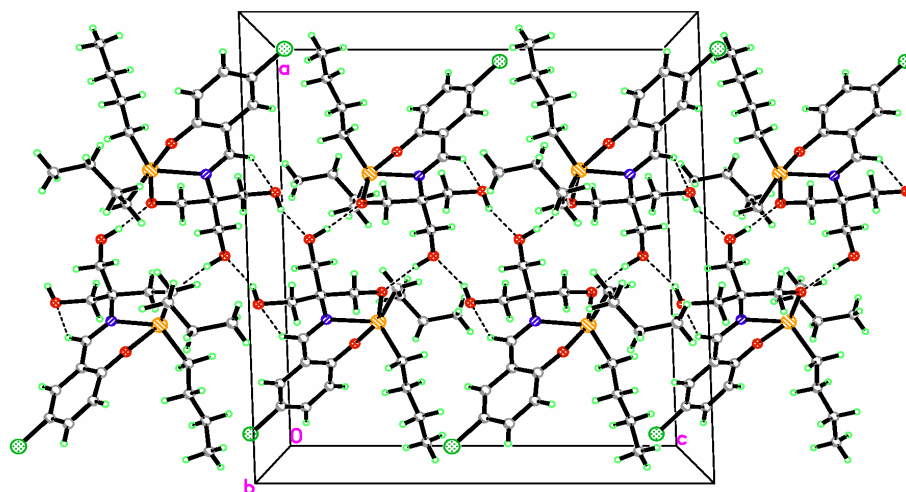


**Appendix V :** Hydrogen bonding geometry (Å) of [1-hydroxy-2-hydroxymethyl-2-(5-chloro-2-oxidobenzylideneamino)-3-oxidomethylpropane]dibutyltin(IV)

D-H-----A	H----A	D----A	D-H----A
O3-H3-----O2	1.79(2)	2.611(2)	167(2)
O4-H40----O3	1.94(2)	2.739(2)	159(3)
C11-H11---O3	2.5300	3.355(3)	145.00
C15H15----O4	2.1600	2.932(3)	137.00



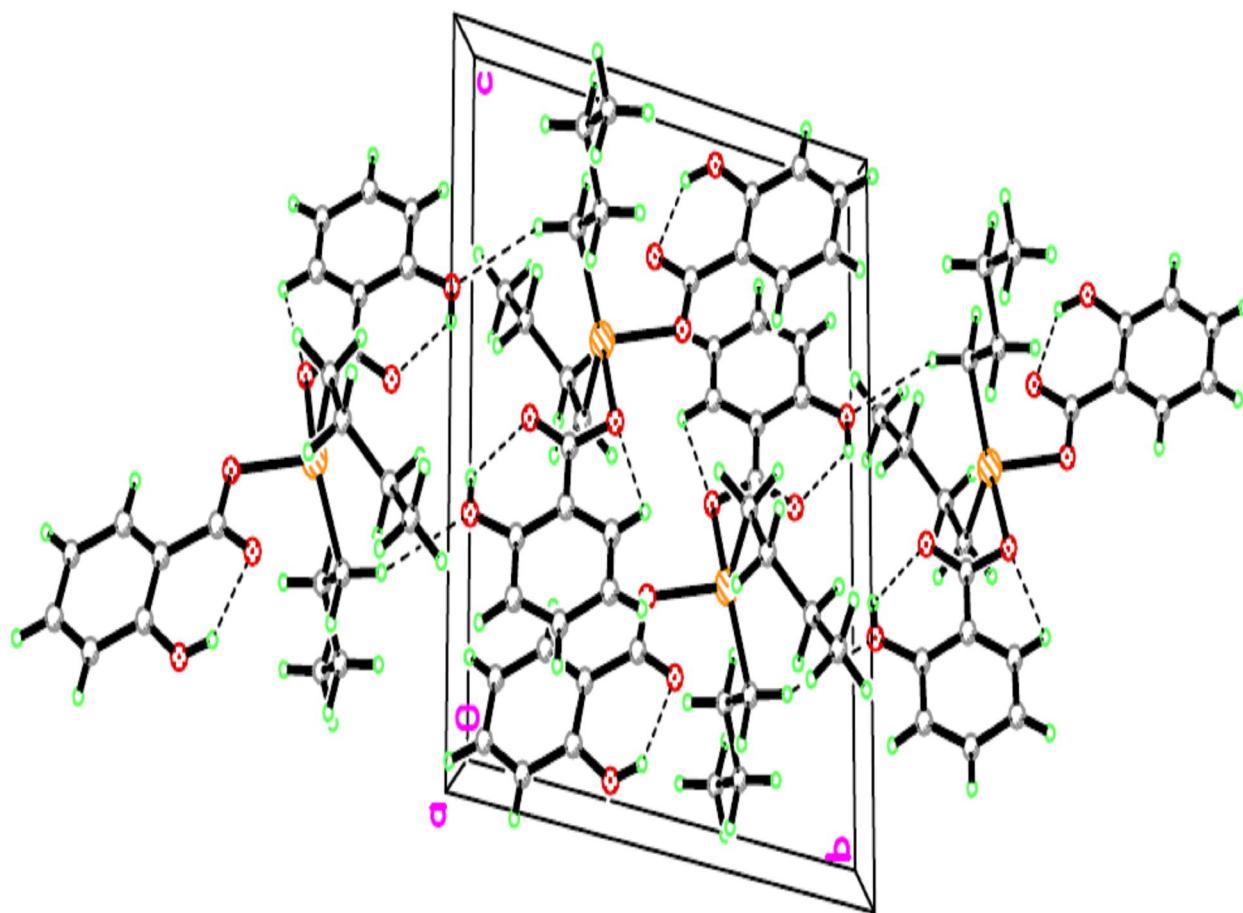
Packing diagram showing [1-hydroxy-2-hydroxymethyl-2-(5-chloro-2-oxidobenzylideneamino)-3-oxidomethylpropane]dibutyltin(IV) by intermolecular hydrogen bonding

**Appendix VI:** Atomic displacement parameters ( $\text{\AA}^2$ ) for [1-hydroxy-2-hydroxymethyl-2-(5-chloro-2-oxidobenzylideneamino)-3-oxidomethylpropane]dibutyltin(IV)

	U <sub>11</sub>	U <sub>22</sub>	U <sub>33</sub>	U <sub>23</sub>	U <sub>13</sub>	U <sub>12</sub>
Sn1	0.0165(1)	0.0217(1)	0.0150(1)	0.0029(1)	-0.0020(1)	0.0030(1)
Cl1	0.0314(3)	0.0353(4)	0.0450(4)	0.0064(3)	-0.0230(3)	0.0097(3)
O1	0.0282(9)	0.0240(9)	0.0211(8)	0.0056(7)	-0.0081(7)	0.0075(7)
O2	0.0231(8)	0.0241(8)	0.0152(7)	0.0022(6)	-0.0038(6)	0.0051(6)
O3	0.0143(7)	0.0288(9)	0.0179(8)	0.0035(6)	-0.0022(6)	0.0051(6)
O4	0.0206(8)	0.0318(9)	0.0160(8)	0.0036(7)	0.0003(6)	0.0004(7)
N1	0.0139(8)	0.0185(9)	0.0170(9)	0.0012(7)	0.0002(7)	0.0016(7)
C1	0.0214(11)	0.0279(13)	0.0330(13)	0.0062(10)	-0.0056(10)	0.0011(9)
C2	0.0324(13)	0.0262(13)	0.0351(14)	0.0027(11)	0.0032(11)	0.0011(10)
C3	0.0352(15)	0.0364(16)	0.0368(16)	0.0108(12)	-0.0058(12)	0.0118(11)
C4	0.059(2)	0.093(3)	0.0352(18)	0.0084(19)	-0.0014(16)	0.030(2)
C5	0.0261(12)	0.0291(13)	0.0333(13)	-0.0001(11)	0.0066(10)	0.0010(10)
C6	0.0265(14)	0.0456(19)	0.0479(19)	-0.0146(13)	0.0099(13)	0.0077(11)
C7	0.0299(14)	0.0389(17)	0.0566(19)	0.0133(14)	0.0121(13)	0.0046(12)
C8	0.0292(16)	0.079(3)	0.058(2)	-0.0026(18)	0.0090(15)	0.0081(15)
C9	0.0201(10)	0.0197(11)	0.0169(10)	-0.0012(8)	-0.0004(8)	0.0017(8)
C10	0.0283(12)	0.0227(12)	0.0186(11)	0.0012(9)	0.0012(9)	0.0090(9)
C11	0.0205(11)	0.0270(12)	0.0248(12)	-0.0055(10)	0.0014(9)	0.0084(9)
C12	0.0193(11)	0.0242(12)	0.0239(11)	-0.0026(9)	-0.0067(9)	0.0015(9)
C13	0.0222(11)	0.0219(12)	0.0230(12)	0.0036(9)	-0.0059(9)	0.0035(9)
C14	0.0163(10)	0.0203(10)	0.0179(11)	0.0000(9)	-0.0020(8)	0.0017(8)
C15	0.0172(10)	0.0194(11)	0.0164(10)	0.0024(8)	-0.0005(8)	0.0015(8)
C16	0.0139(9)	0.0170(10)	0.0154(10)	0.0001(8)	-0.0013(7)	0.0027(7)
C17	0.0218(10)	0.0183(11)	0.0160(10)	-0.0009(8)	0.0000(8)	0.0008(8)
C18	0.0160(10)	0.0179(10)	0.0187(10)	0.0004(8)	-0.0008(8)	0.0018(8)
C19	0.0209(10)	0.0192(11)	0.0186(11)	0.0026(9)	-0.0010(8)	0.0004(8)

**Appendix VII** : Hydrogen bonding geometry (Å) of di-n-butyl bis(2-hydroxybenzoato)tin(IV)

D-H----A	D-H	H----A	D----A	D-H----A
O3-H30----O2	0.84	1.96	2.599(9)	132
O6-H60 ---O5	0.84	2.00	2.626(8)	131



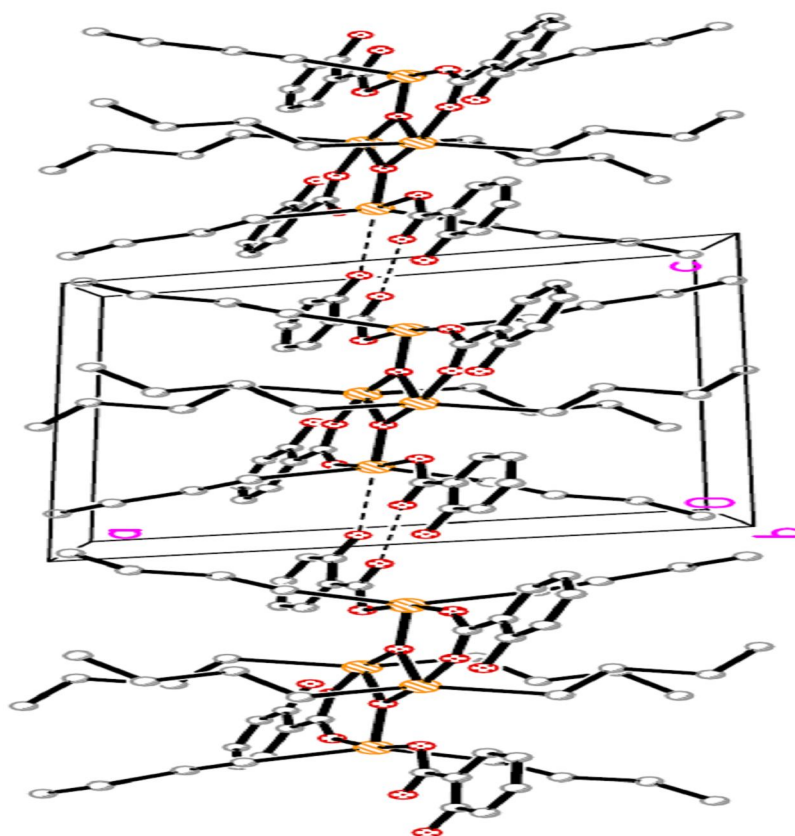
Packing diagram showing di-n-butyl bis(2-hydroxybenzoato)tin(IV)

**Appendix VIII:** Atomic displacement parameters ( $\text{\AA}^2$ ) for di-n butyl bis(2-hydroxybenzoato)tin(IV)

	U <sub>11</sub>	U <sub>22</sub>	U <sub>33</sub>	U <sub>12</sub>	U <sub>13</sub>	U <sub>23</sub>
Sn1	0.0326(3)	0.0370(3)	0.0356(3)	0.00980(19)	0.01499(19)	0.00458(18)
O1	0.048 (3)	0.040 (3)	0.042 (3)	0.015 (2)	0.020 (2)	0.006(2)
O2	0.049 (3)	0.045 (3)	0.052 (3)	0.010 (2)	0.021 (3)	0.006(2)
O3	0.078 (5)	0.059 (4)	0.071 (4)	0.009 (3)	0.048 (4)	0.003(3)
O4	0.044 (3)	0.038 (3)	0.041 (3)	0.014 (2)	0.022 (2)	0.006(2)
O5	0.058 (4)	0.046 (3)	0.060 (4)	0.010 (3)	0.035 (3)	0.010(3)
O6	0.076 (4)	0.036 (3)	0.076 (4)	0.006 (3)	0.041 (4)	-0.002 (3)
C1	0.041 (4)	0.054 (4)	0.039 (4)	0.014 (3)	0.013 (3)	0.011(3)
C2	0.040 (4)	0.051 (5)	0.065 (5)	0.017 (4)	0.020 (4)	0.019(4)
C3	0.055 (5)	0.055 (5)	0.077 (6)	0.019 (4)	0.034 (5)	0.022(5)
C4	0.080 (7)	0.070 (7)	0.098 (8)	0.019 (6)	0.062 (7)	0.014(6)
C5	0.050 (4)	0.040 (4)	0.039 (4)	0.012 (3)	0.019 (3)	0.010(3)
C6	0.048 (4)	0.039 (4)	0.041 (4)	0.013 (3)	0.017 (3)	0.010(3)
C7	0.063 (6)	0.057 (5)	0.054 (5)	0.024 (4)	0.011 (4)	0.016(4)
C8	0.056 (6)	0.104 (9)	0.074 (7)	0.037 (6)	0.008 (5)	0.020(6)
C9	0.042 (4)	0.046 (4)	0.034 (3)	0.021 (3)	0.014 (3)	0.008(3)
C10	0.049 (4)	0.036 (3)	0.032 (3)	0.017 (3)	0.011 (3)	0.009(3)
C11	0.057 (5)	0.044 (4)	0.044 (4)	0.017 (4)	0.024 (4)	0.008(3)
C12	0.099 (8)	0.055 (5)	0.054 (5)	0.027 (5)	0.043 (5)	0.003(4)
C13	0.136 (11)	0.037 (5)	0.086 (8)	0.010 (6)	0.068 (8)	-0.001 (5)
C14	0.145 (12)	0.038 (5)	0.100 (9)	0.007 (6)	0.089 (9)	0.002(5)
C15	0.073 (6)	0.044 (4)	0.051 (5)	0.017 (4)	0.038 (4)	0.009(4)
C16	0.033 (3)	0.040 (4)	0.033 (3)	0.013 (3)	0.012 (3)	0.007(3)
C17	0.036 (3)	0.041 (4)	0.031 (3)	0.017 (3)	0.013 (3)	0.008(3)
C18	0.043 (4)	0.039 (4)	0.046 (4)	0.013 (3)	0.020 (3)	0.008(3)
C19	0.068 (6)	0.055 (5)	0.041 (4)	0.026 (4)	0.025 (4)	0.003(3)
C20	0.074 (6)	0.082 (7)	0.048 (5)	0.039 (5)	0.036 (5)	0.018(4)
C21	0.064 (6)	0.059 (5)	0.060 (5)	0.023 (4)	0.038 (5)	0.028(4)
C22	0.044 (4)	0.043 (4)	0.048 (4)	0.020 (3)	0.022 (3)	0.016(3)

**Appendix IX:** Hydrogen bonding geometry (Å) of bis [1,1,3,3-tetrabutyl-1,3-bis[2-hydroxybenzoato)1,3-distannoxane]

D-H-----A	D-H	H-----A	D----A	D-H----A
O3-H3---O2	0.84	2.02	2.638 (2)	130
O6-H6---O5	0.84	1.91	2.548 (2)	132



Packing diagram showing bis[1,1,3,3-tetrabutyl-1,3-bis[2-hydroxybenzoato)1,3-distannoxane] linked by intermolecular hydrogen bonding

**Appendix X:** Atomic displacement parameters for bis[1,1,3,3-tetrabutyl-1,3-bis[2-hydroxybenzoato)1,3- distannoxane]

	U <sub>11</sub>	U <sub>22</sub>	U <sub>33</sub>	U <sub>12</sub>	U <sub>13</sub>	U <sub>23</sub>
Sn1	0.01990 (8)	0.01605 (8)	0.01136 (8)	0.01119 (6)	0.00618 (5)	0.00671 (6)
Sn2	0.01459 (8)	0.01233 (8)	0.01148 (8)	0.00713 (6)	0.00409 (5)	0.00591 (5)
O1	0.0400 (10)	0.0301 (9)	0.0223 (8)	0.0263 (8)	0.0132 (7)	0.0147 (7)
O2	0.0282 (8)	0.0202 (7)	0.0158 (7)	0.0162 (7)	0.0086 (6)	0.0070 (6)
O3	0.0302 (8)	0.0235 (8)	0.0191 (7)	0.0171 (7)	0.0104 (6)	0.0109 (6)
O4	0.0236 (7)	0.0180 (7)	0.0122 (7)	0.0122 (6)	0.0061 (6)	0.0073 (6)
O5	0.0297 (8)	0.0245 (8)	0.0150 (7)	0.0177 (7)	0.0091 (6)	0.0098 (6)
O6	0.0423 (10)	0.0318 (9)	0.0164 (8)	0.0234 (8)	0.0087 (7)	0.0128 (7)
O7	0.0192 (7)	0.0157 (7)	0.0119 (6)	0.0104 (6)	0.0053 (5)	0.0072 (5)
C1	0.0233 (11)	0.0226 (11)	0.0223 (11)	0.0123 (9)	0.0092 (9)	0.0114 (9)
C2	0.0211 (11)	0.0251 (11)	0.0205 (10)	0.0128 (9)	0.0073 (8)	0.0071 (9)
C3	0.0250 (12)	0.0308 (12)	0.0275 (12)	0.0129 (10)	0.0109 (9)	0.0101 (10)
C4	0.0250 (13)	0.0423 (15)	0.0392 (16)	0.0164 (12)	0.0111 (11)	0.0062 (12)
C5	0.0256 (11)	0.0177 (10)	0.0160 (10)	0.0100 (9)	0.0049 (8)	0.0056 (8)
C6	0.0273 (12)	0.0204 (11)	0.0196 (10)	0.0108 (9)	0.0010 (9)	0.0057 (9)
C7	0.0256 (11)	0.0223 (11)	0.0219 (11)	0.0095 (9)	0.0047 (9)	0.0068 (9)
C8	0.0357 (14)	0.0285 (13)	0.0418 (15)	0.0128 (12)	-0.0047 (12)	0.0097 (12)
C9	0.0166 (10)	0.0213 (10)	0.0147 (9)	0.0089 (8)	0.0035 (8)	0.0071 (8)
C10	0.0170 (10)	0.0202 (10)	0.0182 (10)	0.0078 (8)	0.0049 (8)	0.0079 (8)
C11	0.0197 (11)	0.0267 (12)	0.0240 (11)	0.0065 (9)	0.0041 (9)	0.0078 (9)
C12	0.0210 (12)	0.0326 (13)	0.0364 (14)	0.0031 (10)	0.0091 (10)	0.0125 (11)
C13	0.0202 (10)	0.0154 (9)	0.0148 (9)	0.0084 (8)	0.0065 (8)	0.0075 (8)
C14	0.0198 (10)	0.0152 (9)	0.0161 (10)	0.0074 (8)	0.0043 (8)	0.0057 (8)
C15	0.0206 (11)	0.0201 (11)	0.0245 (11)	0.0056 (9)	0.0064 (9)	0.0075 (9)
C16	0.0219 (12)	0.0273 (12)	0.0337 (13)	0.0053 (10)	-0.0005 (10)	0.0046 (10)
C17	0.0143 (9)	0.0159 (9)	0.0153 (10)	0.0051 (8)	0.0029 (7)	0.0071 (8)
C18	0.0157 (9)	0.0149 (9)	0.0171 (10)	0.0075 (8)	0.0019 (7)	0.0063 (8)
C19	0.0266 (11)	0.0201 (10)	0.0180 (10)	0.0114 (9)	0.0025 (8)	0.0080 (9)
C20	0.0454 (15)	0.0299 (13)	0.0231 (12)	0.0236 (12)	0.0022 (10)	0.0134 (10)
C21	0.0398 (14)	0.0286 (13)	0.0336 (13)	0.0237 (12)	-0.0009 (11)	0.0101 (11)
C22	0.0294 (12)	0.0228 (11)	0.0260 (12)	0.0168 (10)	0.0041 (9)	0.0051 (9)
C23	0.0200 (10)	0.0180 (10)	0.0193 (10)	0.0096 (9)	0.0036 (8)	0.0070 (8)
C24	0.0125 (9)	0.0123 (9)	0.0200 (10)	0.0049 (8)	0.0049 (7)	0.0067 (8)
C25	0.0185 (10)	0.0172 (10)	0.0159 (10)	0.0096 (8)	0.0044 (8)	0.0050 (8)
C26	0.0194 (10)	0.0195 (10)	0.0172 (10)	0.0099 (8)	0.0057 (8)	0.0078 (8)
C27	0.0273 (12)	0.0220 (11)	0.0261 (11)	0.0154 (10)	0.0093 (9)	0.0125 (9)
C28	0.0326 (13)	0.0279 (12)	0.0274 (12)	0.0219 (11)	0.0098 (10)	0.0071 (10)
C29	0.0425 (14)	0.0348 (13)	0.0210 (11)	0.0258 (12)	0.0156 (10)	0.0124 (10)
C30	0.0350 (13)	0.0290 (12)	0.0224 (11)	0.0210 (11)	0.0109 (10)	0.0132 (10)