

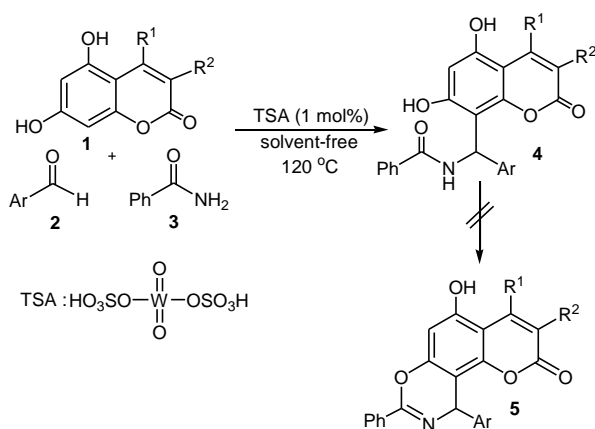
## New Journal of Chemistry

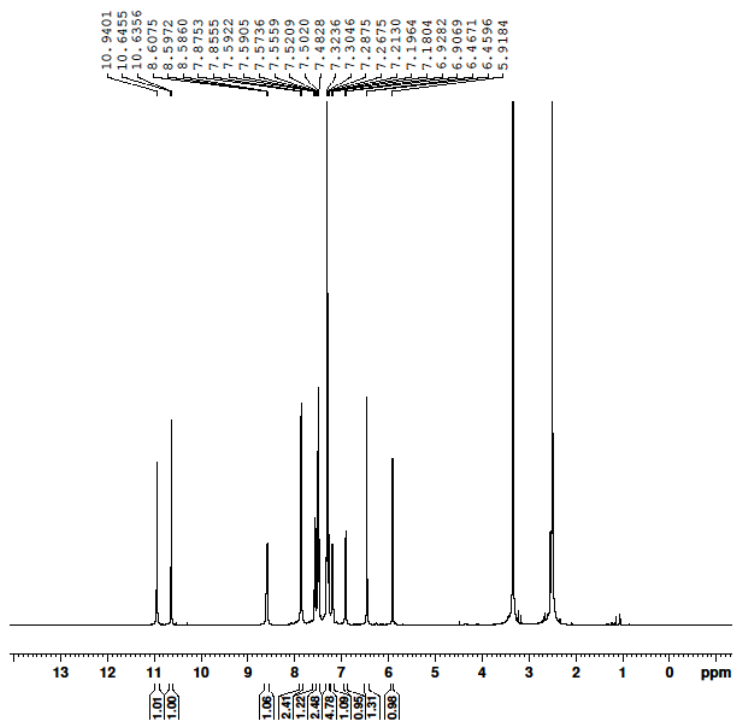
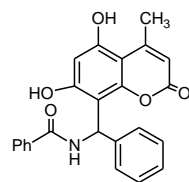
### Supplementary Information

#### Novel synthesis of coumarin-containing secondary benzamide derivatives using tungstate sulfuric acid

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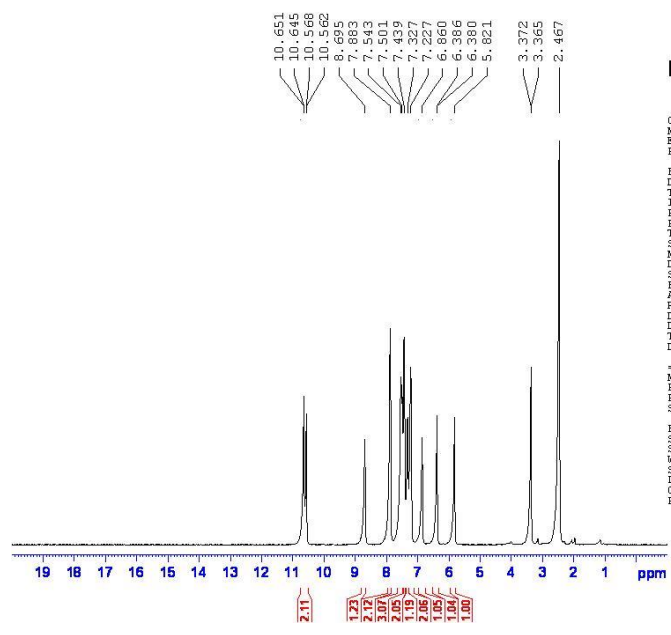
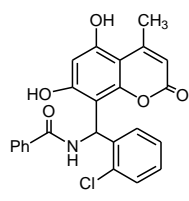


Instrument: Bruker Avance 400  
 NMR Spectrometer (400 MHz, DMSO-d<sub>6</sub>)

Type of experiment: 1D (Decoupled) 1H Spectrum

NAME: NIPER-Dehra-Dun  
 Date: 2013-03-13  
 Time: 10:30:00  
 Sample: 1  
 Solvent: DMSO-d<sub>6</sub>  
 Concentration: 10.00 mg/ml  
 Temperature: 300.2 K  
 Acquisition Time: 0.10000000  
 F1: 400.1464000 MHz  
 F2: 101.6253000 MHz  
 F3: 101.6253000 MHz  
 F4: 101.6253000 MHz  
 F5: 101.6253000 MHz  
 F6: 101.6253000 MHz  
 F7: 101.6253000 MHz  
 F8: 101.6253000 MHz  
 F9: 101.6253000 MHz  
 F10: 101.6253000 MHz  
 F11: 101.6253000 MHz  
 F12: 101.6253000 MHz  
 F13: 101.6253000 MHz  
 F14: 101.6253000 MHz  
 F15: 101.6253000 MHz  
 F16: 101.6253000 MHz  
 F17: 101.6253000 MHz  
 F18: 101.6253000 MHz  
 F19: 101.6253000 MHz  
 F20: 101.6253000 MHz  
 F21: 101.6253000 MHz  
 F22: 101.6253000 MHz  
 F23: 101.6253000 MHz  
 F24: 101.6253000 MHz  
 F25: 101.6253000 MHz  
 F26: 101.6253000 MHz  
 F27: 101.6253000 MHz  
 F28: 101.6253000 MHz  
 F29: 101.6253000 MHz  
 F30: 101.6253000 MHz  
 F31: 101.6253000 MHz  
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 F36: 101.6253000 MHz  
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 F41: 101.6253000 MHz  
 F42: 101.6253000 MHz  
 F43: 101.6253000 MHz  
 F44: 101.6253000 MHz  
 F45: 101.6253000 MHz  
 F46: 101.6253000 MHz  
 F47: 101.6253000 MHz  
 F48: 101.6253000 MHz  
 F49: 101.6253000 MHz  
 F50: 101.6253000 MHz  
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 F63: 101.6253000 MHz  
 F64: 101.6253000 MHz  
 F65: 101.6253000 MHz  
 F66: 101.6253000 MHz  
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 F68: 101.6253000 MHz  
 F69: 101.6253000 MHz  
 F70: 101.6253000 MHz  
 F71: 101.6253000 MHz  
 F72: 101.6253000 MHz  
 F73: 101.6253000 MHz  
 F74: 101.6253000 MHz  
 F75: 101.6253000 MHz  
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 F77: 101.6253000 MHz  
 F78: 101.6253000 MHz  
 F79: 101.6253000 MHz  
 F80: 101.6253000 MHz  
 F81: 101.6253000 MHz  
 F82: 101.6253000 MHz  
 F83: 101.6253000 MHz  
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 F87: 101.6253000 MHz  
 F88: 101.6253000 MHz  
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 F90: 101.6253000 MHz  
 F91: 101.6253000 MHz  
 F92: 101.6253000 MHz  
 F93: 101.6253000 MHz  
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 F95: 101.6253000 MHz  
 F96: 101.6253000 MHz  
 F97: 101.6253000 MHz  
 F98: 101.6253000 MHz  
 F99: 101.6253000 MHz  
 F100: 101.6253000 MHz





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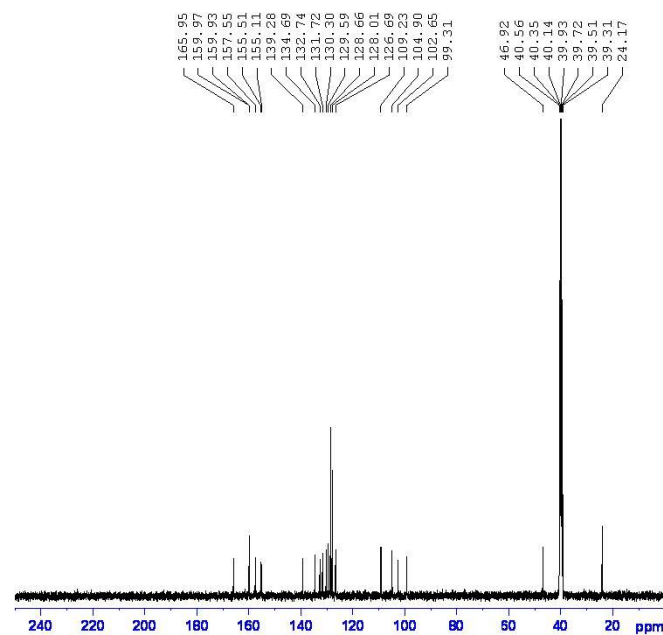
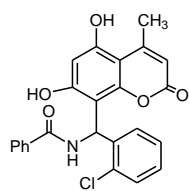
Current Data Parameters
NAME          SH
EXPNO        2307
PROCNO       1

F2 - Acquisition Parameters
Date_        20140209
Time         9.20
INSTRUM      spect
PROBHD       5 mm Multinucl
PULPROG      zg
TD           32768
SOLVENT      DMSO
NS           16
DS           0
SWH          11574.074 Hz
FIDRES       0.353213 Hz
AQ           1.4156276 sec
RG           101
WDW          43.200 usec
DE           6.00 usec
TE           300.0 K
D1           5.0000000 sec

----- CHANNEL f1 -----
NUC1         1H
P1           9.00 usec
PL1          -6.00 dB
SF01         400.1324710 MHz

F2 - Processing parameters
SI           32768
SF           400.1300045 MHz
WDW          EM
SSB          0
LB           0.30 Hz
GB           0
PC           1.00

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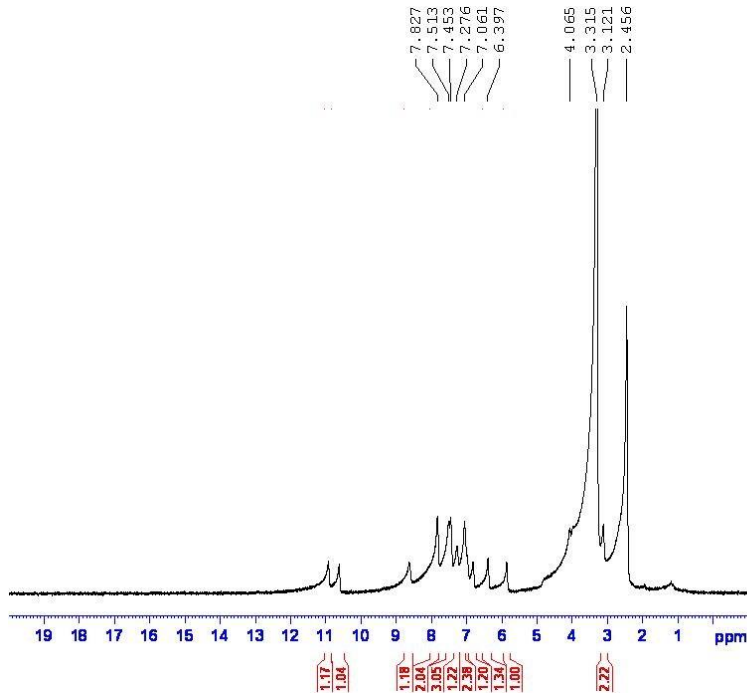
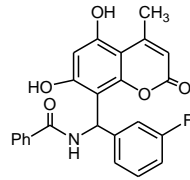
Current Data Parameters
NAME      Carbon13
EXPNO    2544
PROCNO   1

F2 - Acquisition Parameters
Date_    20140210
Time     9.05
INSTRUM spect
PROBHD   5 mm Multinucl
PULPROG zgpg30
TD       65536
SOLVENT  DMSO
NS       1500
DS       4
SWH      40404.039 Hz
FIDRES   0.615517 Hz
AQ       0.8110580 sec
RG       32768
DW       12.375 usec
DE       6.00 usec
TE       300.0 K
D1       1.0000000 sec
d11      0.0300000 sec
d12      0.0000200 sec

***** CHANNEL f1 *****
NUC1     13C
P1       7.50 usec
PL1      -2.00 dB
SFO1    100.6204965 MHz

***** CHANNEL f2 *****
CPDPRG2  waltz16
NUC2     1H
PCPD2    80.00 usec
PL2      -4.00 dB
PL12     18.50 dB
PL13     18.50 dB
SFO2    400.1316005 MHz

F2 - Processing parameters
SI       32768
SF       100.6127650 MHz
WDW      EM
SSB      0
LB       1.00 Hz
GB       0
PC       1.40
  
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Current Data Parameters
NAME          3H
EXPNO        2205
PROCNO       1

F2 - Acquisition Parameters
Date_        20140208
Time         15.04
INSTRUM      spect
PROBHD       5 mm Multinucl
PULPROG      zgpg30
TD           32768
SOLVENT      DMSO
NS           16
DS           0
SWH          11574.074 Hz
FIDRES       0.353213 Hz
AQ           1.4156276 sec
RG           362
DW           43.200 usec
DE           6.00 usec
TE           300.0 K
D1           5.00000000 sec

===== CHANNEL f1 =====
NUC1         1H
P1           9.00 usec
PL1          -6.00 dB
SFO1        400.1324710 MHz

F2 - Processing parameters
SI           32768
SF           400.1300045 MHz
WDW          EM
SSB          0
LB           0.30 Hz
GB           0
PC           1.00
  
```

