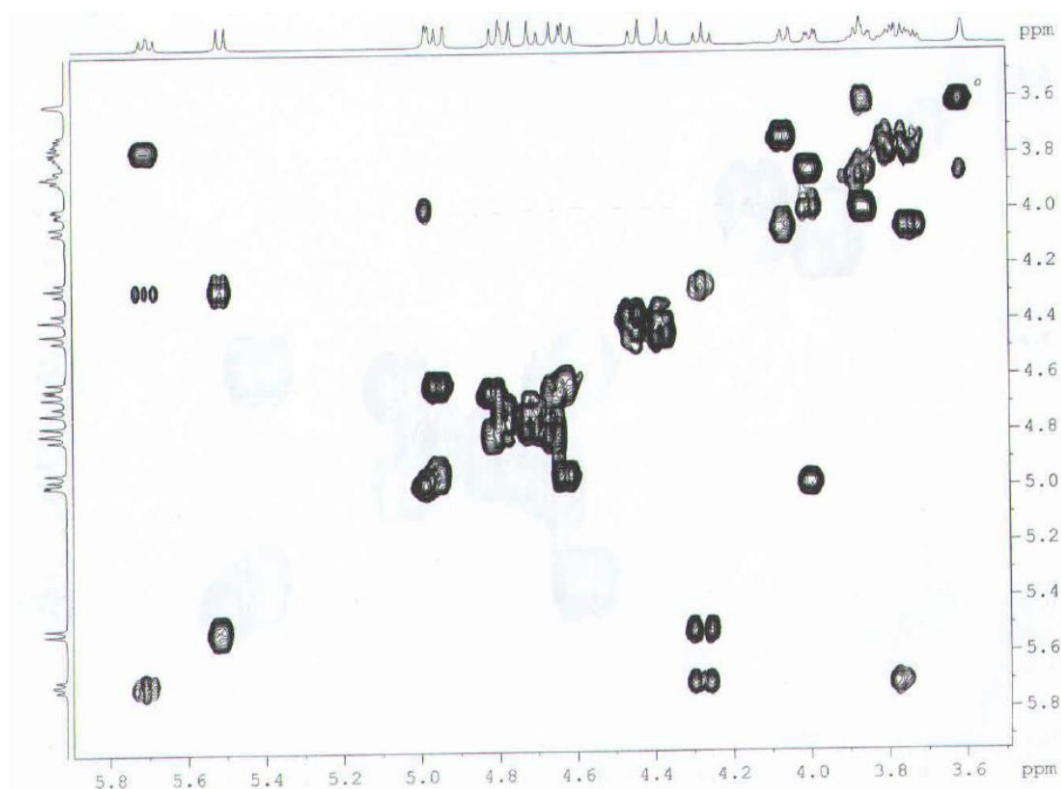
2D COSY and HSQC NMR spectra (selected regions) of 2-azidoethyl (2-*O*-acetyl-4-*O*-benzyl- $\alpha$ -L-rhamnopyranosyl)-(1 $\rightarrow$ 3)-2,4,6-tri-*O*-acetyl- $\beta$ -D-galactopyranoside (**8**) (CDCl<sub>3</sub> + CCl<sub>4</sub>).



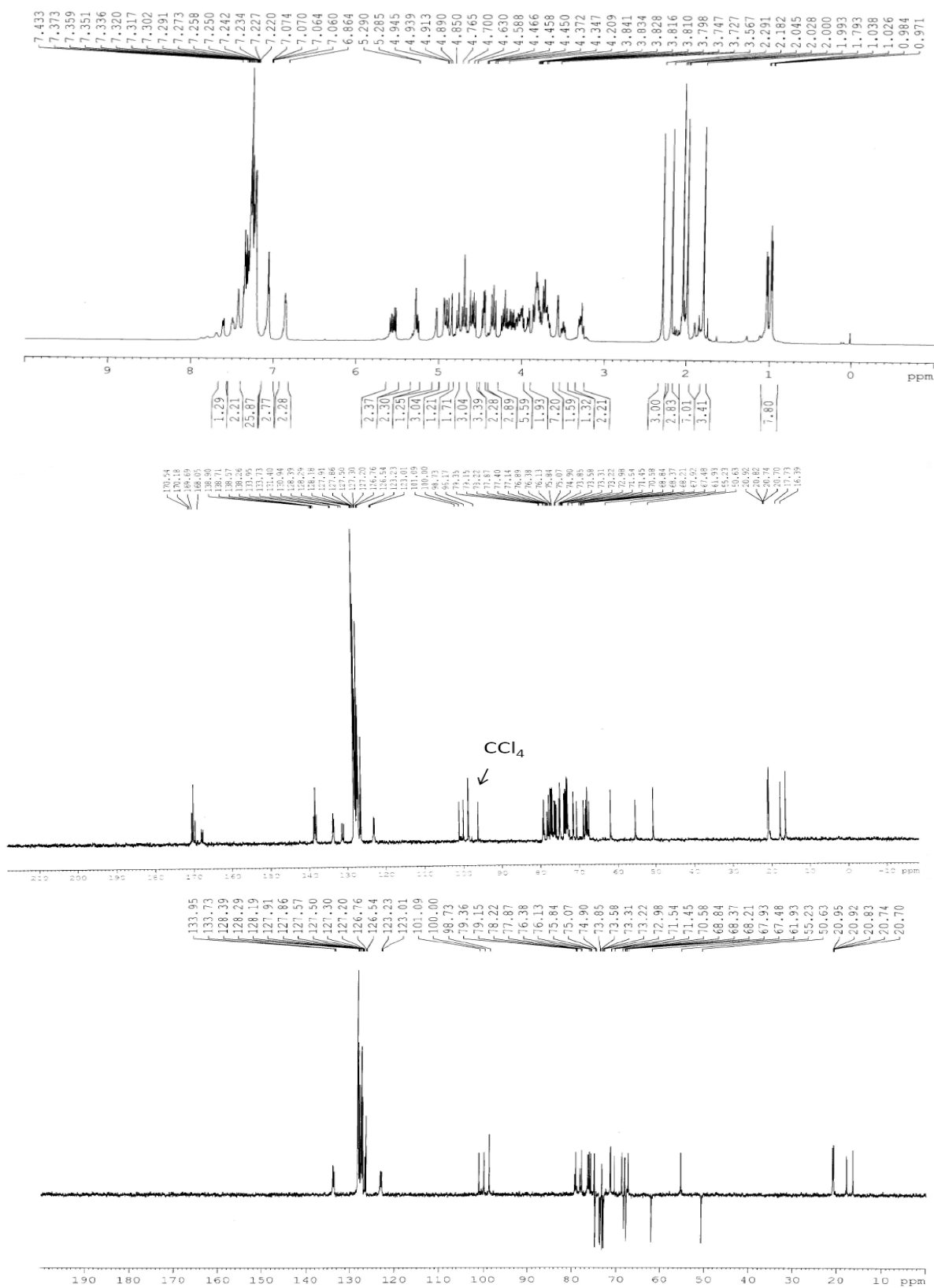


<sup>1</sup>H, <sup>13</sup>C and DEPT 135 NMR spectra of ethyl (2,3,4-tri-*O*-benzyl- $\alpha$ -L-fucopyranosyl)-(1 $\rightarrow$ 4)-3-*O*-acetyl-6-*O*-benzyl-2-deoxy-2-phthalimido-1-thio- $\beta$ -D-glucopyranoside (**9**) (CDCl<sub>3</sub> + CCl<sub>4</sub>).

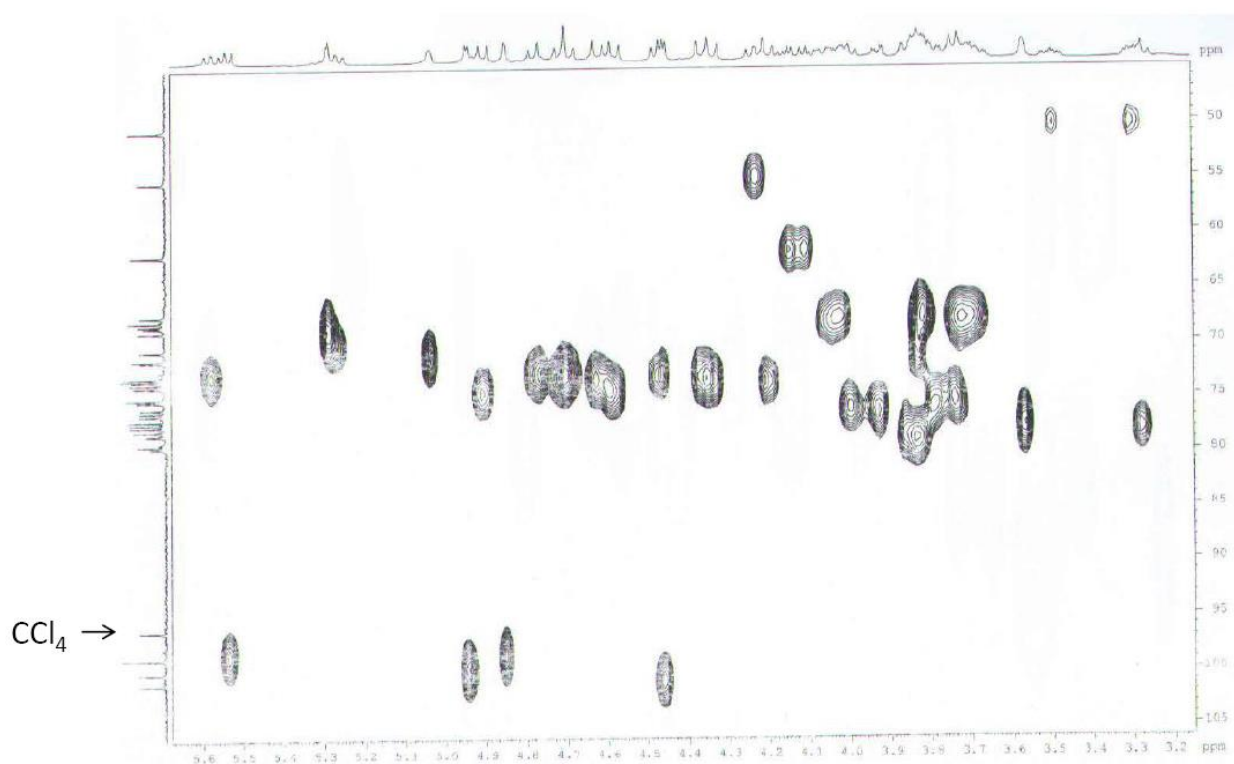
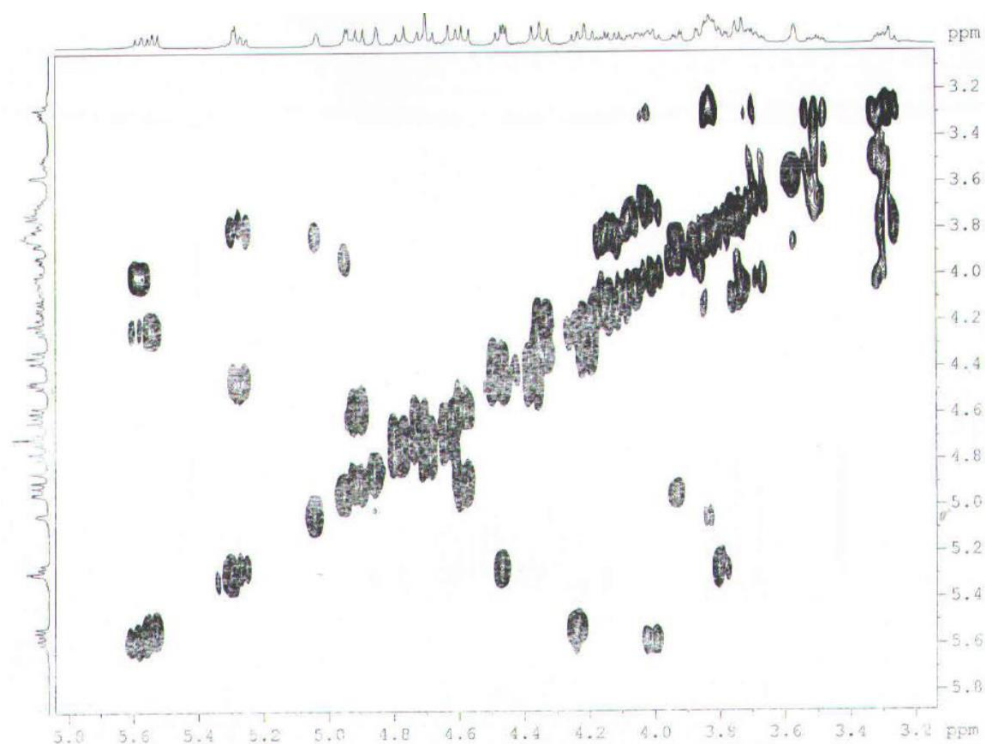




2D COSY and HSQC NMR spectra (selected regions) of ethyl (2,3,4-tri-*O*-benzyl- $\alpha$ -L-fucopyranosyl)-(1 $\rightarrow$ 4)-3-*O*-acetyl-6-*O*-benzyl-2-deoxy-2-phthalimido-1-thio- $\beta$ -D-glucopyranoside (**9**) (CDCl<sub>3</sub> + CCl<sub>4</sub>).



<sup>1</sup>H, <sup>13</sup>C and DEPT 135 NMR spectra of 2-azidoethyl (2,3,4-tri-*O*-benzyl- $\alpha$ -L-fucopyranosyl)-(1 $\rightarrow$ 4)-(3-*O*-acetyl-6-*O*-benzyl-2-deoxy-2-phthalimido- $\beta$ -D-glucopyranoside)-(1 $\rightarrow$ 3)-(2-*O*-acetyl-4-*O*-benzyl- $\alpha$ -L-rhamnopyranosyl)-(1 $\rightarrow$ 3)-2,4,6-tri-*O*-acetyl- $\beta$ -D-galactopyranoside (**10**) (CDCl<sub>3</sub> + CCl<sub>4</sub>).



2D COSY and HSQC NMR spectra (selected regions) of 2-azidoethyl (2,3,4-tri-*O*-benzyl- $\alpha$ -L-fucopyranosyl)-(1 $\rightarrow$ 4)-(3-*O*-acetyl-6-*O*-benzyl-2-deoxy-2-phthalimido- $\beta$ -D-glucopyranoside)-(1 $\rightarrow$ 3)-(2-*O*-acetyl-4-*O*-benzyl- $\alpha$ -L-rhamnopyranosyl)-(1 $\rightarrow$ 3)-2,4,6-tri-*O*-acetyl- $\beta$ -D-galactopyranoside (**10**) (CDCl<sub>3</sub> + CCl<sub>4</sub>).