

Supplementary Material

Synthesis of 4,5,6-trichloropyrimidine-2-carbonitrile from 4,6-dichloro-2-(methylthio)pyrimidine

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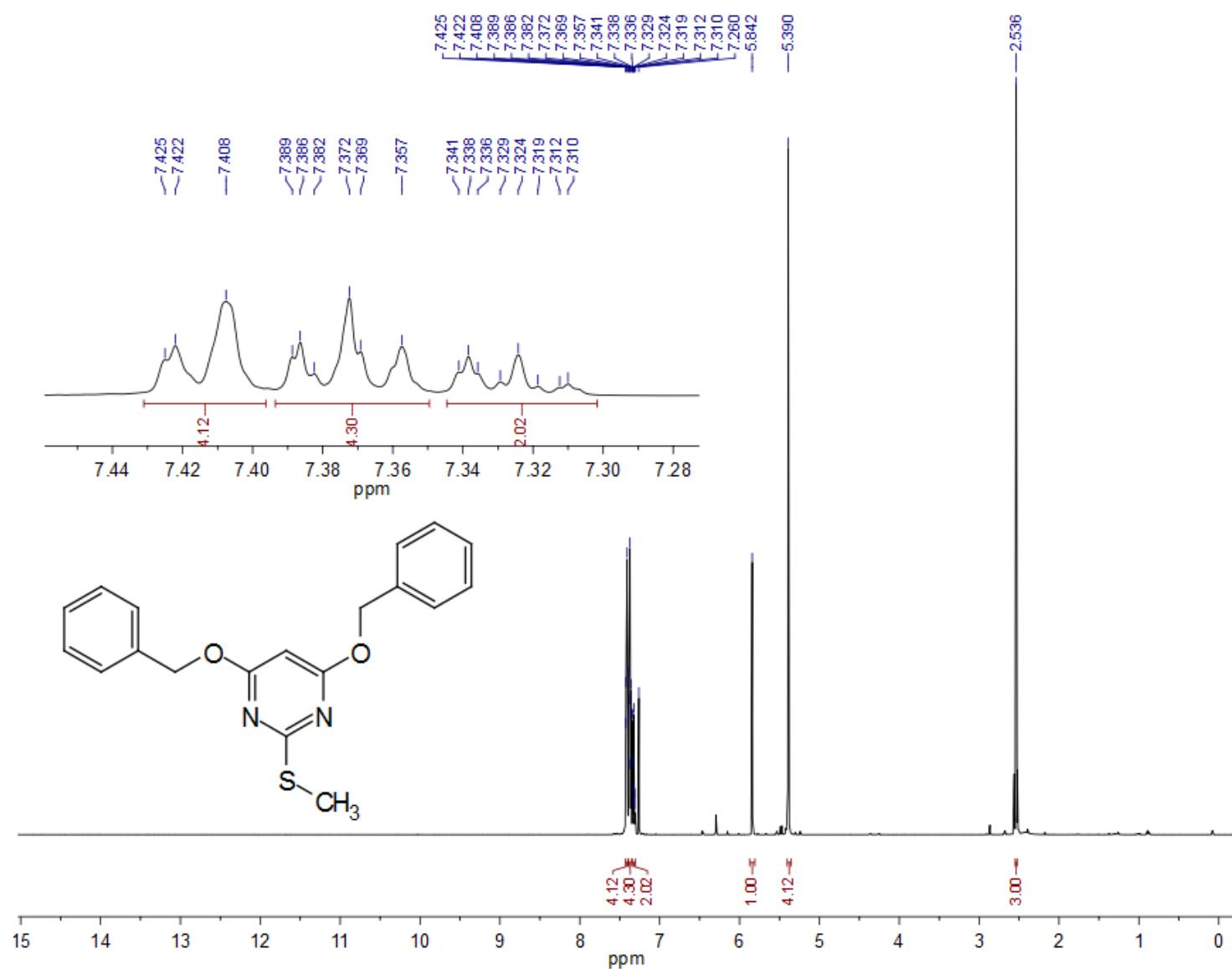
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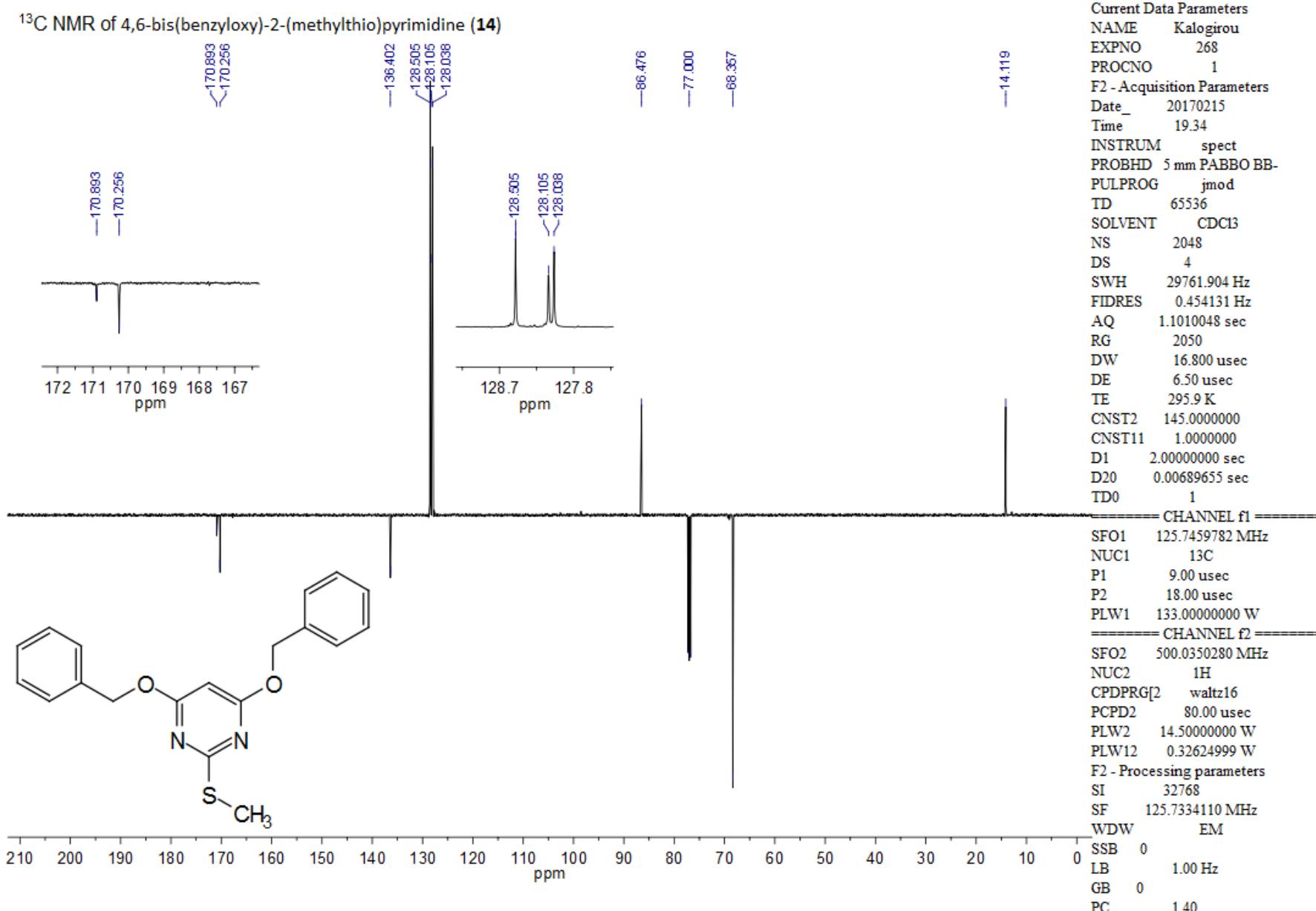
¹H NMR of 4,6-bis(benzyloxy)-2-(methylthio)pyrimidine (**14**)

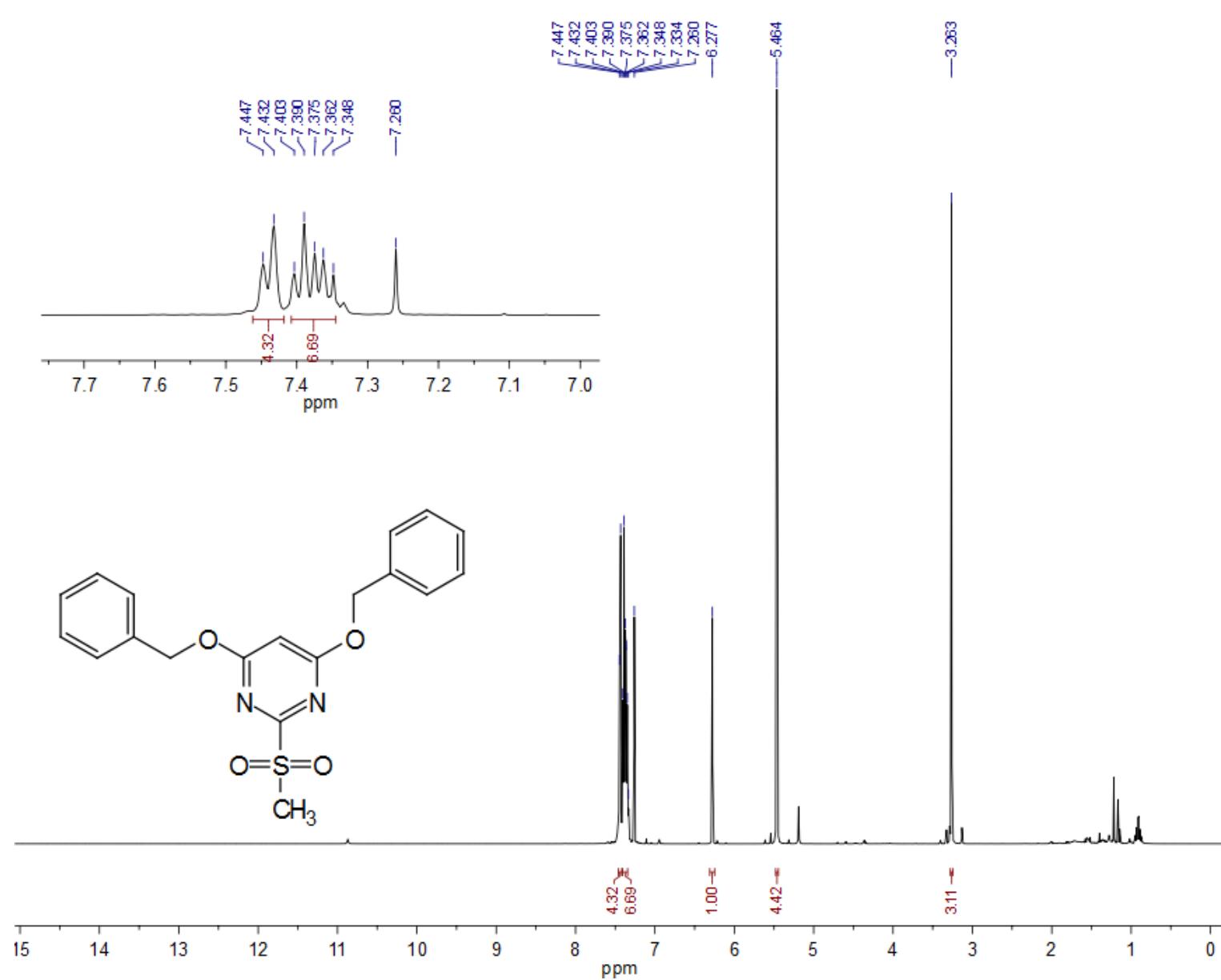
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 SOLVENT CDCl₃
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 DS 2
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 FIDRES 0.152588 Hz
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 RG 101
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 TE 294.7 K
 D1 1.0000000 sec
 TD0 1

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 PLW1 14.50000000 W

F2 - Processing parameters
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 SF 500.0330403 MHz
 WDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00

¹³C NMR of 4,6-bis(benzyloxy)-2-(methylthio)pyrimidine (**14**)

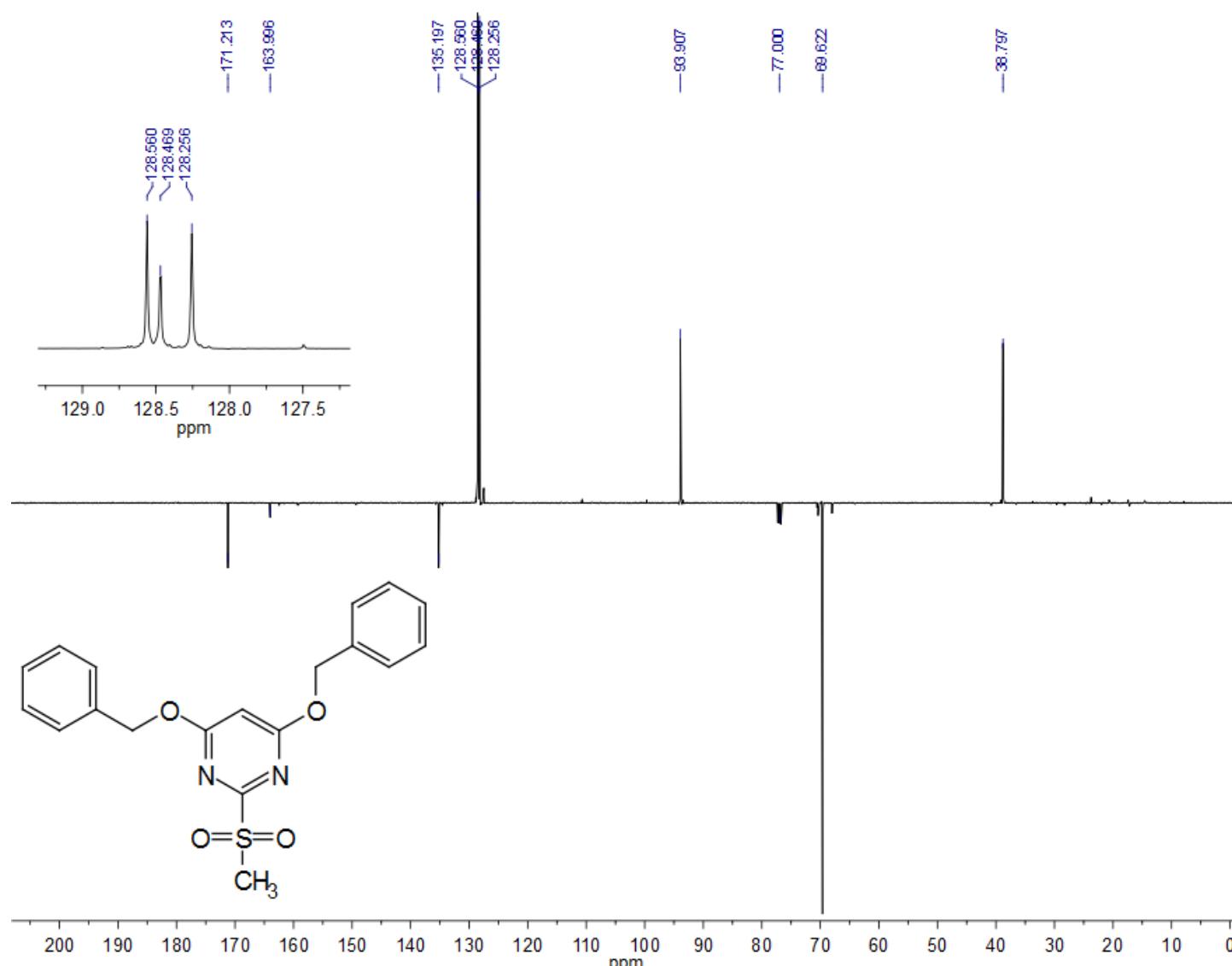
¹H NMR of 4,6-bis(benzyloxy)-2-(methylsulfonyl)pyrimidine (**15**)

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 EXPNO 271
 PROCNO 1

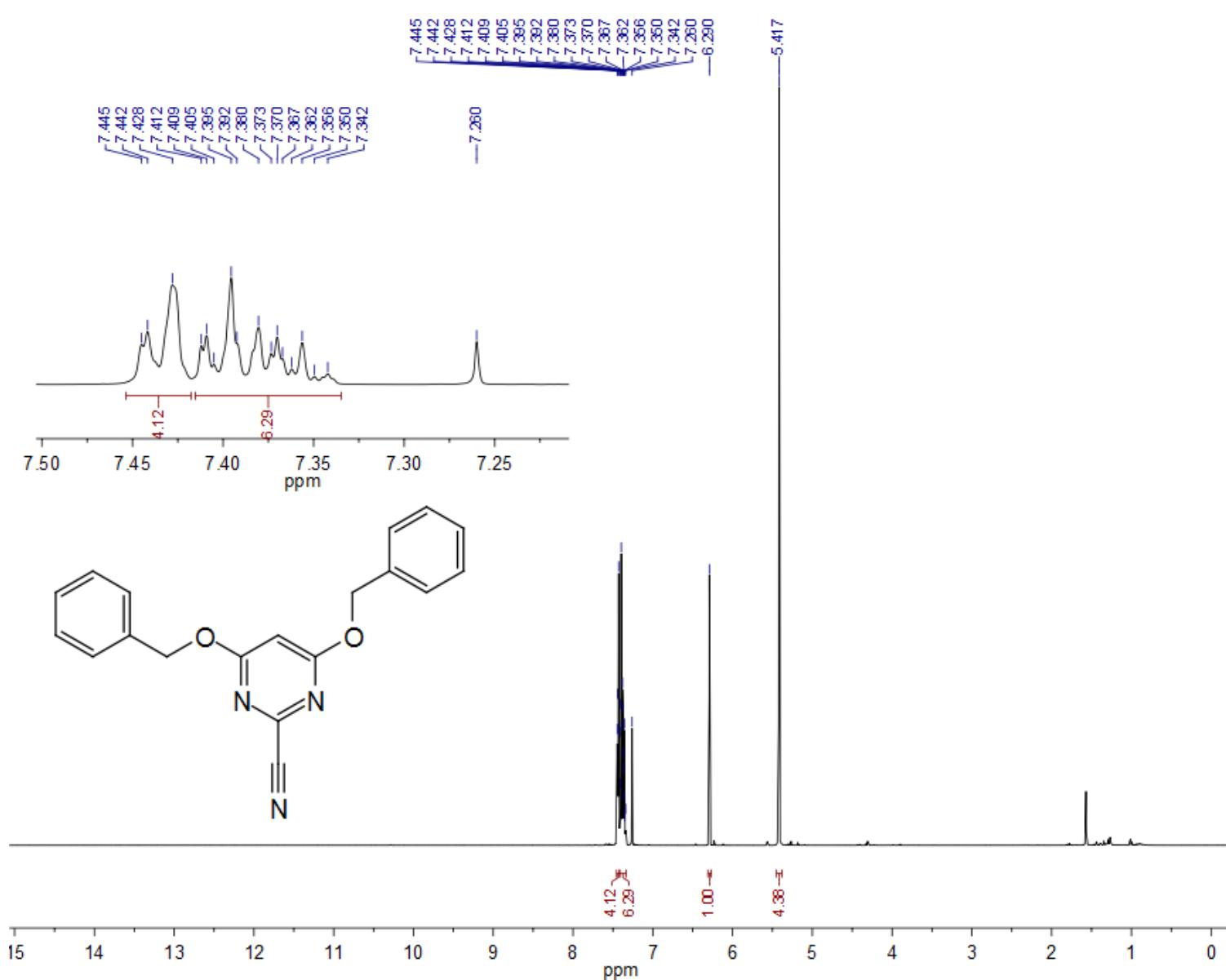
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 PULPROG zg30
 TD 65536
 SOLVENT CDCl₃
 NS 16
 DS 2
 SWH 10000.000 Hz
 FIDRES 0.152588 Hz
 AQ 3.2767999 sec
 RG 32
 DW 50.000 usec
 DE 6.50 usec
 TE 294.5 K
 D1 1.0000000 sec
 TD0 1

===== CHANNEL f1 =====
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 NUC1 1H
 P1 12.00 usec
 PLW1 14.5000000 W

F2 - Processing parameters
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 SF 500.0330401 MHz
 WDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00

¹³C NMR of 4,6-bis(benzyloxy)-2-(methylsulfonyl)pyrimidine (**15**)

Current Data Parameters
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 EXPNO 272
 PROCNO 1
 F2 - Acquisition Parameters
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 PULPROG jmod
 TD 65536
 SOLVENT CDCl3
 NS 1792
 DS 4
 SWH 29761.904 Hz
 FIDRES 0.454131 Hz
 AQ 1.1010048 sec
 RG 2050
 DW 16.800 usec
 DE 6.50 usec
 TE 295.9 K
 CNST2 145.000000
 CNST11 1.000000
 D1 2.0000000 sec
 D20 0.00689655 sec
 TD0 1
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 NUC1 ¹³C
 P1 9.00 usec
 P2 18.00 usec
 PLW1 133.0000000 W
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 SFO2 500.0350280 MHz
 NUC2 ¹H
 CPDPRG[2] waltz16
 PCPD2 80.00 usec
 PLW2 14.5000000 W
 PLW12 0.32624999 W
 F2 - Processing parameters
 SI 32768
 SF 125.7334234 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40

¹H NMR of 4,6-bis(benzyloxy)pyrimidine-2-carbonitrile (**16**)

Current Data Parameters
 NAME Kalogirou
 EXPNO 273
 PROCNO 1

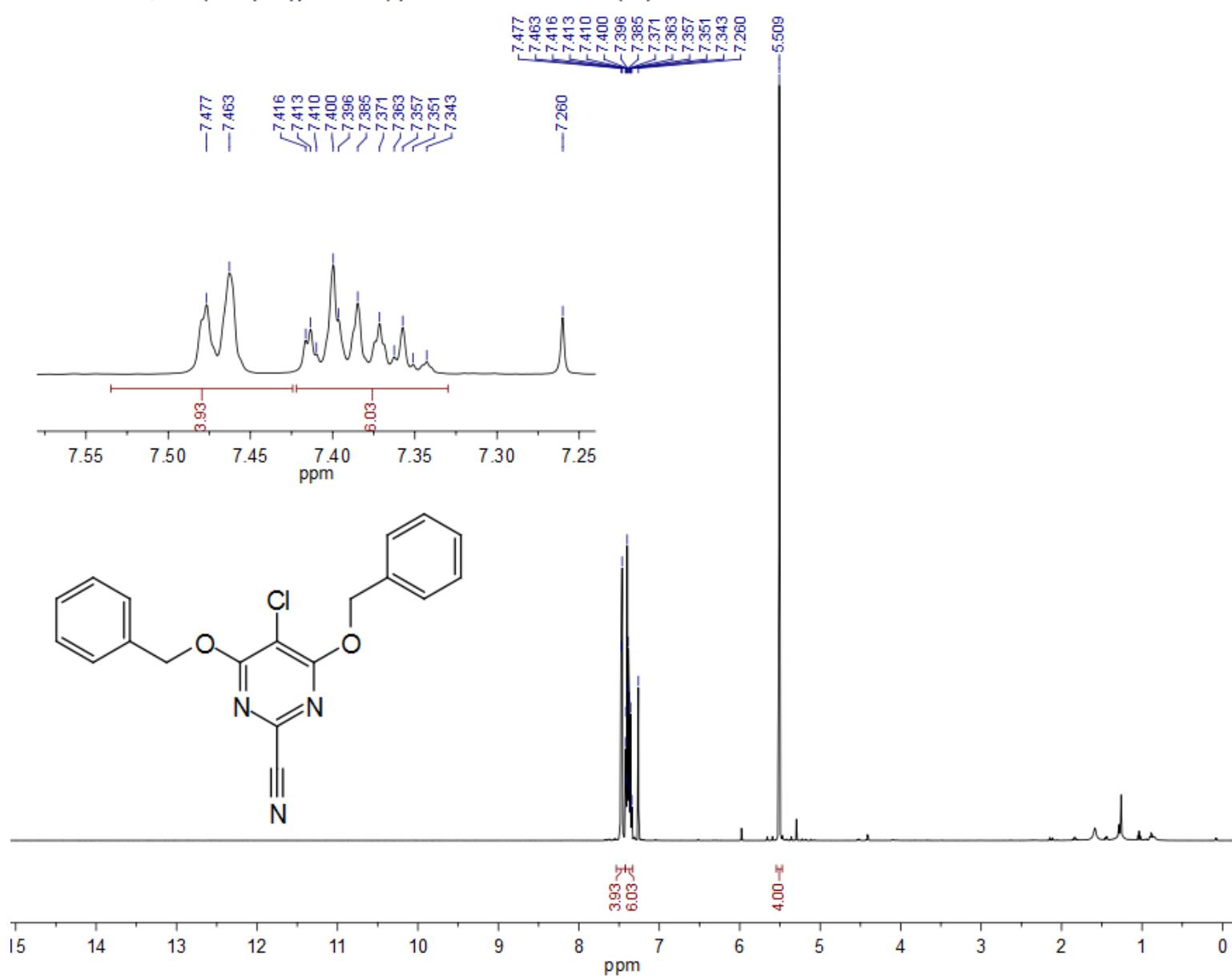
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 PULPROG zg30
 TD 65536
 SOLVENT CDCl₃
 NS 16
 DS 2
 SWH 10000.000 Hz
 FIDRES 0.152588 Hz
 AQ 3.2767999 sec
 RG 90.5
 DW 50.000 usec
 DE 6.50 usec
 TE 297.2 K
 D1 1.0000000 sec
 TD0 1

===== CHANNEL f1 =====
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 NUC1 1H
 P1 12.00 usec
 PLW1 14.5000000 W

F2 - Processing parameters
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 SF 500.0330403 MHz
 WDW EM
 SSB 0
 LB 0.30 Hz
 GB 0
 PC 1.00

¹³C NMR of 4,6-bis(benzyloxy)pyrimidine-2-carbonitrile (**16**)

Current Data Parameters
 NAME Kalogirou
 EXPNO 274
 PROCNO 1
 F2 - Acquisition Parameters
 Date_ 20170309
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 INSTRUM spect
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 PULPROG jmod
 TD 65536
 SOLVENT CDCl3
 NS 7680
 DS 4
 SWH 29761.904 Hz
 FIDRES 0.454131 Hz
 AQ 1.1010048 sec
 RG 2050
 DW 16.800 usec
 DE 6.50 usec
 TE 297.2 K
 CNST2 145.000000
 CNST11 1.000000
 D1 2.0000000 sec
 D20 0.00689655 sec
 TD0 1
 ===== CHANNEL f1 =====
 SFO1 125.7459782 MHz
 NUC1 ¹³C
 P1 9.00 usec
 P2 18.00 usec
 PLW1 133.0000000 W
 ===== CHANNEL f2 =====
 SFO2 500.0350280 MHz
 NUC2 ¹H
 CPDPRG[2] waltz16
 PCPD2 80.00 usec
 PLW2 14.5000000 W
 PLW12 0.32624999 W
 F2 - Processing parameters
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 SF 125.7334107 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40

¹H NMR of 4,6-bis(benzyloxy)-5-chloropyrimidine-2-carbonitrile (**17**)

Current Data Parameters

NAME Kalogirou
EXPNO 275
PROCNO 1

F2 - Acquisition Parameters

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PULPROG zg30
TD 65536
SOLVENT CDCl₃
NS 16
DS 2
SWH 10000.000 Hz
FIDRES 0.152588 Hz
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RG 114
DW 50.000 usec
DE 6.50 usec
TE 295.2 K
D1 1.0000000 sec
TD0 1

===== CHANNEL f1 =====

SFO1 500.0361158 MHz
NUC1 ¹H
P1 12.00 usec
PLW1 14.50000000 W

F2 - Processing parameters

SI 65536
SF 500.0330403 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

