Selected $^1$H NMR, $^{13}$C NMR, IR and Mass Spectra of Compounds Described in This Thesis
FIR Analysis Report

Sample Name: [Redacted]
Detector: DTGS/HR
Sample: [Redacted]
Source: [Redacted]

Fig. 2.1: FTIR Spectra of Compound #2

Fig. 2.2: 1H-NMR (300 MHz) Spectrum of Compound #2
Fig. 2.h. $^{13}$C-NMR (75 MHz) Spectrum of Compound 81

A SATYS KUMAR/MLP-0011

PCr5: 17 (0.314) 55 (0.009) 25 Mn 56 (0.009) 25 Cr (14.23)
143

Fig. 2.a. Mass Spectrum of Compound 52
Fig. 2.27: $^{13}$C-NMR (75 MHz) Spectrum of Compound 59

Fig. 2.28: Mass Spectrum of Compound 59
Sample Name: 20S-TPS-OH [NEAT]

Sample Preparation:

Collection time: Fri Sep 03 11:57:54 2010 (GMT+05:30)

Bench: Thermo Nicolet Nexus 670 Spectrometer

Resolution: 4 cm⁻¹

Fig. 2.3h: IR Spectrum of Compound 40

OTBDPS

Source: IR

Analyte Name:

Fig. 2.3i: 1H NMR (300 MHz) Spectrum of Compound 40
Sample Name: BOS-FZ-C1-OH 01/10/10 (NEAT)
Sample Preparation:
Collection time: 11/11/11 11:11:11
Instrument: Thermo Nicolet Nexus 670 Spectrometer
Resolution: 6 cm⁻¹

Fig. 2.45: IR Spectrum of Compound 46
Source: IR

Fig. 2.46: 1H-NMR (300 MHz) Spectrum of Compound 46
Fig. 2.47 $^{13}$C-NMR (75 MHz) Spectrum of Compound 46

National Centre for Mass Spectrometry
Indian Institute of Chemical Technology

Sample Information
Name: A. SATHYA KUMAR

Sample ID: BDS-b.
Data File: E:ISWA:0-BAC-1.QCD

Sample: 7M-F3-C3-OH

Fig. 2.48 Mass Spectrum of Compound 46
Fig. 2.51: $^{13}$C-NMR (75 MHz) Spectrum of Compound 64

Fig. 2.52: Mass Spectrum of Compound 64
A SATYS KUMAR, MLP-0011
PID:OL 21 (0.308) 05 (2.50.00) 5mm (Wm 5.5x5.5). C 15 (1.12-1.77)x15-050

RCT NCMR
22-Mar-2010 13:08:19
Boat (Bar-1) 1.456

Fig. 2.36. Mass Spectrum of Compound 65

Fig. 2.36: 1^1C NMR (79.5 MHz) Spectrum of Compound 65
Fig. 2.73: IR Spectrum of Compound 30

Fig. 2.74: 1H-NMR (200 MHz) Spectrum of Compound 30
Fig. 3.1c: $^1$H-NMR (300 MHz) Spectrum of Compound 3c

Fig. 3.1d: Mass Spectrum of Compound 3d
Fig. 5.1: ^1H-NMR (300 MHz) Spectrum of Compound 3q

Fig. 5.2: Mass Spectrum of Compound 3q
Sample Name: IDS-IND-SCN
Sample Preparation: NSAT
Collection Time: Fri Sep 19 17:34:51 2008 (GMT+05:30)
Bench: Thermo Nicolet Nexus 670 Spectrometer
Resolution: 4 cm⁻¹

S: KBr
Source: IR

Analyzer Name:

Fig. 4(a): IR Spectroscopy of Compound 2a

Fig. 4(b): NMR (300 MHz) Spectroscopy of Compound 2a
National Centre for Mass Spectrometry
Indian Institute of Chemical Technology

Sample Information
Sample ID: BDS-INO-SCN
Data File: E:/SWAMY/BDS-INO-SCN.QGD
Analyzed by: Admm
Analyzed: 7/25/2018 11:28:57 AM
Tuning File: C:/GCMSolution/System/Tune/\Auto Tuning-ES(With Column)-14.07.2008.agf

Fig. 4.1c: Mass Spectrum of Compound 2c

Fig. 4.1d: 1H-NMR (300 MHz) Spectrum of Compound 2c
Indian Institute of Chemical Technology, Hyderabad
FTIR Analysis Report
Sample Name: BDS-JF-SCN
Sample Preparation: NEAT
Collection time: Mon Sep 22 12:52:49 2023 (GMT+05 30)
Bench: Thermo Nicolet Nexus 670 Spectrometer
Resolution: 4 cm⁻¹

Fig. 4.01 FTIR Spectrum of Compound 2F

Source: IR
Analytical Name

Fig. 4.02 750-2000 (DRIFT) Spectrum of Compound 2F
National Centre for Mass Spectrometry
Indian Institute of Chemical Technology

Sample Information
Name: SATYSKUMAR

Sample ID: MF/SCN
Data File: E:/SWAMY/MF/SCN.QGD
Analyzed by: Admin
Analyzed: 25/08/2008 5:37:19 PM
Tuning File: C:\GCMSolution\System\Tune\Auto Tune - El(With Column)- 18-08-2008.qti
Sample Name: 80S-4BT [H5A1]

Sample Preparation:

Curation Time: Tue Apr 21 11:18:47 2009 (GMT+05:30)

Bench: Thermo-Nicolet Nexus 670 Spectrometer

Resolution: 4 cm-1

Fig. 4.2a: 'H NMR (300 MHz) Spectrum of Compound J'

Fig. 4.2b: IR Spectrum of Compound J

ORCID ID: [Redacted]

Source: [Redacted]

Analysis Name: [Redacted]
Fig. 4.2e: $^1$H-NMR (300 MHz) Spectrum of Compound 3h

Fig. 4.2f: $^{13}$C-NMR (50 MHz) Spectrum of Compound 3h
Fig. 4.3i: 1H-NMR (200 MHz) Spectrum of Compound 3

Indian Institute of Chemical Technology, Hyderabad
FTR Analysis Report

Fig. 4.2k: IR Spectrum of Compound 3

Sample Name: BOS-2NO (NEAT)
Sample Preparation: 
Collection Time: Wed Apr 01 15:03:00 2009 (GMT+05:30)
Instruments: Thermo Nicolet Nexus 670 Spectrometer
Resolution: 4 cm⁻¹
Fig. 4.2a: $^1$H-NMR (500 MHz) Spectrum of Compound J

Fig. 4.2b: Mass Spectrum of Compound J
Display Report - Selected Window Selected Analysis

Fig. 5a: 1H-NMR (300 MHz) Spectrum of Compound B (26)

Fig. 5b: Mass Spectrum of Compound C (27)
Display Report - Selected Window Selected Analysis

Analysis Name: 0907009.D
Method: Copy of ONLYPASS.M
Sample Name: 005 pH 6.0c

Fig. 5.10: 1H-NMR (300 MHz) Spectrum of Compound C (25%)  

Fig. 5.11: Mass Spectrum of Compound D (50)
Fig. 5.16: IR Spectrum of Compound E (SI)

Fig. 5.17: 1H NMR (500 MHz) Spectrum of Compound E (SI)
Fig. 5.18: $^{13}$C-NMR (150 MHz) Spectrum of Compound E (S1)

Fig. 5.19: Mass Spectrum of Compound F (B1)
Fig. 5.20: IR Spectrum of Compound F (81)

Fig. 5.21: ¹H-NMR (200 MHz) Spectrum of Compound F (81)
Fig. 5.22: $^{13}$C-NMR (150 MHz) Spectrum of Compound P (81)

Fig. 5.23: Mass Spectrum of Compound G (182)
Fig. 2.24: 1H NMR 2D (DOE 300) Spectrum of Compound G (1H2)

Fig. 2.25: Mass Spectrum of Compound H (1H2)
Elemental composition calculator

Target m/z: +397.2000 amu
Tolerance: +5.0000 ppm
Result type: Elemental
Max num of results: 10
Min DBE: -1.0000 Max DBE: +100.0000
Electron state: OddAndEven
Num of charges: 0
Add water: N/A
Add proton: N/A
File Name: 059NOVO9.wiff

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Formula | Calculated m/z (amu) | mDa Error | PPM Error | DBE |
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