

Supporting Information

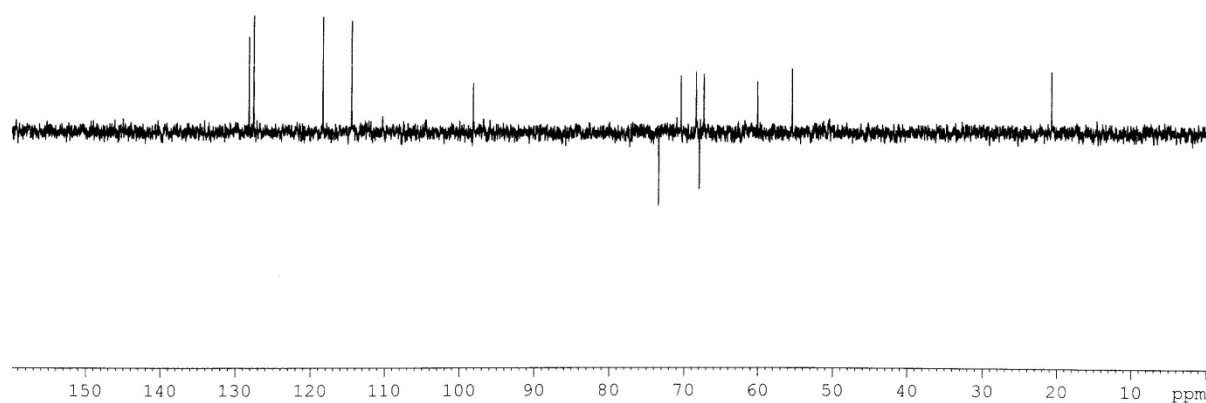
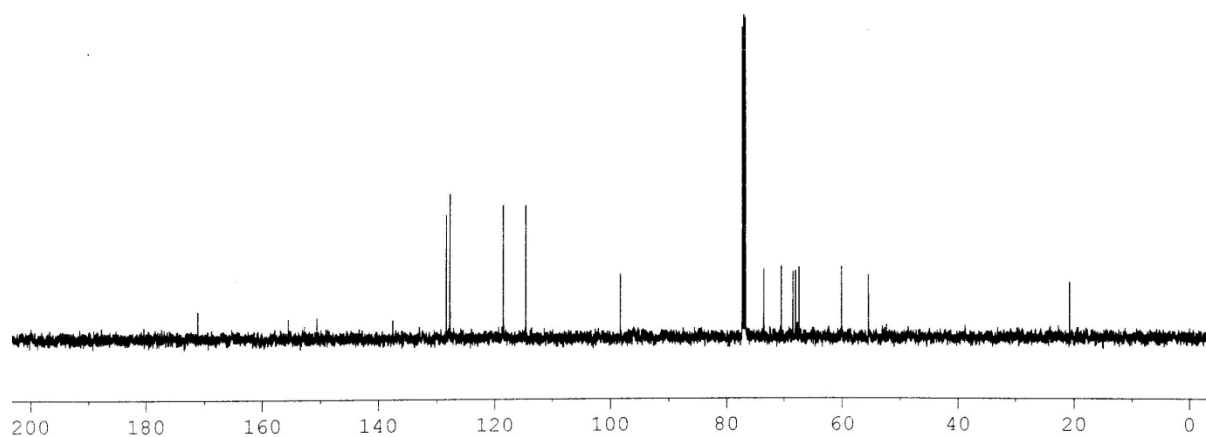
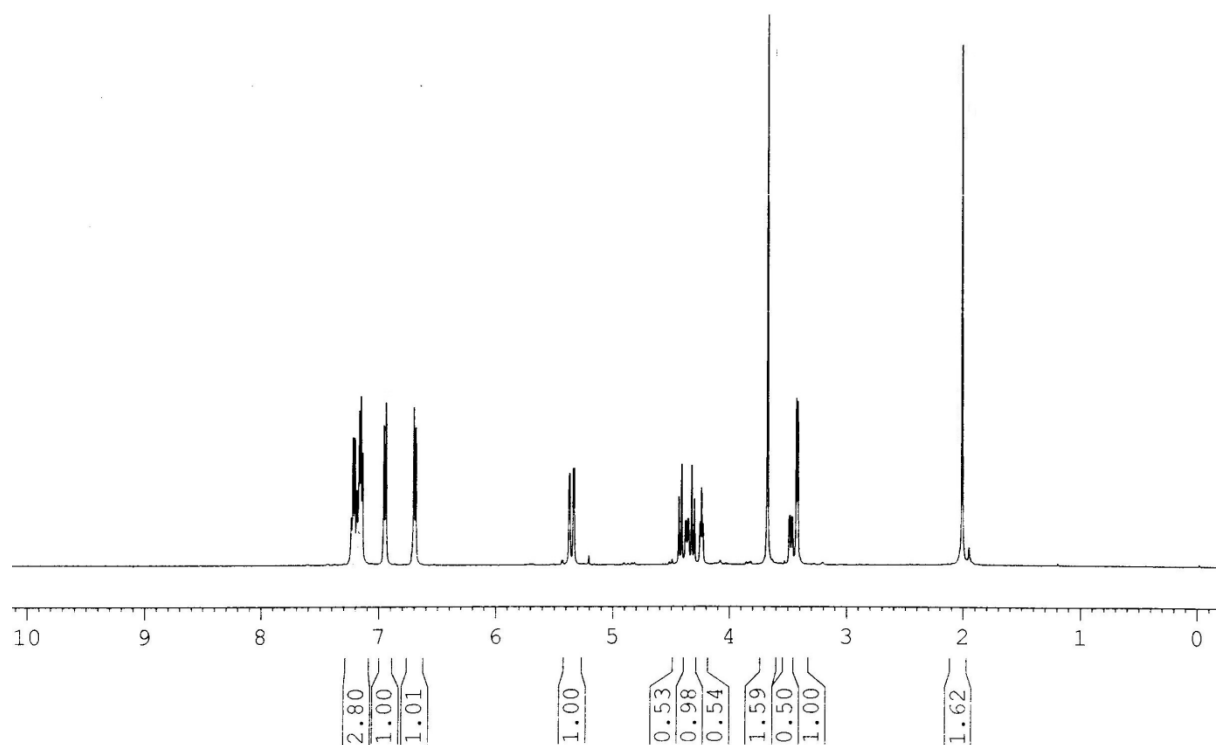
Expedient synthesis of a pentasaccharide related to the *O*-specific polysaccharide of *Escherichia coli* O117:K98:H4 strain

Ishani Bhaumik and Anup Kumar Misra*

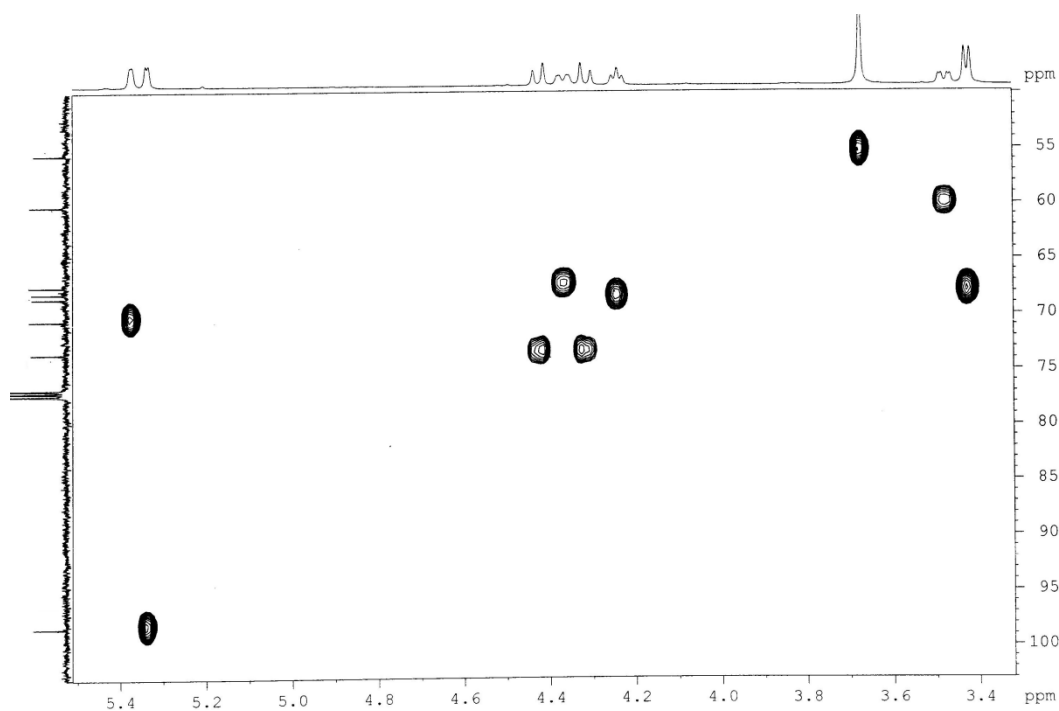
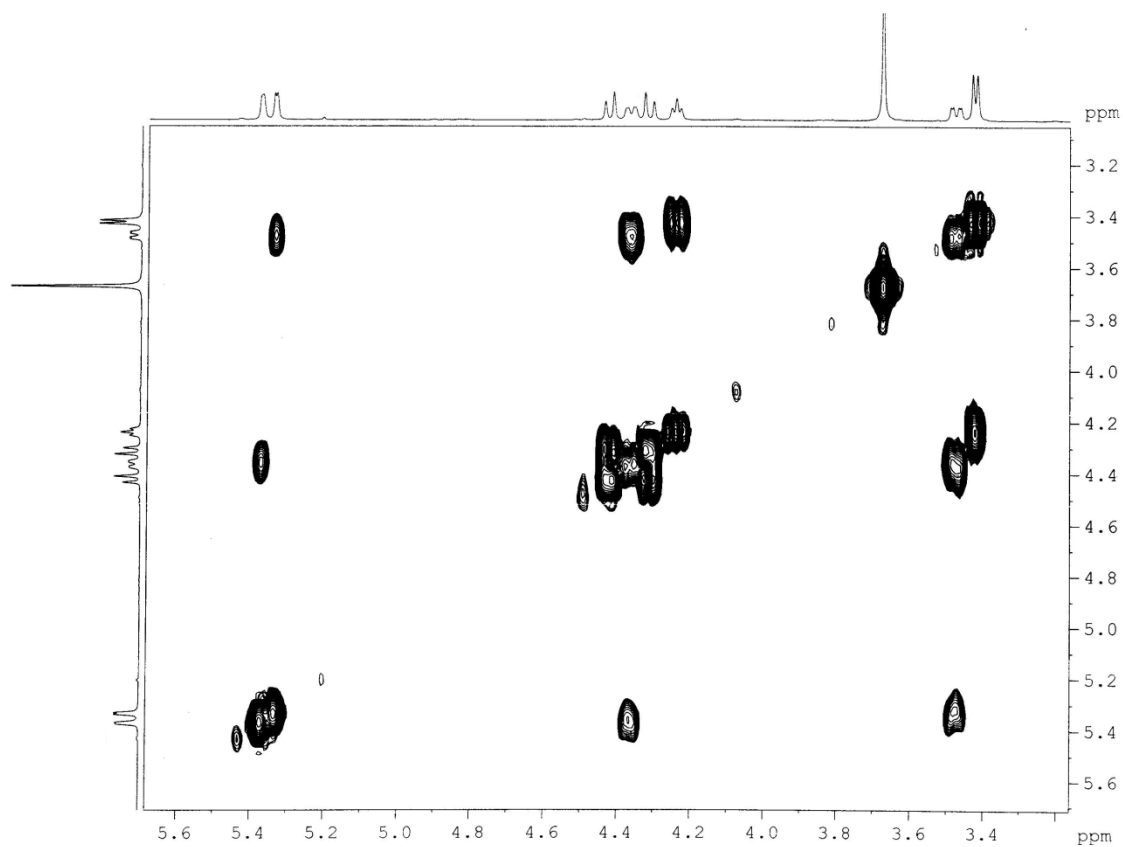
Bose Institute, Division of Molecular Medicine, P-1/12, C.I.T. Scheme VII-M, Kolkata-700054, India; Fax: 91-33-2355 3886; Tel: 91 33-2569 3240; E-mail: akmisra69@gmail.com

Index

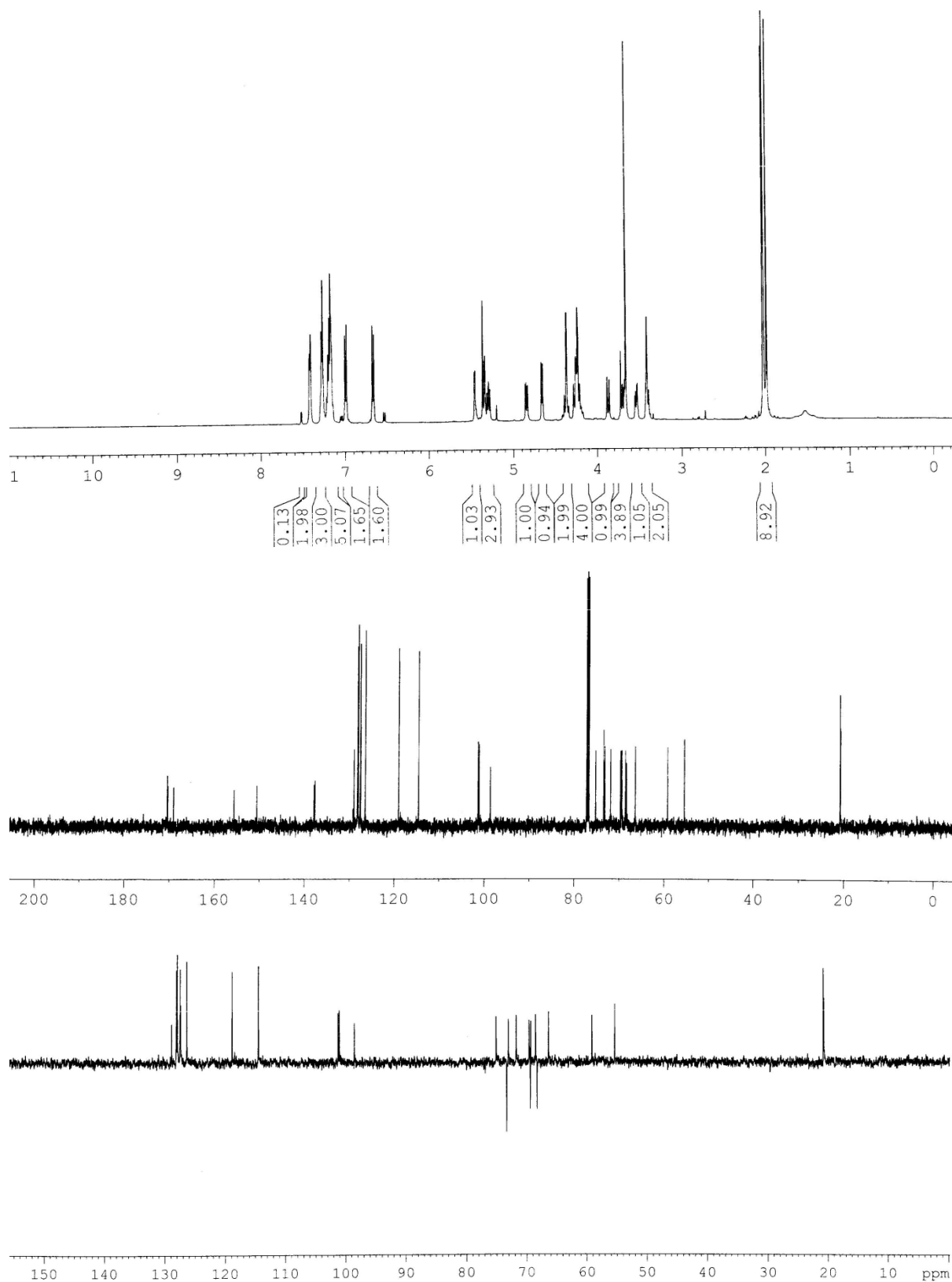
Subject	Page No.
1D and 2D NMR spectra of compounds 2, 8, 9, 10, acetylated 10, 11, 12, 13 and compound 1	2-18



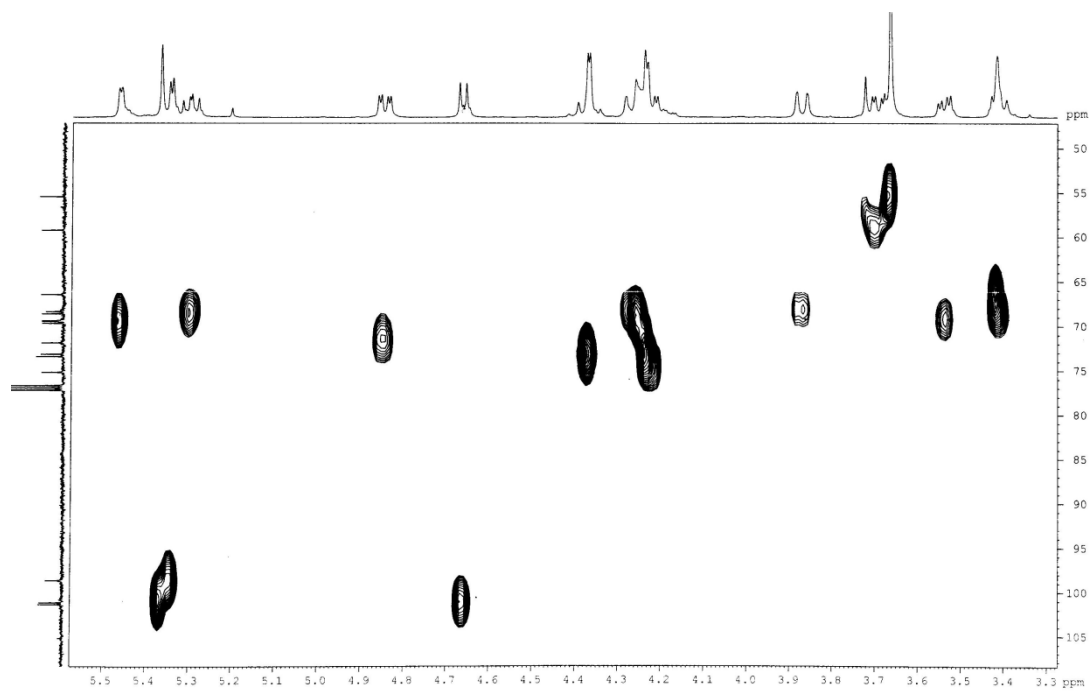
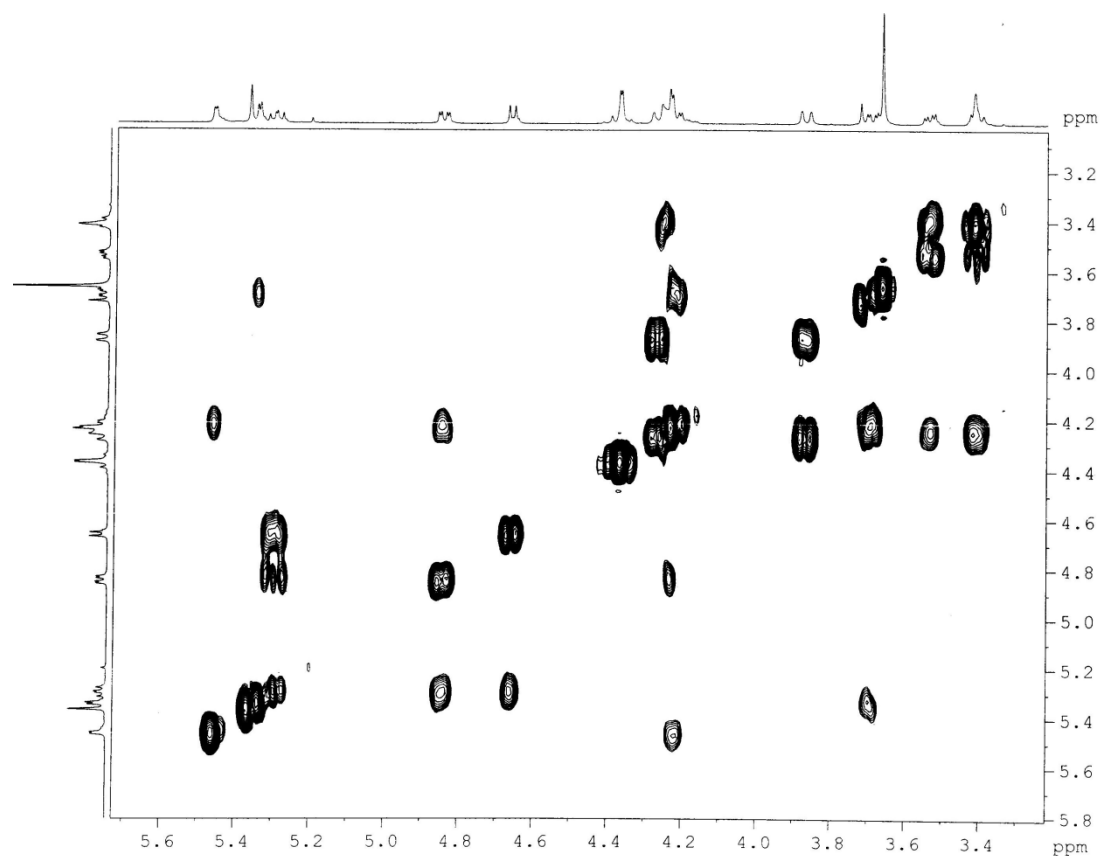
^1H , ^{13}C and DEPT 135 NMR spectra of *p*-methoxyphenyl 4-*O*-acetyl-2-azido-6-*O*-benzyl-2-deoxy- α -D-galactopyranoside (**2**) (CDCl₃).



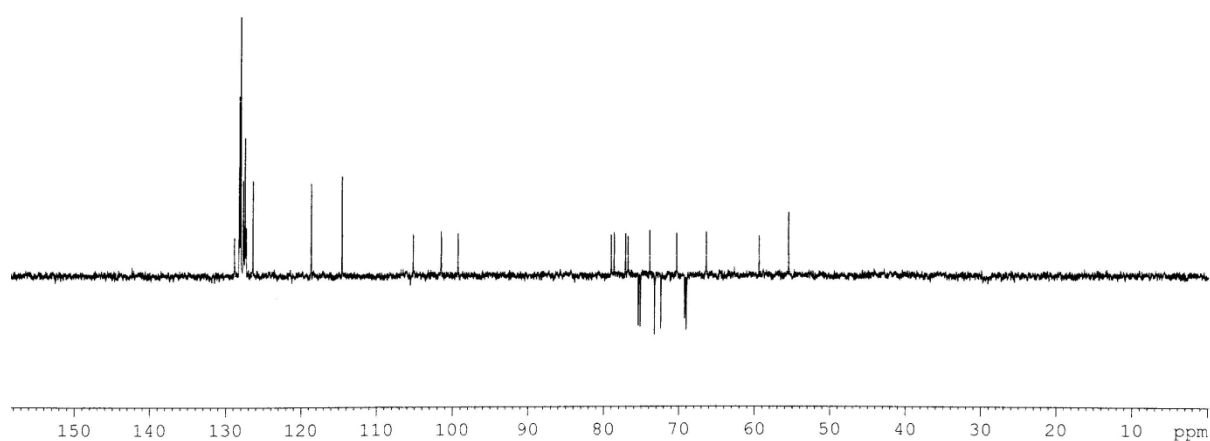
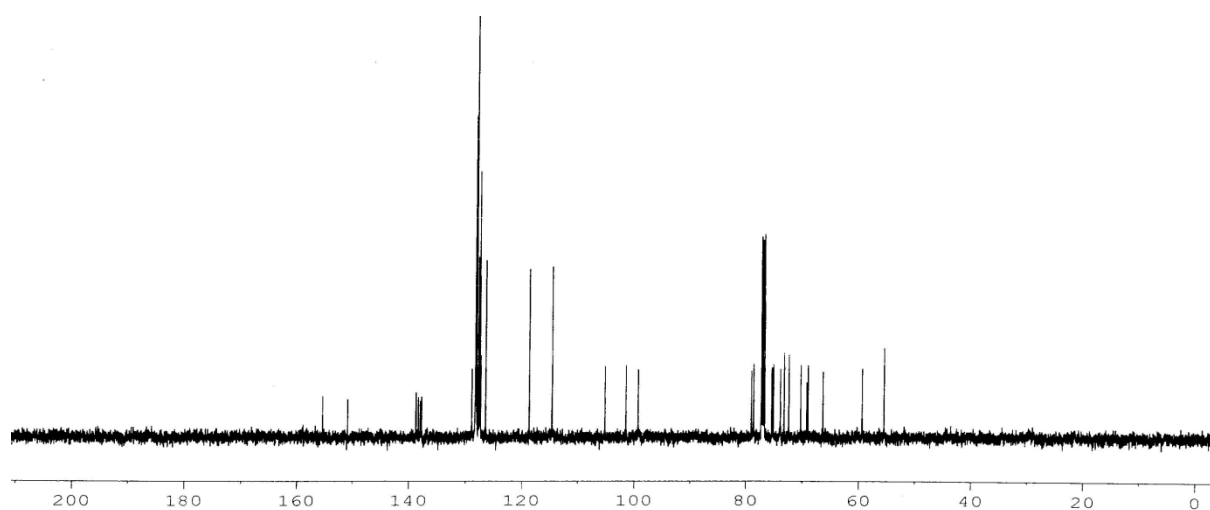
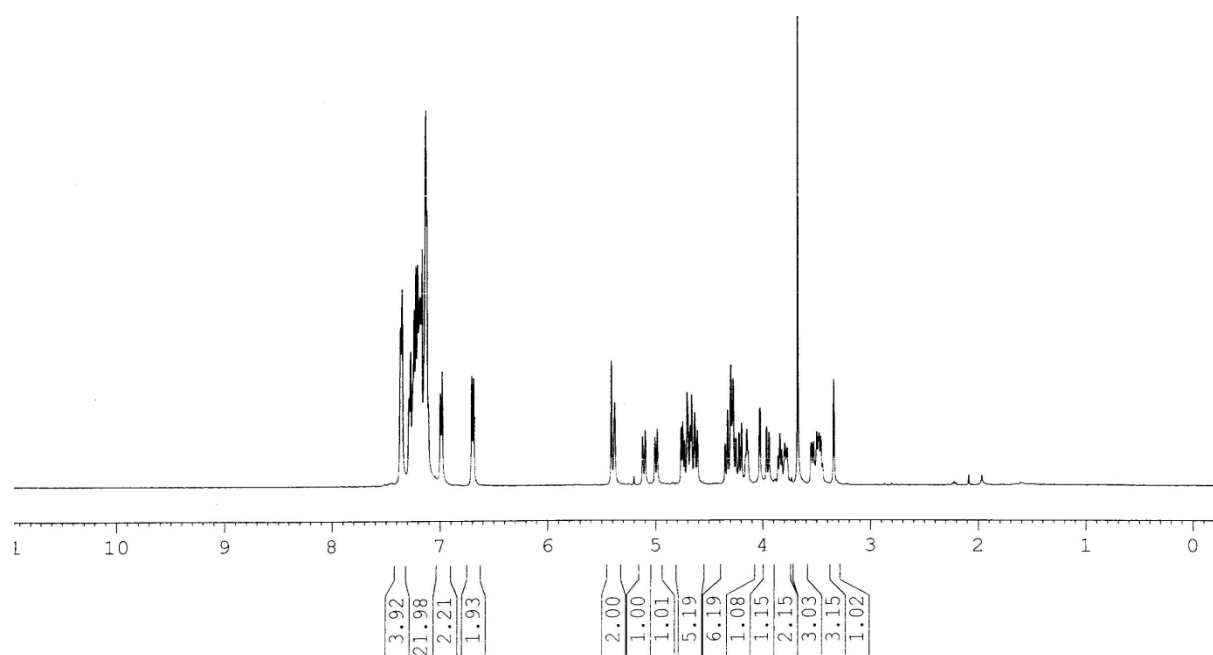
2D COSY and HSQC spectra of *p*-methoxyphenyl 4-*O*-acetyl-2-azido-6-*O*-benzyl-2-deoxy- α -D-galactopyranoside (**2**) (CDCl₃) (selected regions).



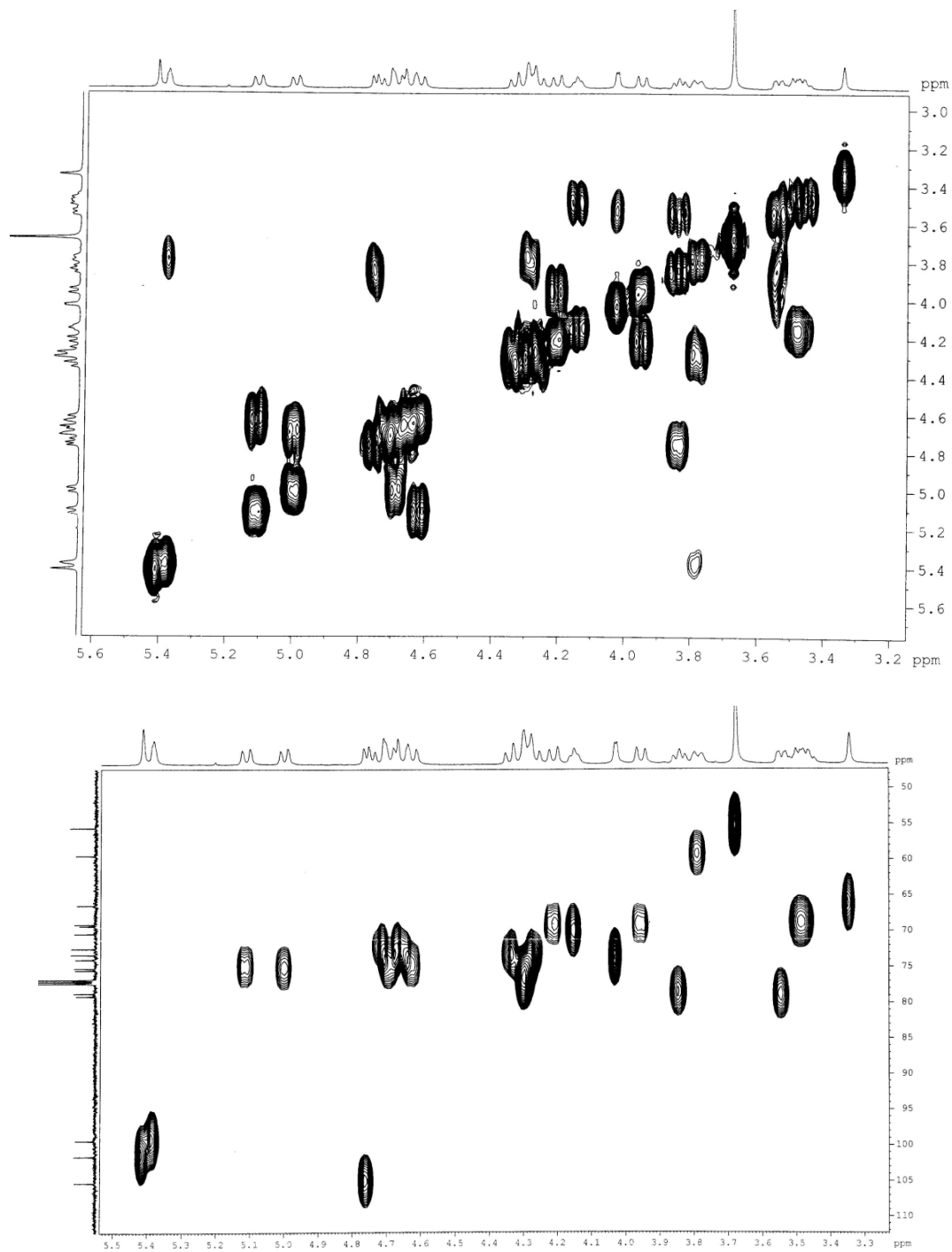
^1H , ^{13}C and DEPT 135 NMR spectra of *p*-methoxyphenyl (2,3-di-*O*-acetyl-4,6-*O*-benzylidene- β -D-galactopyranosyl)-(1 \rightarrow 3)-4-*O*-acetyl-2-azido-6-*O*-benzyl-2-deoxy- α -D-galactopyranoside (**8**) (CDCl_3).



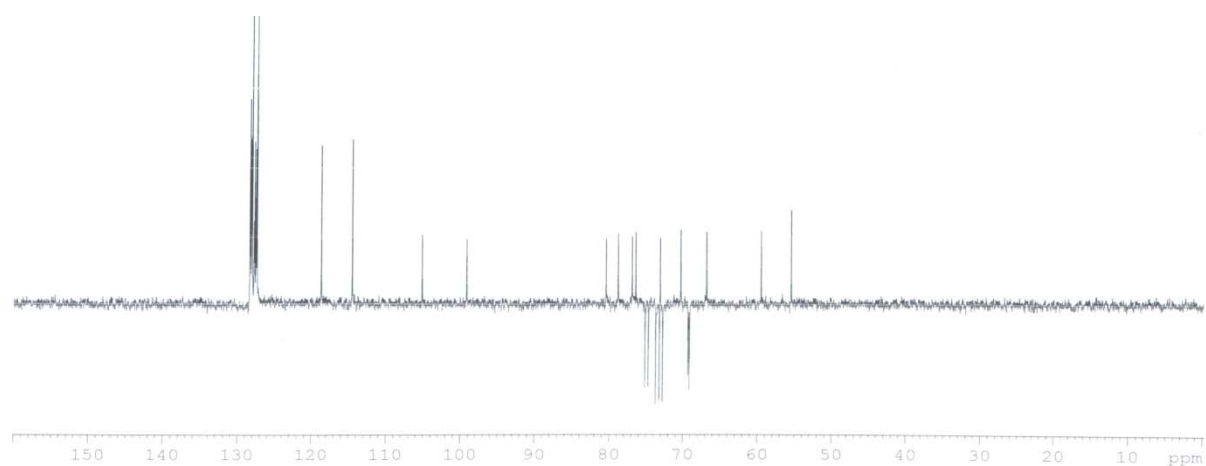
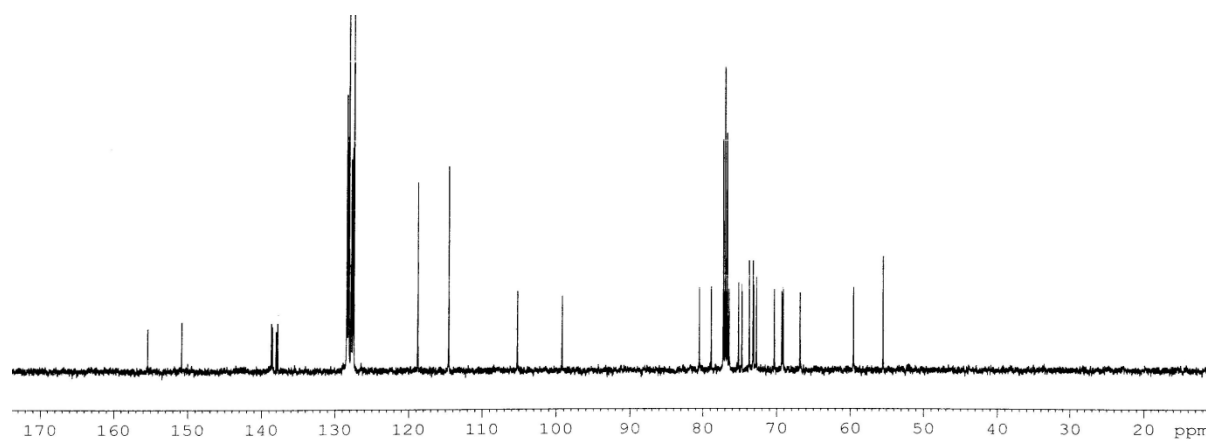
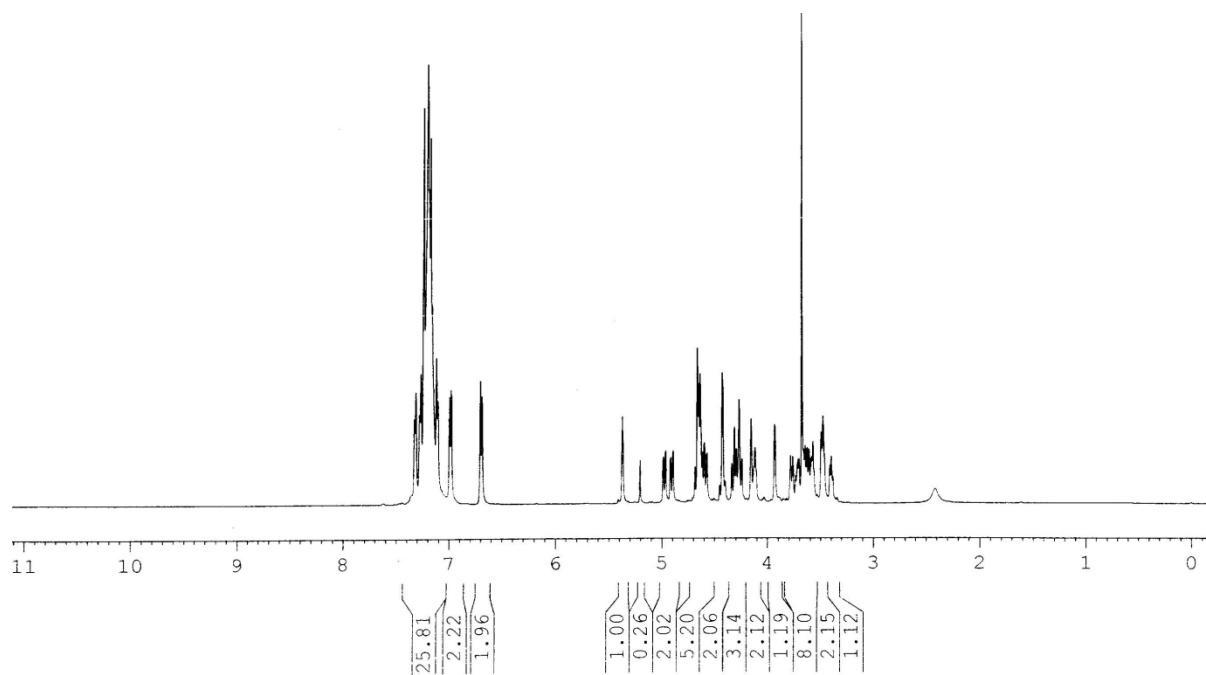
2D COSY and HSQC spectra of *p*-methoxyphenyl (2,3-di-*O*-acetyl-4,6-*O*-benzylidene- β -D-galactopyranosyl)-(1 \rightarrow 3)-4-*O*-acetyl-2-azido-6-*O*-benzyl-2-deoxy- α -D-galactopyranoside (**8**) (CDCl₃) (selected regions).



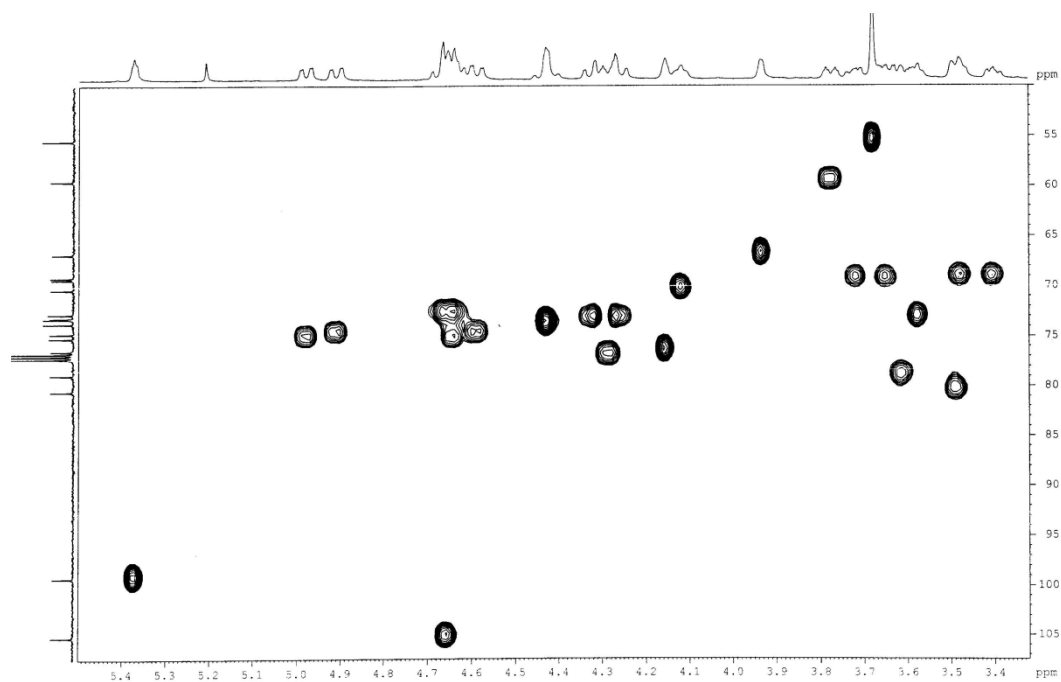
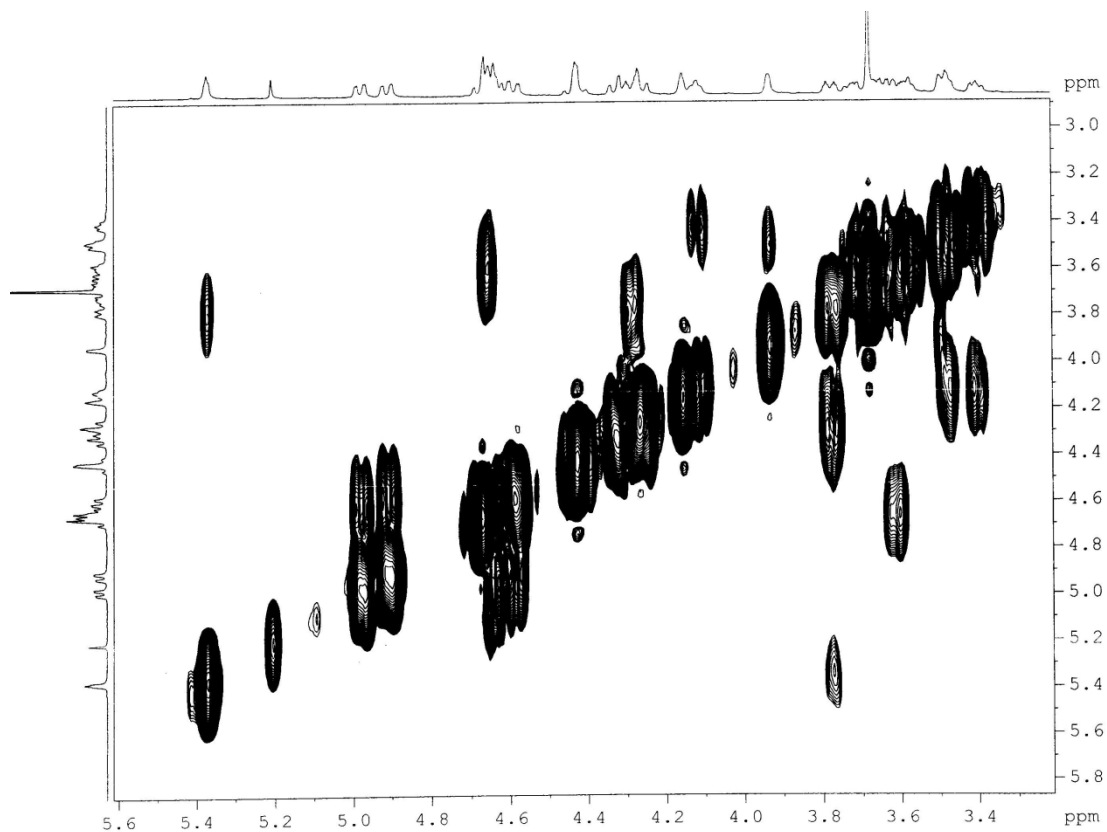
^1H , ^{13}C and DEPT 135 NMR spectra of *p*-methoxyphenyl (2,3-di-*O*-benzyl-4,6-*O*-benzylidene- β -D-galactopyranosyl)-(1 \rightarrow 3)-2-azido-4,6-di-*O*-benzyl-2-deoxy- α -D-galactopyranoside (**9**) (CDCl₃).



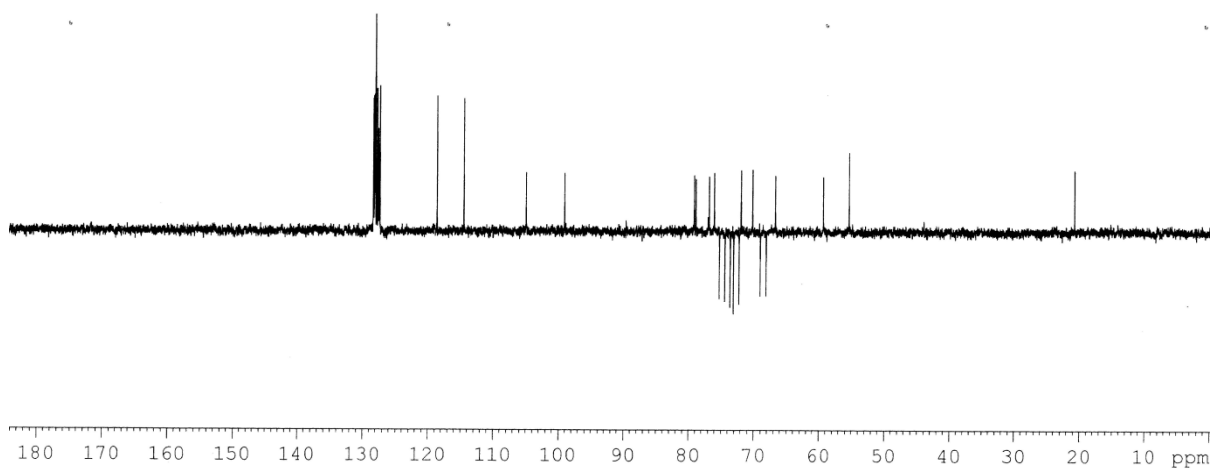
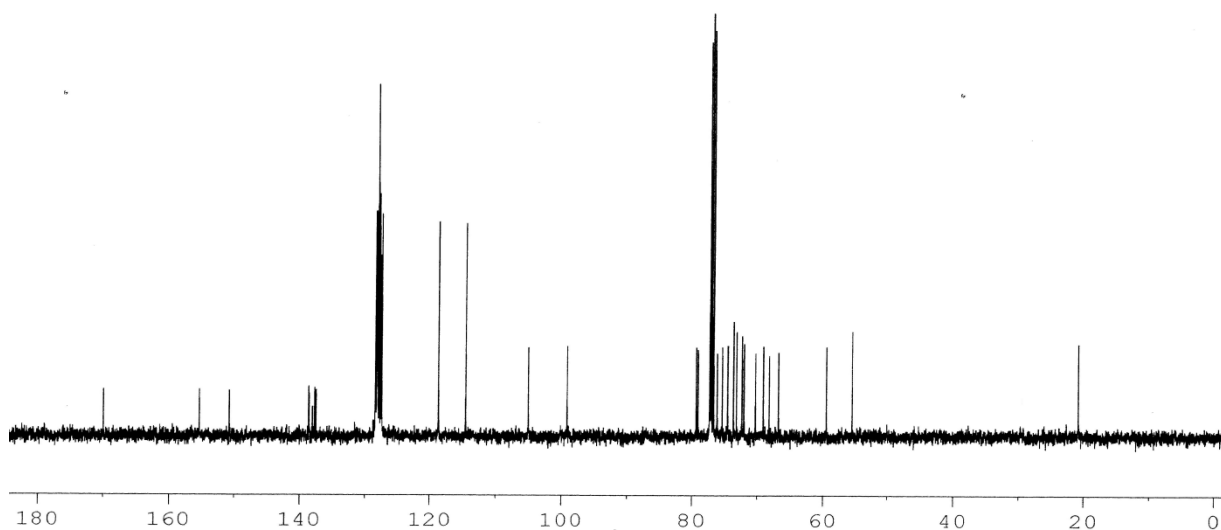
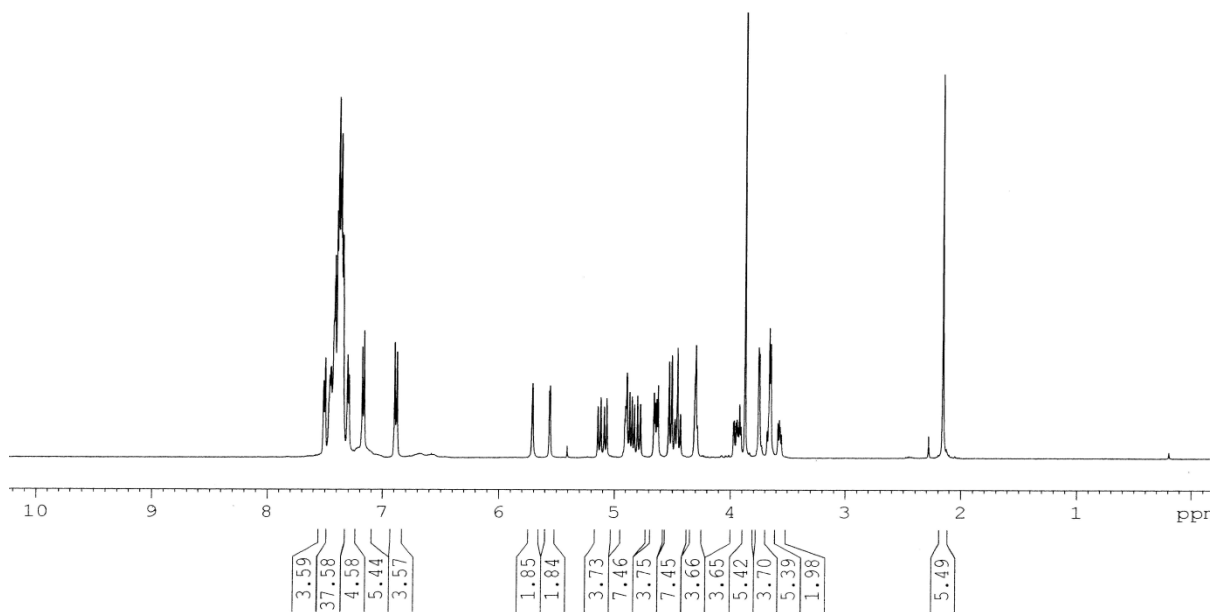
2D COSY and HSQC spectra of *p*-methoxyphenyl (2,3-di-*O*-benzyl-4,6-*O*-benzylidene- β -D-galactopyranosyl)-(1 \rightarrow 3)-2-azido-4,6-di-*O*-benzyl-2-deoxy- α -D-galactopyranoside (**9**) (CDCl_3) (selected regions).



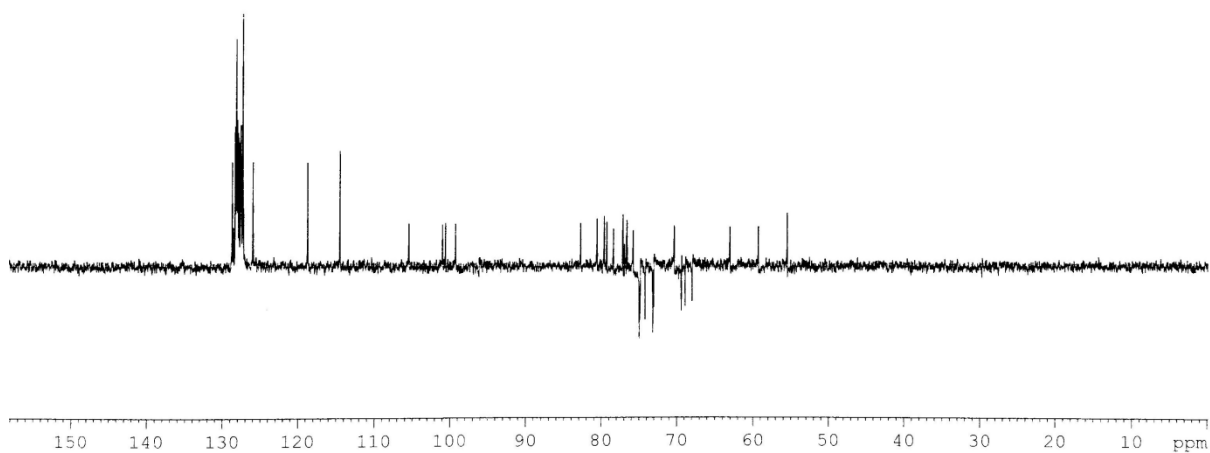
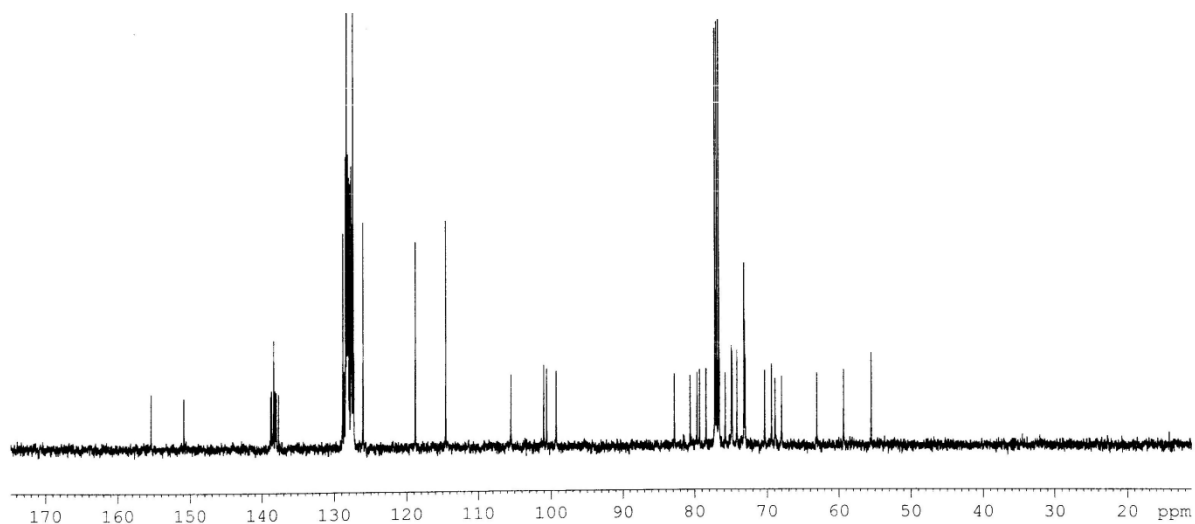
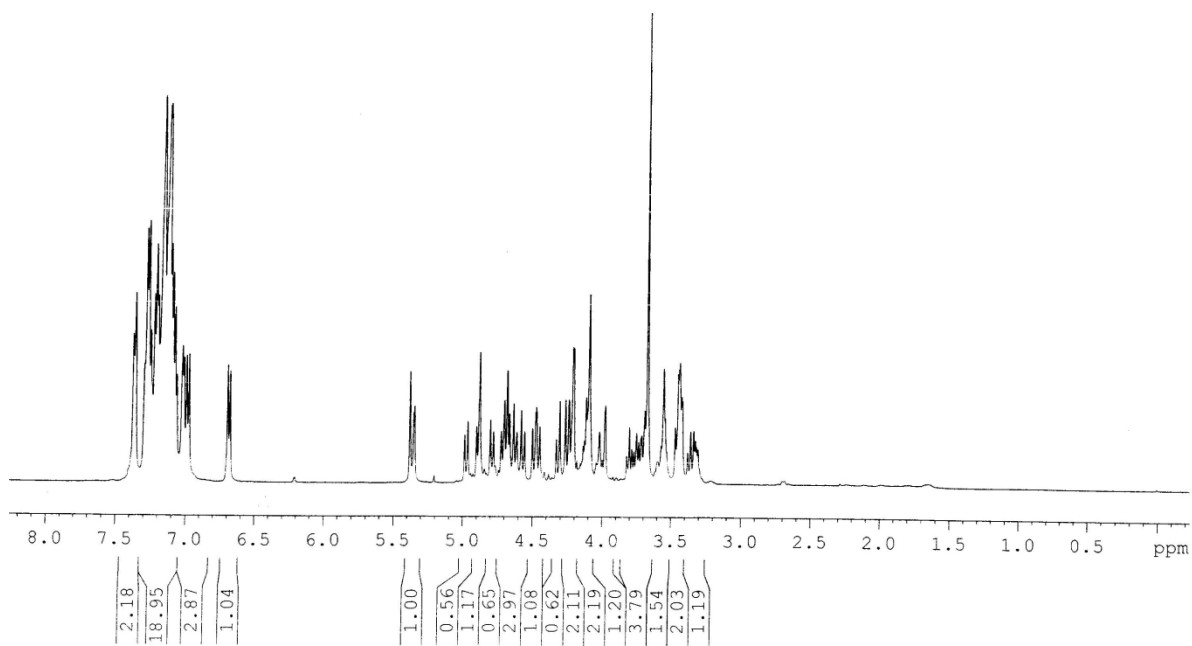
¹H, ¹³C and DEPT 135 NMR spectra of *p*-methoxyphenyl (2,3,6-tri-*O*-benzyl-β-D-galactopyranosyl)-(1→3)-2-azido-4,6-di-*O*-benzyl-2-deoxy-α-D-galactopyranoside (**10**) (CDCl₃).



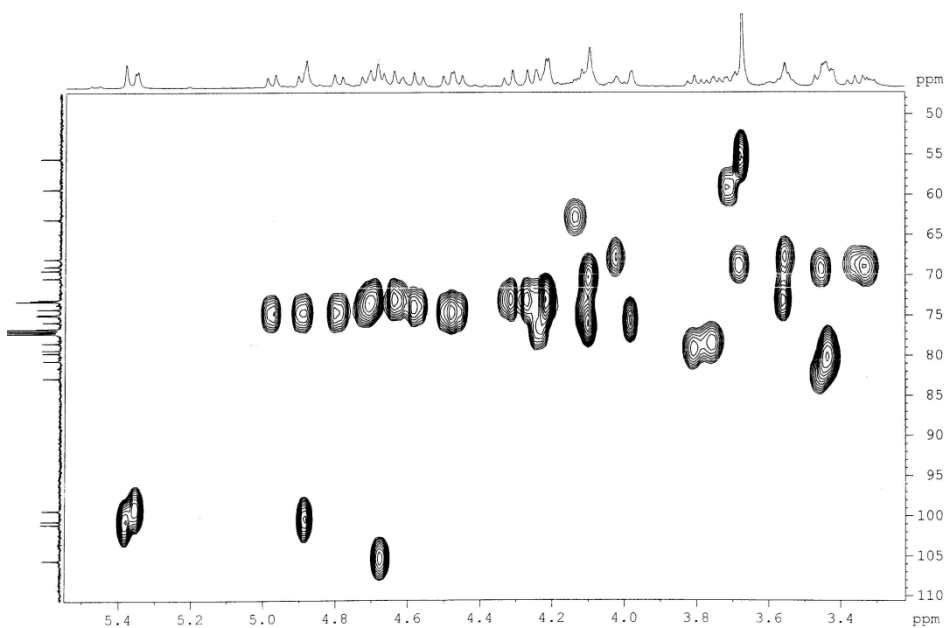
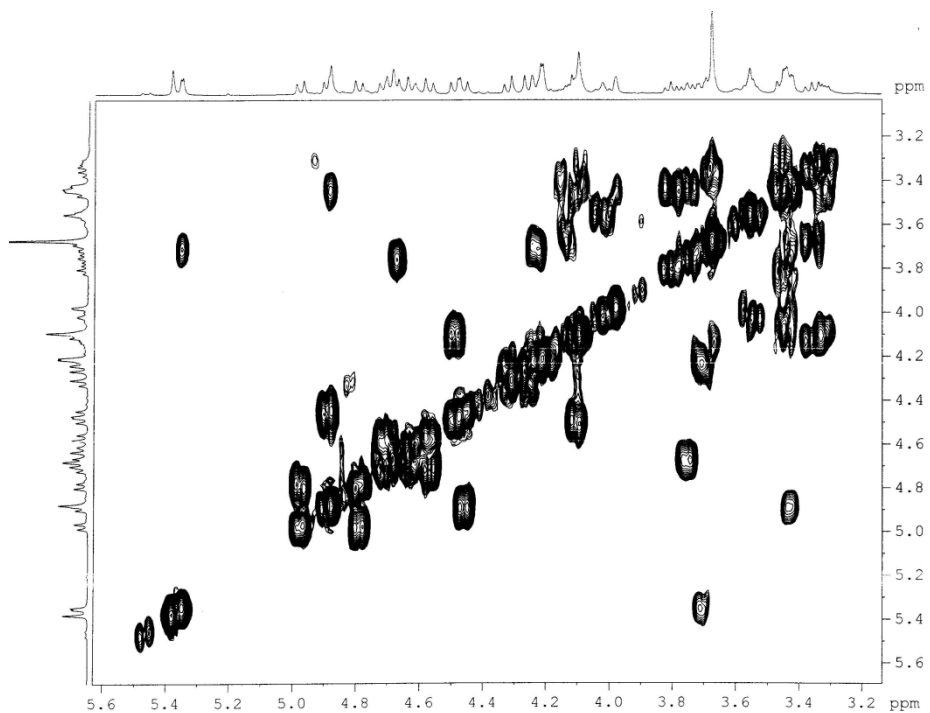
2D COSY and HSQC spectra of *p*-methoxyphenyl (2,3,6-tri-*O*-benzyl- β -D-galactopyranosyl)-(1 \rightarrow 3)-2-azido-4,6-di-*O*-benzyl-2-deoxy- α -D-galactopyranoside (**10**) (CDCl₃) (selected regions).



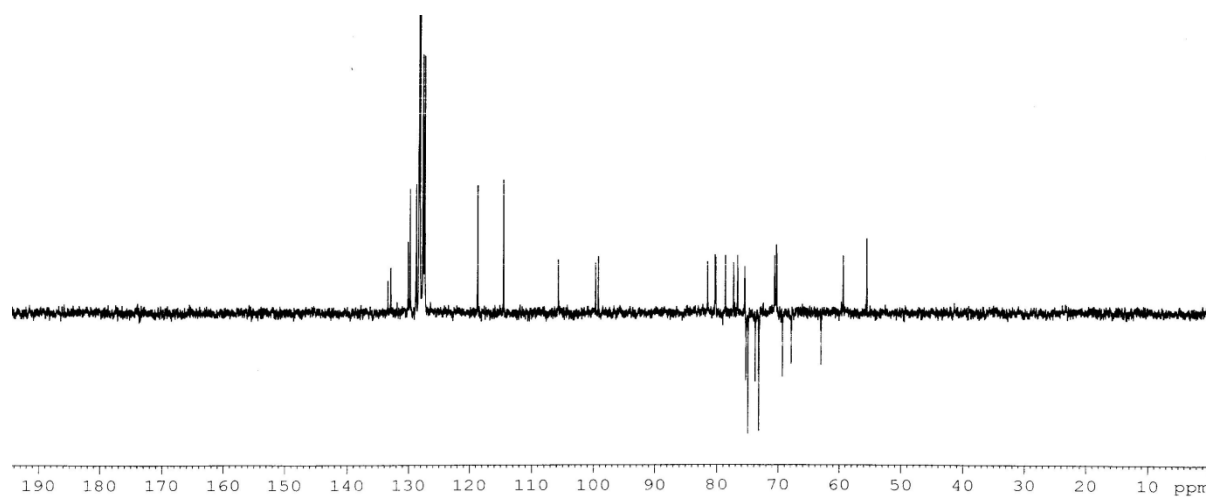
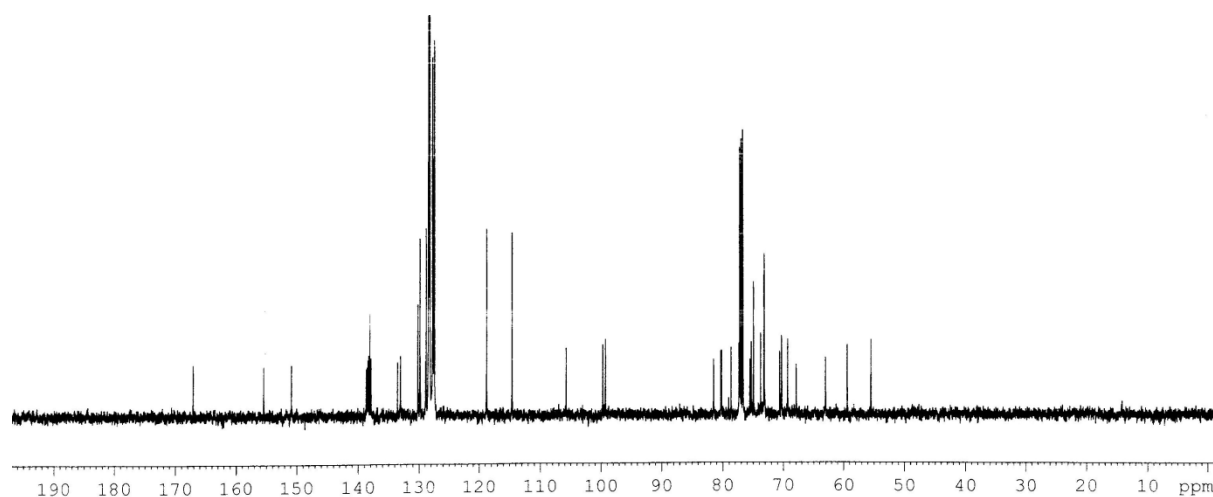
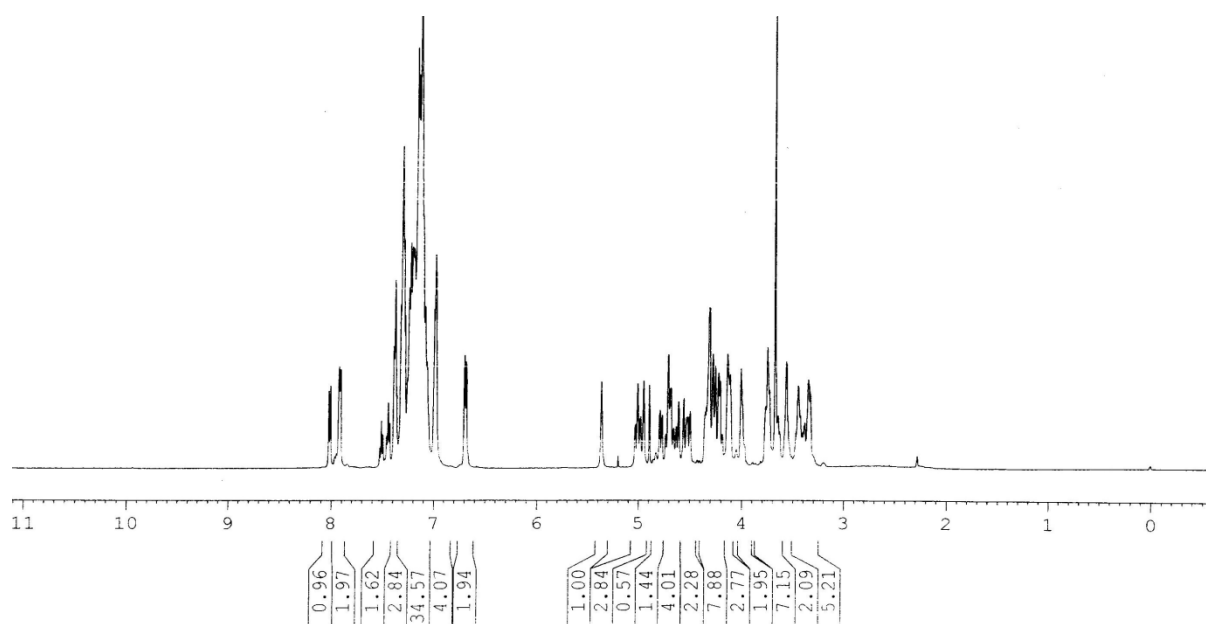
^1H , ^{13}C and DEPT 135 NMR spectra of *p*-methoxyphenyl (4-*O*-acetyl-2,3,6-tri-*O*-benzyl- β -D-galactopyranosyl)-(1 \rightarrow 3)-2-azido-4,6-di-*O*-benzyl-2-deoxy- α -D-galactopyranoside (**10**) (CDCl_3) (acetylated compound **10**).



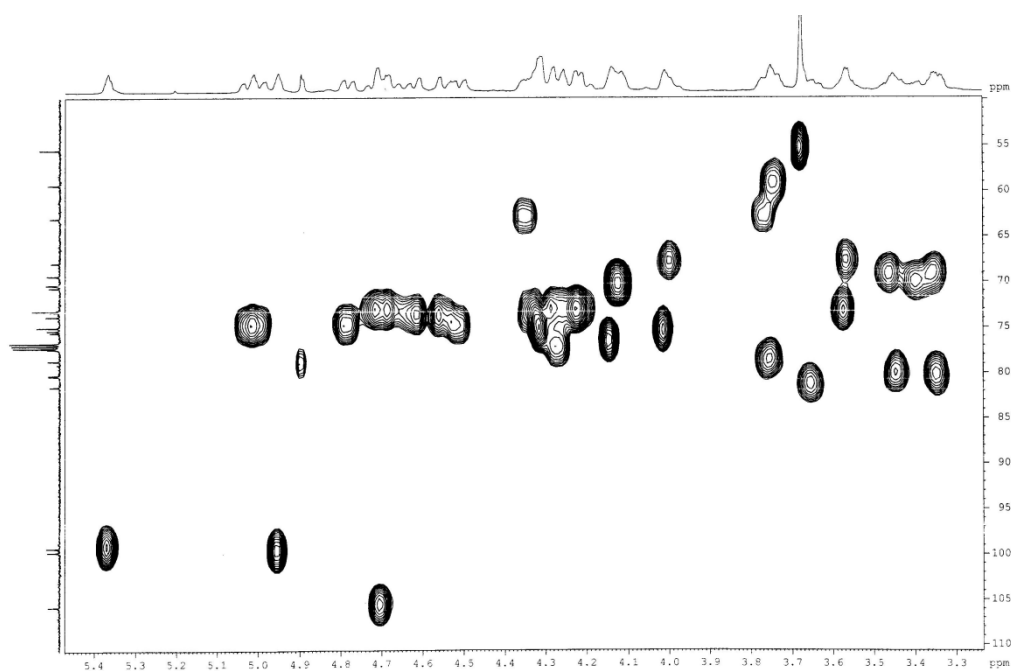
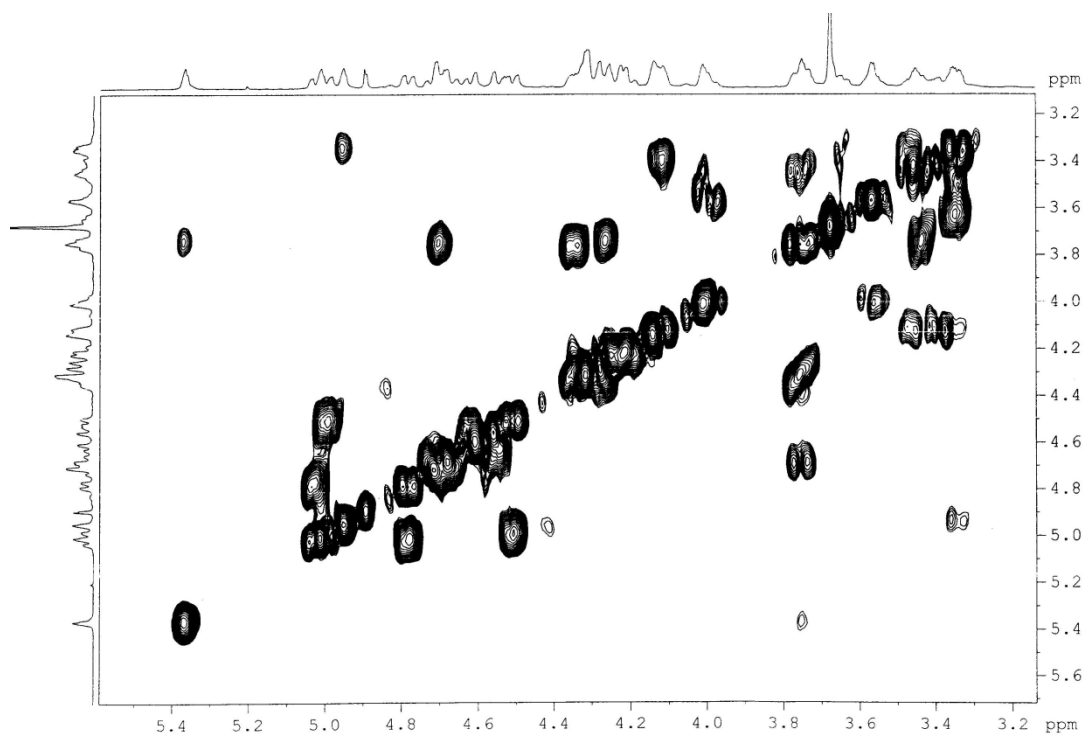
¹H, ¹³C and DEPT 135 NMR spectra of *p*-methoxyphenyl (2,3-di-*O*-benzyl-4,6-*O*-benzylidene- α -D-glucopyranosyl)-(1 \rightarrow 4)-(2,3,6-tri-*O*-benzyl- β -D-galactopyranosyl)-(1 \rightarrow 3)-2-azido-4,6-di-*O*-benzyl-2-deoxy- α -D-galactopyranoside (**11**) (CDCl₃).



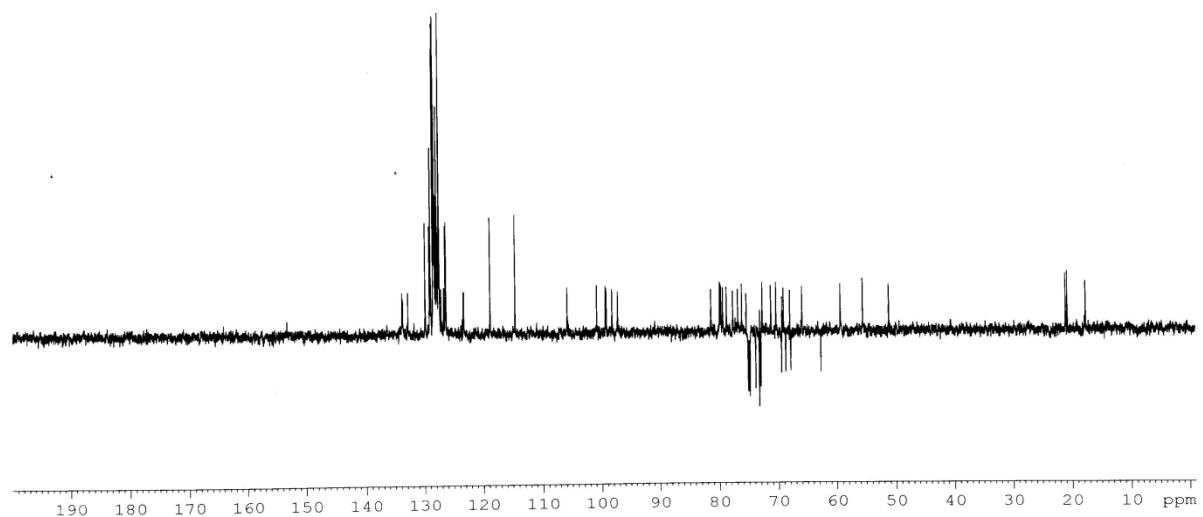
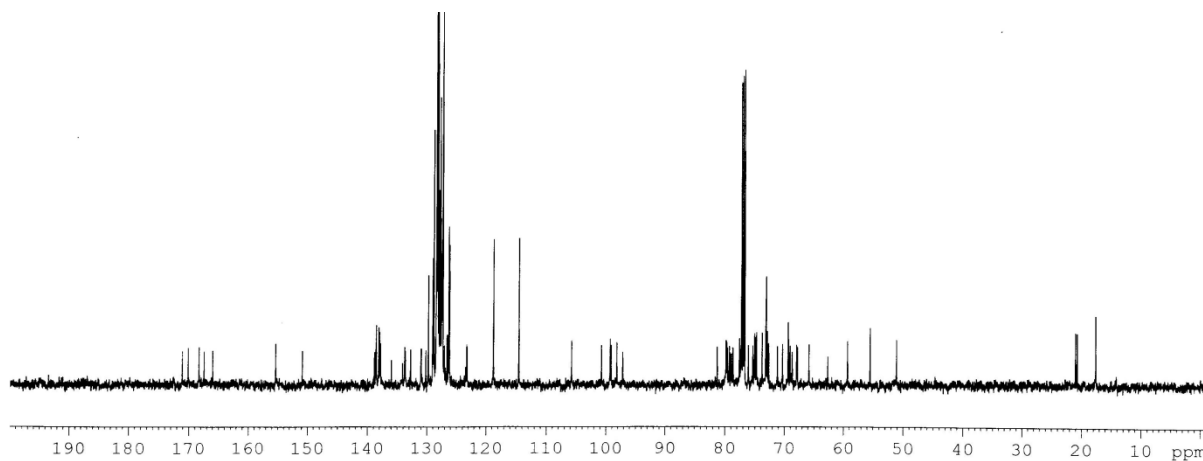
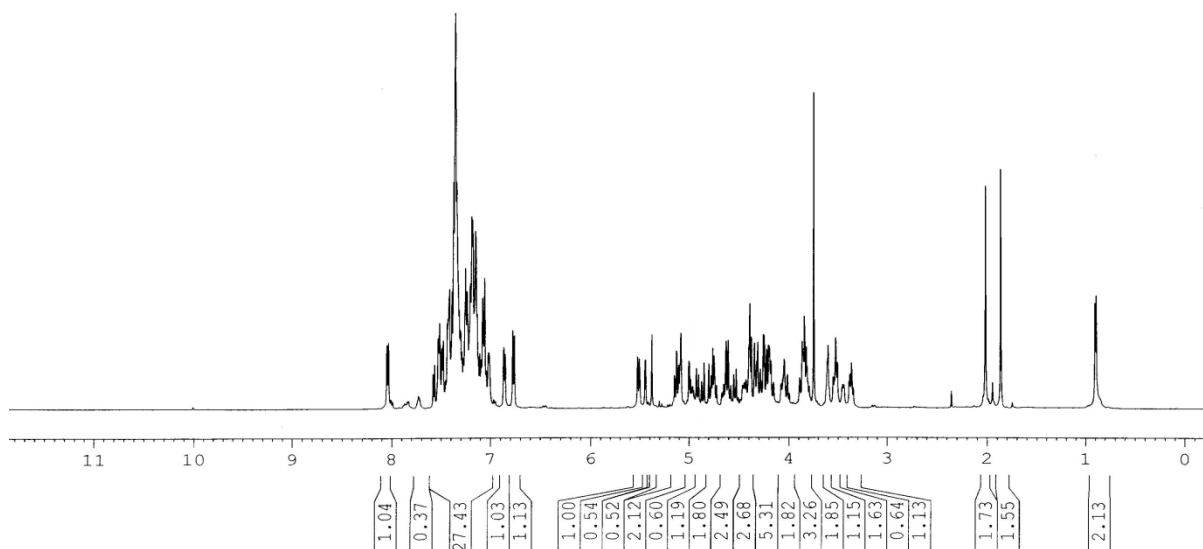
2D COSY and HSQC spectra of *p*-methoxyphenyl (2,3-di-*O*-benzyl-4,6-*O*-benzylidene- α -D-glucopyranosyl)-(1 \rightarrow 4)-(2,3,6-tri-*O*-benzyl- β -D-galactopyranosyl)-(1 \rightarrow 3)-2-azido-4,6-di-*O*-benzyl-2-deoxy- α -D-galactopyranoside (**11**) (CDCl_3) (selected regions).



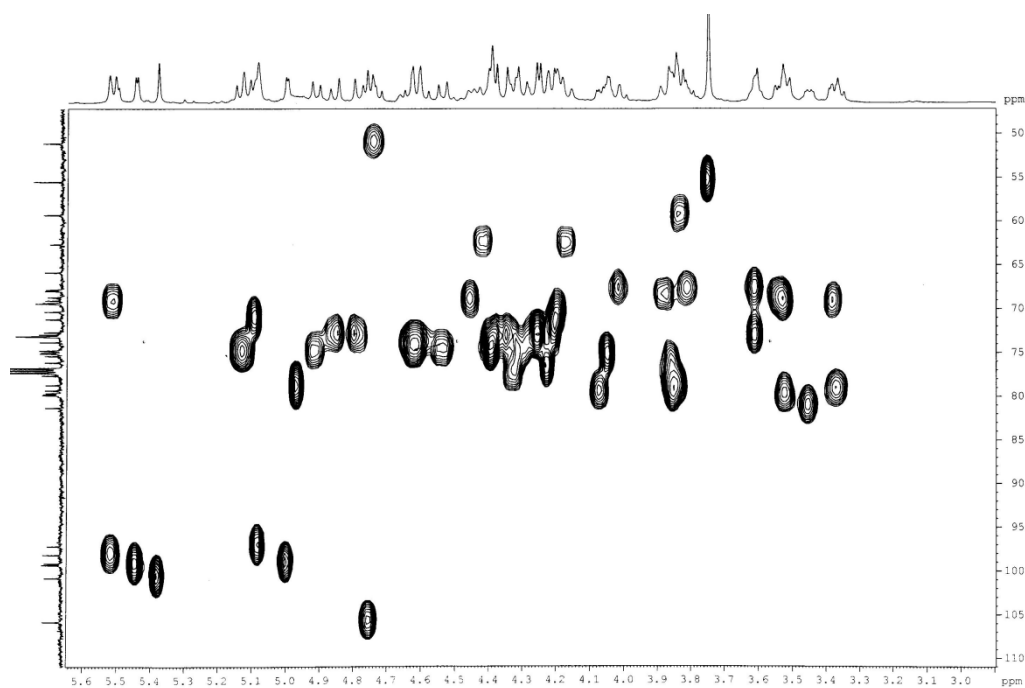
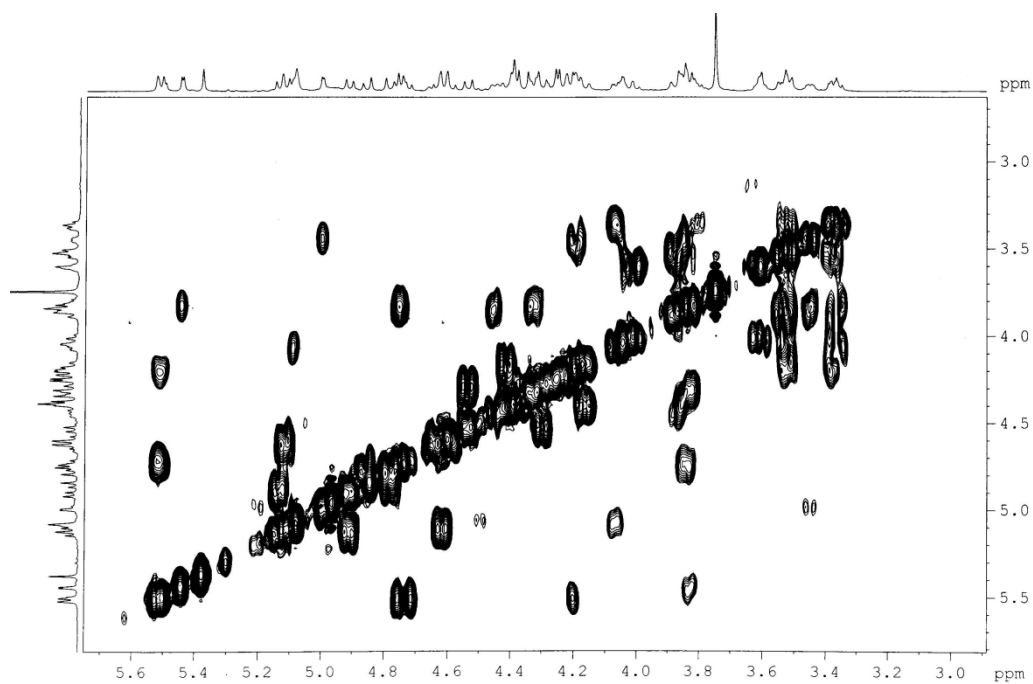
¹H, ¹³C and DEPT 135 NMR spectra of *p*-methoxyphenyl (6-*O*-benzoyl-2,3-di-*O*-benzyl- α -D-glucopyranosyl)-(1 \rightarrow 4)-(2,3,6-tri-*O*-benzyl- β -D-galactopyranosyl)-(1 \rightarrow 3)-2-azido-4,6-di-*O*-benzyl-2-deoxy- α -D-galactopyranoside (**12**) (CDCl₃).



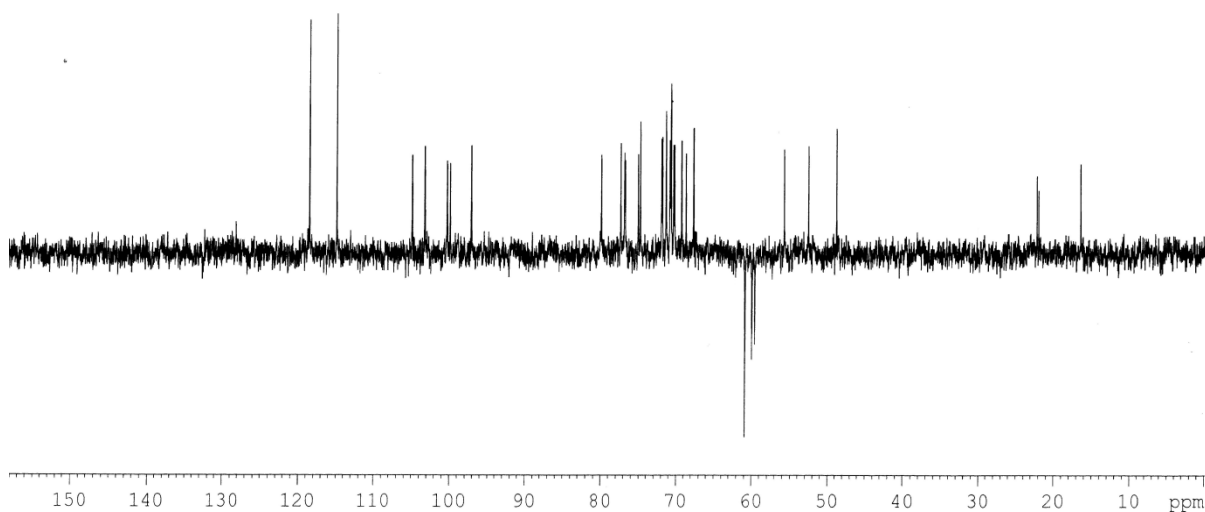
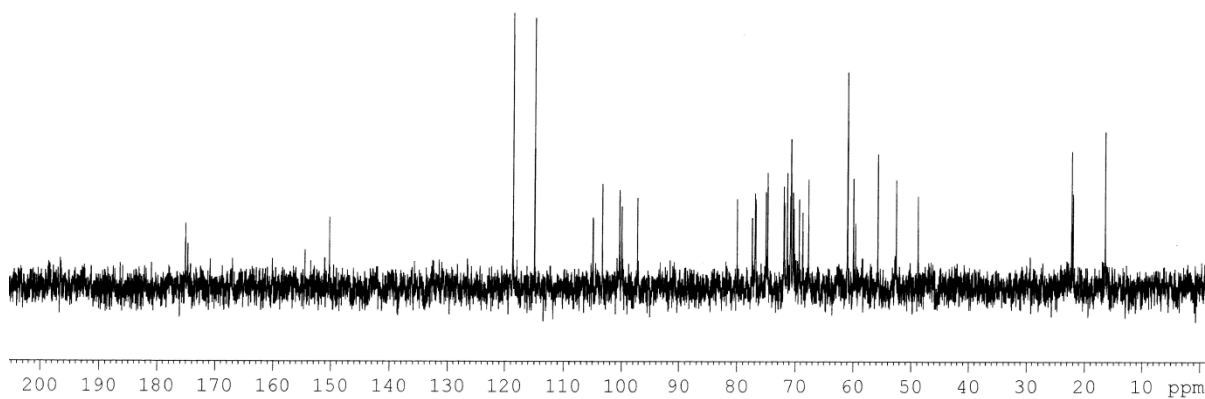
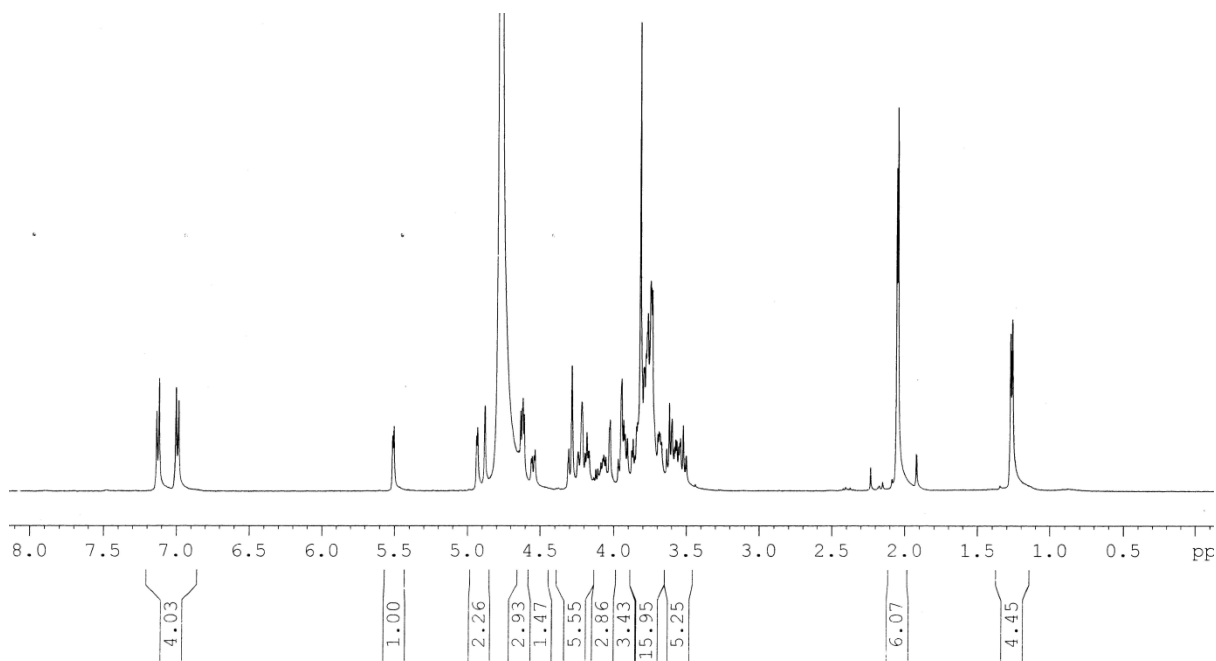
2D COSY and HSQC spectra of *p*-methoxyphenyl (6-*O*-benzoyl-2,3-di-*O*-benzyl- α -D-glucopyranosyl)-(1 \rightarrow 4)-(2,3,6-tri-*O*-benzyl- β -D-galactopyranosyl)-(1 \rightarrow 3)-2-azido-4,6-di-*O*-benzyl-2-deoxy- α -D-galactopyranoside (**12**) (CDCl_3) (selected regions).



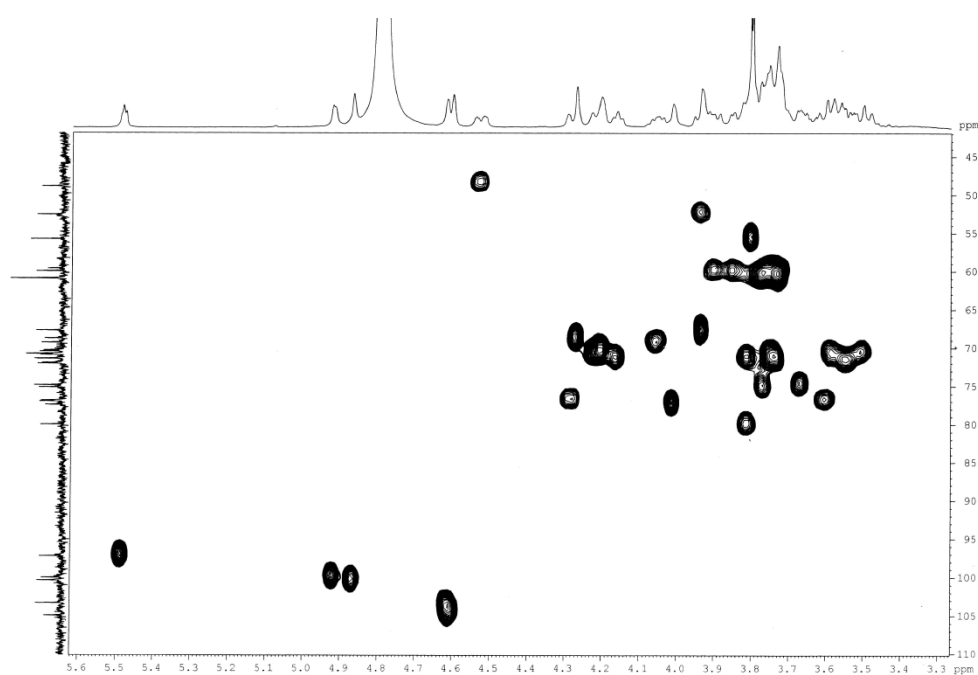
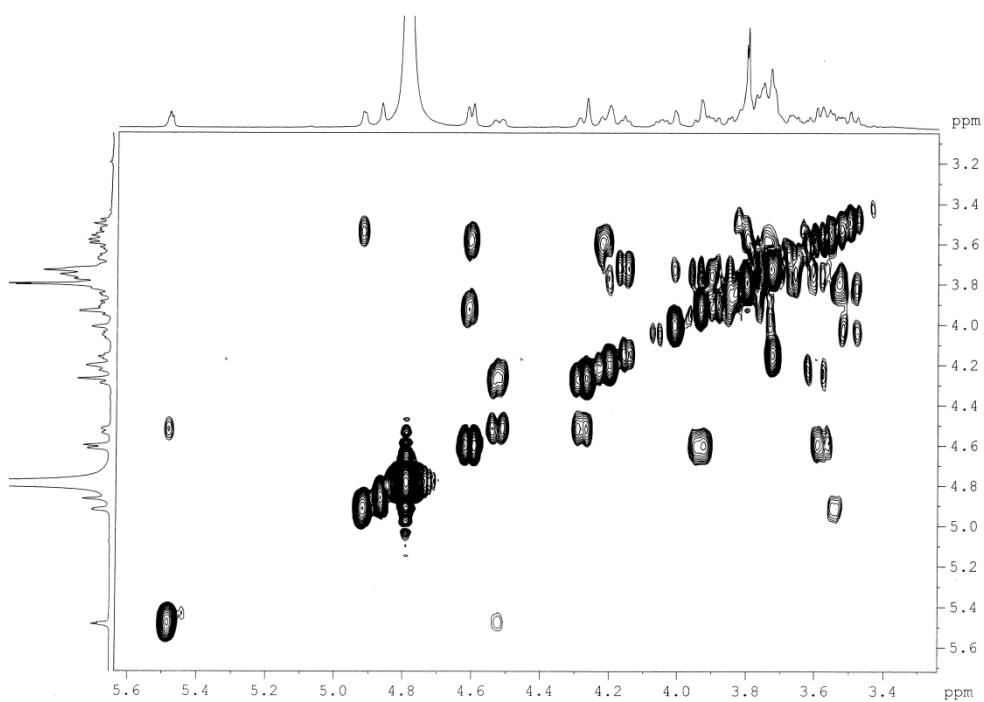
^1H , ^{13}C and DEPT 135 NMR spectra of *p*-methoxyphenyl (3-*O*-acetyl-4,6-*O*-benzylidene-2-deoxy-2-phthalimido- β -D-galactopyranosyl)-(1 \rightarrow 3)-(2-*O*-acetyl-4-*O*-benzyl- α -L-rhamnopyranosyl)-(1 \rightarrow 4)-(6-*O*-benzoyl-2,3-di-*O*-benzyl- α -D-glucopyranosyl)-(1 \rightarrow 4)-(2,3,6-tri-*O*-benzyl- β -D-galactopyranosyl)-(1 \rightarrow 3)-2-azido-4,6-di-*O*-benzyl-2-deoxy- α -D-galactopyranoside (**13**) (CDCl_3).



2D COSY and HSQC spectra of *p*-methoxyphenyl (3-*O*-acetyl-4,6-*O*-benzylidene-2-deoxy-2-phthalimido- β -D-galactopyranosyl)-(1 \rightarrow 3)-(2-*O*-acetyl-4-*O*-benzyl- α -L-rhamnopyranosyl)-(1 \rightarrow 4)-(6-*O*-benzoyl-2,3-di-*O*-benzyl- α -D-glucopyranosyl)-(1 \rightarrow 4)-(2,3,6-tri-*O*-benzyl- β -D-galactopyranosyl)-(1 \rightarrow 3)-2-azido-4,6-di-*O*-benzyl-2-deoxy- α -D-galactopyranoside (**13**) (CDCl₃) (selected regions).



¹H, ¹³C and DEPT 135 NMR spectra of *p*-methoxyphenyl (2-acetamido-2-deoxy- β -D-galactopyranosyl)-(1 \rightarrow 3)-(α -L-rhamnopyranosyl)-(1 \rightarrow 4)-(α -D-glucopyranosyl)-(1 \rightarrow 4)-(β -D-galactopyranosyl)-(1 \rightarrow 3)-2-acetamido-2-deoxy- α -D-galactopyranoside (**1**) (D₂O).



2D COSY and HSQC spectra of *p*-methoxyphenyl (2-acetamido-2-deoxy- β -D-galactopyranosyl)-(1 \rightarrow 3)-(α -L-rhamnopyranosyl)-(1 \rightarrow 4)-(α -D-glucopyranosyl)-(1 \rightarrow 4)-(β -D-galactopyranosyl)-(1 \rightarrow 3)-2-acetamido-2-deoxy- α -D-galactopyranoside (**1**) (D₂O) (selected regions).