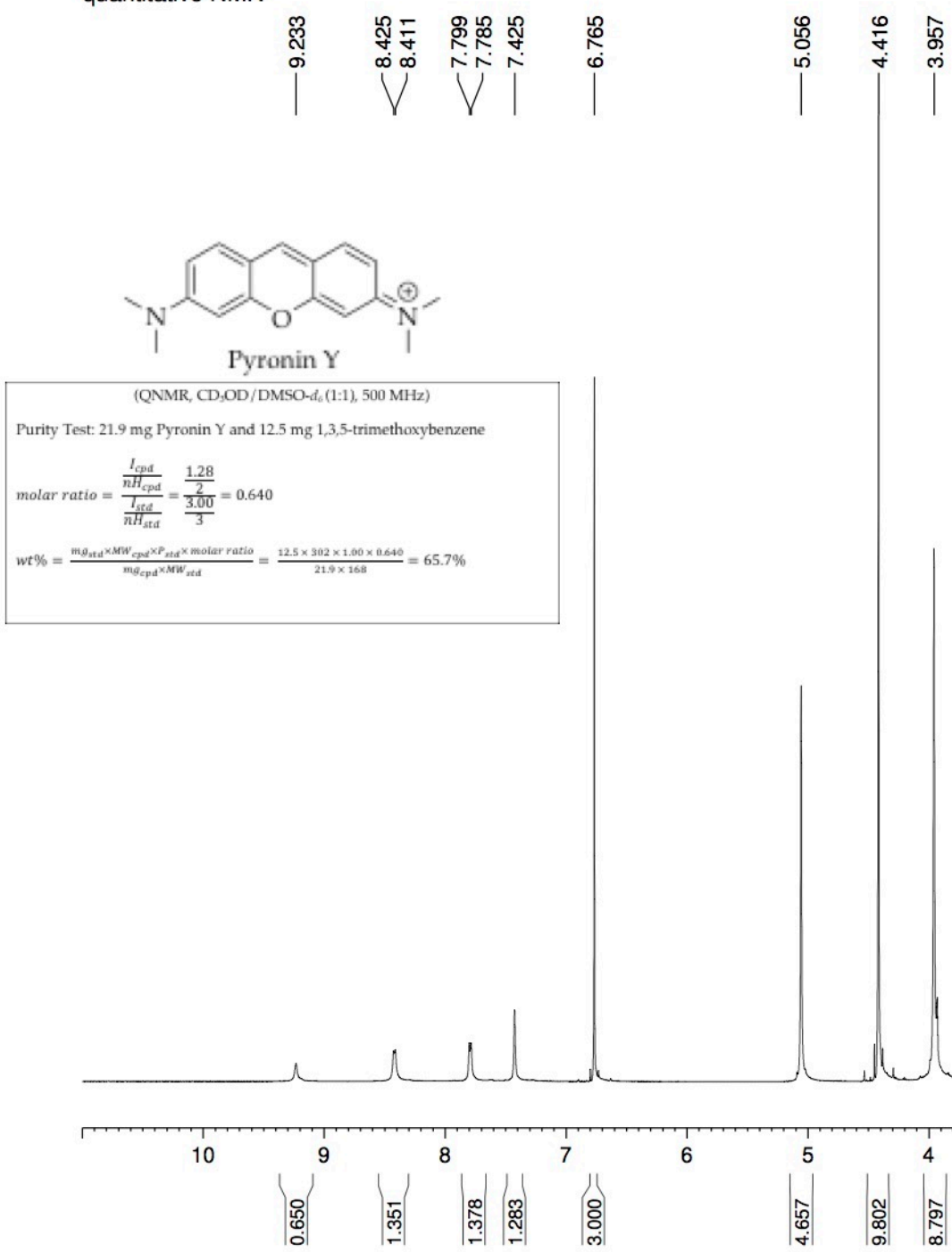
quantitative NMR



Pyronin Y

(QNMR, CD_3OD/DMSO-d_6 (1:1), 500 MHz)

Purity Test: 21.9 mg Pyronin Y and 12.5 mg 1,3,5-trimethoxybenzene

$$molar\ ratio = \frac{\frac{I_{cpd}}{nH_{cpd}}}{\frac{I_{std}}{nH_{std}}} = \frac{\frac{1.28}{2}}{\frac{3.00}{3}} = 0.640$$

$$wt\% = \frac{m_{std} \times MW_{cpd} \times P_{std} \times molar\ ratio}{m_{cpd} \times MW_{std}} = \frac{12.5 \times 302 \times 1.00 \times 0.640}{21.9 \times 168} = 65.7\%$$

Current Data Parameters
NAME KAS-2019-256
EXPNO 1
PROCNO 999

F2 - Acquisition Parameters
Date_ 20191206
Time 16.33
INSTRUM av600
PROBHD 5 mm BB5
PULPROG zg30
TD 65536
SOLVENT MeOD
NS 8
DS 0
SWH 12376.237 Hz
FIDRES 0.188846 Hz
AQ 2.6476543 sec
RG 114
DW 40.400 usec
DE 6.50 usec
TE 295.3 K
D1 30.00000000 sec
TD0 1

======== CHANNEL f1 ======
NUC1 1H
P1 16.50 usec
PL1 -1.00 dB
PL1W 31.62277603 W
SFO1 600.1336008 MHz

F2 - Processing parameters
SI 65536
SF 600.1300273 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00