Supplementary Information

CuI-mediated and air promoted cyclization for one-pot synthesis of polyarylated oxazoles

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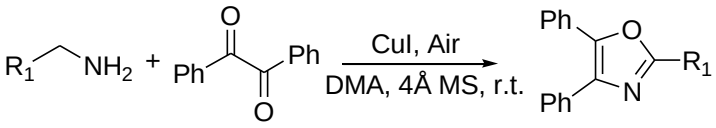
Experimental Section

Materials and Methods: NMR spectra were recorded on Brucker AVANCE 300 NMR spectrometer or Brucker AVANCE III 400 NMR spectrometer. The chemical shifts (δ) and coupling constants (*J*) were expressed in ppm and Hz respectively. HRMS was recorded on a Micromass UK LTD GCT spectrometer. Melting points were determined on a Beijing Tech Instrument Co., LTD X-6 melting point apparatus and are uncorrected，GC-MS was Shimadzu QP-5050 GC-MS system.

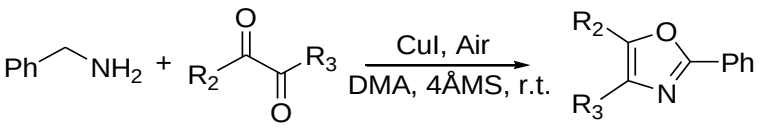
Optimization of the reaction conditions:

Except for copper salts, many other metal salts were examined, such as $FeCl_3$, $CoCl_2$, $NiCl_2$ and $ZnCl_2$, all these meltal salts can not catalyst the reaction. The amount of 1 equiv., 0.5 equiv., 0.3 equiv., 0.15 equiv. CuI was examined and 0.3 equiv. of CuI give the best yiled.

Experimental procedure



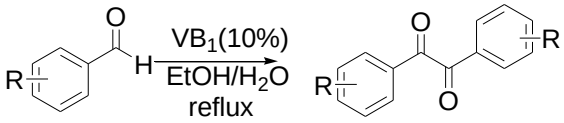
A typical experimental procedure for air oxidative cyclization for one-pot synthesis of triarylated oxazoles via CuI mediated reaction of benzil with benzylamine derivatives(A): To a distilled DMA solution of benzil (0.2 mmol) were successively added, CuI (0.06 mmol), 4 Å MS(100 mg) were added after it, finally benzylamine derivatives (0.6 mmol) was added in two portions. After the reaction mixture was stirred for 1-2 hours at room temperature, the reaction mixture was extracted with EtOAc, dried with Na_2SO_4. Then solvent was removed under reduced pressure and purified by silica gel column chromatography to afford the desired product.



A typical experimental procedure for air oxidative cyclization for one-pot synthesis of triarylated oxazoles via CuI mediated reaction of benzil derivatives with benzylamine (B): To a distilled DMA solution of benzil derivatives (0.2 mmol) were successively added, CuI (0.06 mmol), 4 Å MS(100 mg) were added after it, finally benzylamine (0.6 mmol) was added in two portions. After the reaction mixture was stirred for 1-2 hours at room temperature, the reaction mixture was

extracted with EtOAc, dried with Na_2SO_4. Then solvent was removed under reduced pressure and purified by silica gel column chromatography to afford the desired product.

Preparation of benzil derivations:



A typical experimental procedure for preparation of benzyl derivations: To a H_2O (1 ml) solution of VB_1 (0.3g, 1 mmol) were successively dissolved under ice-bath, EtOH (8 ml) and aldehydes (10 mmol) were added after that and we got settled solution. Ice-bathed NaOH (10% solution) was added to the solution until the pH of the solution become 8.0-9.0 and the solution became orange red. After the reaction mixture was stirred overnight at reflux, the reaction mixture was cooled and yellow crystal was found. After filtration, the solid was washed by cooled EtOH and diethyl ether, and finally recrystallization, we got yellow solid. Only those aldehydes with electron-withdrawing substitution group can get the corresponding benzil derivates. While electron-donating benzil derivates were purchased from aladdin.

Analytical and spectral data for compounds

[^{1}H NMR $CDCl_3$ δ: 7.26, **^{13}C NMR $CDCl_3$** δ: 77.04]

2, 4, 5-triphenyloxazole (3a):

The white solid was obtained according to a general procedure A (87% yield), mp 114-115˚C, **^{1}H NMR (400 MHz, $CDCl_3$)** δ: 8.14-8.17 (m, 2H), 7.74-7.72 (m, 2H), 7.69-7.67 (m, 2H), 7.50-7.46 (m, 3H), 7.43-7.32 (m, 6H); **^{13}C NMR (101 MHz, $CDCl_3$)** δ: 160.16, 145.57, 136.81, 132.60, 130.36, 129.02, 128.78, 128.70, 128.63, 128.56, 128.24, 128.17, 127.42, 126.55, 125.48, HRMS calc. $C_{21}H_{15}NO$ (M^+): 297.1154, Found: 297.1150.

4, 5-diphenyl-2-p-tolyloxazole (3b):

The white solid was obtained according to a general procedure A (88% yield), mp 130-131˚C, **^{1}H NMR (300 MHz, $CDCl_3$)** δ: 8.03 (d, *J*=16.4, 2H), 7.73 (d, *J* = 7.9 Hz, 2H), 7.67 (d, *J* = 6.7 Hz, 2H), 7.45-7.34 (m, 6H), 7.29(m, 2H), 2.42 (s, 3H); **^{13}C NMR (75 MHz, $CDCl_3$)** δ: 160.39, 145.24, 140.64, 136.70, 132.72, 129.48, 129.12, 128.66, 128.60, 128.44, 128.17, 126.53, 126.45, 124.73, 21.55, HRMS calc. $C_{22}H_{17}NO$ (M^+): 311.1310, Found: 311.1312.

4, 5-diphenyl-2-m-tolyloxazole (3c):

The white solid was obtained according to a general procedure A (72% yield), mp 127-128˚C, **^{1}H NMR (300 MHz, $CDCl_3$)** δ: 8.02-7.92 (m, 2H), 7.73 (m, 2H), 7.68 (m, 2H), 7.44-7.32 (m, 7H), 7.29 (s, 1H), 2.44 (s, 3H); **^{13}C NMR (75 MHz, $CDCl_3$)** δ: 160.72, 145.85, 138.92, 137.15, 133.05, 131.58, 129.44, 129.06, 129.00, 128.89, 128.59, 128.56, 127.68, 127.43, 126.94, 124.02, 21.75, HRMS calc. $C_{22}H_{17}NO$ (M^+): 311.1310, Found: 311.1312.

4, 5-diphenyl-2-o-tolyloxazole (3d):

The white solid was obtained according to a general procedure A (65% yield), mp 124-125˚C, **^{1}H NMR (300 MHz, $CDCl_3$)** δ: 8.12 (d, *J* = 7.9 Hz, 1H), 7.78-7.73 (m, 2H), 7.71-7.66 (m, 2H), 7.42 -7.38 (m, 3H), 7.38-7.34 (m, 3H), 7.34-7.30 (m, 3H), 2.80 (s, 3H); **^{13}C NMR (75 MHz, $CDCl_3$)** δ: 160.66, 145.18, 137.54, 136.38, 132.76, 131.67, 129.97, 129.16, 128.92, 128.71, 128.58, 128.14, 128.10, 126.58, 126.39, 125.98, 22.16, HRMS calc. $C_{22}H_{17}NO$ (M^+): 311.1310, Found: 311.1312.

2-(4-methoxyphenyl)-4, 5-diphenyloxazole (3e):

The white solid was obtained according to a general procedure A (90% yield), mp 111-112˚C, **^{1}H NMR (300 MHz, $CDCl_3$)** δ: 8.12-8.07 (m, 2H), 7.72 (m, 2H), 7.66 (m, 2H), 7.43-7.37 (m, 3H), 7.34 (m, 3H), 7.02-6.96 (m, 2H), 3.87 (s, 3H); **^{13}C NMR (75 MHz, $CDCl_3$)** δ: 161.4, 160.26, 145.01, 136.64, 132.78, 129.19, 128.86, 128.66, 128.61, 128.36, 128.16, 126.47, 120.24, 114.21, 55.39, HRMS calc. $C_{22}H_{17}NO_2$ (M^+): 327.1259, Found: 311.1260.

2-(4-fluorophenyl)-4, 5-diphenyloxazole (3f):

The light yellow solid was obtained according to a general procedure A (74% yield), mp 129-130˚C, **^{1}H NMR (300 MHz, $CDCl_3$)** δ: 8.19-8.10 (m, 2H), 7.72 (d, *J* = 8.0 Hz, 2H), 7.66 (d, *J* = 8.0 Hz, 2H), 7.45-7.31 (m, 6H), 7.16 (m, 2H); **^{13}C NMR (75 MHz, $CDCl_3$)** δ: 165.79, 162.46, 159.35, 145.64, 136.79, 132.48, 128.72, 128.65, 128.53, 128.31, 128.13, 126.58, 118.17, 116.13, 115.84, HRMS calc. $C_{21}H_{14}FNO$ (M^+): 310.1059, Found: 310.1060.

2-(4-chlorophenyl)-4, 5-diphenyloxazole (3g):

The light yellow solid was obtained according to a general procedure A (74% yield), mp 135-136˚C, **^{1}H NMR (300 MHz, CDCl3)** δ: 8.09 (d, J = 8.6 Hz, 2H), 7.74-7.69 (m, 2H), 7.66 (m, 2H), 7.45 (m, 2H), 7.43-7.31 (m, 6H); **^{13}C NMR (75 MHz, CDCl3)** δ: 159.21, 145.82, 136.93, 136.45, 132.39, 129.10, 128.82, 128.73, 128.65, 128.34, 128.11, 127.71, 126.62, 125.91, HRMS calc. $C_{21}H_{14}FNO$ (M^+): 331.0764, Found: 331.0759.

4, 5-diphenyl-2-(4-(trifluoromethyl)phenyl)oxazole (3h):

The white solid was obtained according to a general procedure A (60% yield), mp 133-134˚C, **^{1}H NMR (300 MHz, CDCl3)** δ: 8.26 (d, *J*=8.1Hz, 2H), 7.75-7.71 (m, 3H), 7.69-7.66 (m, 3H), 7.43-7.37 (m, 6H); **^{13}C NMR (75 MHz, $CDCl_3$)** δ: 158.75, 146.51, 137.27, 132.22, 130.49, 129.40, 129.21, 128.95, 128.80, 128.72, 128.66, 128.48, 128.13, 126.74, 126.66, 125.91, 125.86, 125.81, 125.76, 122.11, HRMS calc. $C_{22}H_{14}F_3NO$ (M^+): 365.1027, Found: 365.1031.

2-(furan-2-yl)-4, 5-diphenyloxazole (3i):

The light yellow solid was obtained according to a general procedure A (80% yield), mp 110-111˚C, **^{1}H NMR (300 MHz, $CDCl_3$)** δ: 7.71 (m, 2H), 7.65 (m, 2H), 7.62-7.57 (m, 1H), 7.43-7.31 (m, 6H), 7.11 (d, *J* = 3.5 Hz, 1H), 6.56 (m, 1H); **^{13}C NMR (75 MHz, $CDCl_3$)** δ: 153.07, 145.11, 144.50, 142.91, 136.51, 132.14, 128.72, 128.65, 128.58, 128.35, 128.17, 126.69, 111.92, 111.65, HRMS calc.$C_{19}H_{13}NO_2$ (M^+): 287.0946, Found: 287.0940.

2-(naphthalen-2-yl)-4, 5-diphenyloxazole (3j):

The white solid was obtained according to a general procedure A (76% yield), mp 126-127˚C, **^{1}H NMR (300 MHz, $CDCl_3$)** δ: 9.44 (d, *J* = 8.6 Hz, 1H), 8.34 (d, *J* = 7.3 Hz, 1H), 7.98 (d, *J* = 8.2 Hz, 1H), 7.92 (d, *J* = 8.2 Hz, 1H), 7.83 (m, 2H), 7.75 (m, 2H), 7.67 (m, 1H), 7.57 (m, 2H), 7.48-7.34 (m, 6H), **^{13}C NMR (75 MHz, $CDCl_3$)** δ: 160.10, 145.32, 136.72, 134.02, 132.71, 131.22, 130.29, 129.06, 128.74, 128.64, 128.61, 128.53, 128.22, 128.18, 127.84, 127.59, 126.76 , 126.74, 126.46, 124.96, 123.82, HRMS calc.$C_{25}H_{17}NO$ (M^+): 347.1310, Found: 347.1314.

4, 5-diphenyl-2-vinyloxazole (3k):

The white solid was obtained according to a general procedure A (56% yield), mp 110-111˚C, **^{1}H NMR (300 MHz, $CDCl_3$)** δ: 7.64 (m, 4H), 7.43-7.29 (m, 6H), 6.70 (m, 1H), 6.30 (d, *J* = 17.6 Hz, 1H), 5.70 (d, *J* = 11.2 Hz, 1H); **^{13}C NMR (75 MHz, $CDCl_3$)** δ: 159.49, 145.33, 136.25, 132.12, 129.00, 128.72, 128.60, 128.29, 128.02, 126.63, 123.18, 122.18, HRMS calc. $C_{17}H_{13}NO$ (M^+): 247.0997, Found: 247.1001.

4, 5-bis(4-fluorophenyl)-2-phenyloxazole (3m):

The white solid was obtained according to a general procedure B (82% yield), mp 125-126˚C, **^{1}H NMR (300 MHz, $CDCl_3$)** δ: 8.13 (m, 2H), 7.72-7.55 (m, 4H), 7.51-7.40 (m, 3H), 7.09 (m, 4H); **^{13}C NMR (75 MHz, $CDCl_3$)** δ: 164.44, 164.40, 162.14, 161.11, 160.20, 144.60, 135.68, 130.52, 129.94, 129.83, 128.83, 128.62, 128.51, 128.47, 127.21, 126.46, 125.10, 125.06, 116.12, 115.89,

115.83, 115.61, HRMS calc. $C_{21}H_{13}F_2NO$ (M^+): 333.0965, Found: 333.0968.

4, 5-bis(4-chlorophenyl)-2-phenyloxazole (3n):

The white solid was obtained according to a general procedure B (89% yield), mp 129-130˚C, **^{1}H NMR (300 MHz, $CDCl_3$)** δ: 8.16-8.08 (m, 1H), 7.67-7.61 (m, 1H), 7.60-7.53 (m, 1H), 7.52-7.44 (m, 2H), 7.41-7.33 (m, 2H), **^{13}C NMR (75 MHz, $CDCl_3$)** δ: 160.49, 144.70, 136.11, 134.67, 134.31, 130.80, 130.38, 129.38, 129.12, 127.83, 127.21, 127.21, 127.06, 126.52, HRMS calc. $C_{21}H_{13}Cl_2NO$ (M^+): 365.0374, Found: 365.0370.

2-phenyl-4, 5-bis(4-(trifluoromethyl)phenyl)oxazole (3o):

The white solid was obtained according to a general procedure B (55% yield), mp 120-121˚C, **^{1}H NMR (300 MHz, $CDCl_3$)** δ: 8.15 (m, 2H), 7.84 (d, *J* = 8.1 Hz, 2H), 7.77 (d, *J* = 8.2 Hz, 2H), 7.69 (m, 4H), 7.55-7.48 (m, 3H); **^{13}C NMR (100MHz, $CDCl_3$)** δ: 158.85, 139.40, 133.99, 132.97, 130.43, 129.61, 128.66, 128.27, 128.01, 127.76, 126.56, 126.41, 125.83, 125.76, 125.61, 125.27, 125.27, 125.25, HRMS calc. $C_{23}H_{13}F_6NO$ (M^+): 433.0901, Found: 433.0907.

4, 5-bis(4-bromophenyl)-2-phenyloxazole (3p):

The white solid was obtained according to a general procedure B (84% yield), mp 119-120˚C, **^{1}H NMR (300 MHz, $CDCl_3$)** δ: 8.18-8.06 (m, 2H), 7.60 -7.54 (m, 3H), 7.47-7.42 (m, 8H); **^{13}C NMR (75 MHz, $CDCl_3$)** δ: 160.53, 144.71, 136.19, 132.05, 131.90, 131.21, 130.65, 129.61, 128.82, 128.01, 127.60, 126.99, 126.49, 122.86, 122.50, HRMS calc. $C_{21}H_{13}Br_2NO$ (M^+): 452.9364, Found: 452.9360.

2-phenyl-4, 5-dip-tolyloxazole (3q):

The white solid was obtained according to a general procedure B (70% yield), mp 132-133˚C, **^{1}H NMR (300 MHz, $CDCl_3$)** δ: 8.15 (m, 2H), 7.62 (d, *J* = 8.0 Hz, 2H), 7.57 (d, *J* = 8.2 Hz, 2H), 7.48-7.40 (m, 3H), 7.20 (m, 4H), 2.38 (s, 6H); **^{13}C NMR (75 MHz, $CDCl_3$)** δ: 159.79, 145.45, 138.46, 137.87, 136.27, 130.14, 129.78, 129.33, 129.25, 128.69, 127.95, 127.55, 126.50,126.39, 126.32 , 21.35, 21.32, HRMS calc. $C_{23}H_{19}NO$ (M^+): 325.1467, Found: 3251468.

4, 5-bis(4-methoxyphenyl)-2-phenyloxazole (3r):

The white solid was obtained according to a general procedure B (60% yield), mp 127-128˚C, **^{1}H NMR (300 MHz, $CDCl_3$)** δ 8.13 (m, 2H), 7.64 (d, *J* = 8.8 Hz, 2H), 7.61-7.56 (m, 2H), 7.48-7.41 (m, 3H), 6.92 (m, 4H), 3.84 (s, 6H); **^{13}C NMR (75 MHz, $CDCl_3$)** δ: 159.75, 159.48, 145.04, 135.36, 133.99, 130.09, 129.31, 128.71, 128.06, 127.65, 126.34, 114.17, 114.05, 55.31, HRMS

calc. $C_{23}H_{19}NO_3$ (M^+): 357.1365, Found: 357.1360.

4, 5-bis(3-chlorophenyl)-2-phenyloxazole (3s):

The white solid was obtained according to a general procedure B (76% yield), mp 118-119˚C, **^{1}H NMR (300 MHz, $CDCl_3$)** δ: 8.13-8.17(m, 2H), 7.75(s, 1H), 7.68(s, 1H), 76.57-7.54(m, 1H), 7.50-7.48(m, 4H), 7.35-7.31(m, 4H), **^{13}C NMR (75 MHz, $CDCl_3$)** δ: 160.69, 144.57, 136.34, 134.91, 134.78, 133.98, 130.78, 130.78, 130.29, 130.08, 129.97, 128.87, 128.64, 128.26, 126.93, 126.60, 126.53, 126.12, 124.59, $C_{21}H_{13}Cl_2NO$ (M^+): 365.0374, Found: 365.0370.

4, 5-bis(2-chlorophenyl)-2-phenyloxazole (3t):

The white solid was obtained according to a general procedure B (25% yield), mp 122-123˚C, **^{1}H NMR (300 MHz, $CDCl_3$)** δ: 8.06 (d, *J* = 7.7 Hz, 2H), 7.61-7.50 (m, 3H), 7.49-7.45 (m, 4H), 7.4-7.36 (m, 2H), 7.19 (d, *J* = 4.0 Hz, 1H), 7.08 (d, *J* = 7.8 Hz, 1H); **^{13}C NMR (75 MHz, $CDCl_3$)** δ: 162.26, 145.15, 136.91, 135.49, 135.36, 134.56, 131.35, 130.87, 130.65, 130.52, 129.45, 129.21, 128.84, 127.51, 127.18, 127.10, 126.69, 125.17, $C_{21}H_{13}Cl_2NO$ (M^+): 365.0374, Found: 365.0370.

2-phenyl-4, 5-di(pyridin-2-yl)oxazole (3u):

The white solid was obtained according to a general procedure B (85% yield), mp 131-132˚C, **^{1}H NMR (300 MHz, $CDCl_3$)** δ: 8.92 (d, *J* = 6.2 Hz, 2H), 8.61 (d, *J* = 6.1 Hz, 2H), 7.61-7.56 (m, 2H), 7.48-7.41 (m, 3H), 6.92 (m, 4H), 3.84 (s, 6H). δ 8.93(6.2Hz); **^{13}C NMR (75 MHz, CDCl3)** δ: 170.71, 161.54, 149.77, 149.57, 148.83, 147.44, 143.55, 135.27, 133.49, 131.00, 128.92, 128.12, 126.67, 126.61, 124.83, 123.64, $C_{19}H_{13}N_3O$ (M^+): 299.1059, Found: 299.1061.

4, 5-di(furan-2-yl)-2-phenyloxazole (3v):

The yellow solid was obtained according to a general procedure B (58% yield), mp 101-102˚C, **^{1}H NMR (300 MHz, $CDCl_3$)** δ: 8.1-8.09 (m, 2H), 7.59-7.53 (m, 2H), 7.52-7.44 (m, 3H), 7.40 (m, 2H), 7.16-7.06 (m, 2H);^{13}C NMR (75 MHz, $CDCl_3$) δ: 159.86, 140.41, 135.00, 133.98, 131.44, 130.62, 129.67, 128.76, 127.57, 127.42, 126.84, 126.77, 126.62, 126.28, HRMS calc. $C_{17}H_{11}NOS_2$ (M^+): 309.0282, Found: 309.0280.

5-methyl-2, 4-diphenyloxazole (3w):

The light yellow solid was obtained according to a general procedure B (70% yield), mp 74-75˚C, **^{1}H NMR (300 MHz, $CDCl_3$)** δ: 2.52 (s, 3H), 7.34-7.37 (m, 1H), 7.46-7.50 (m, 5H), 7.68-7.71 (m, 2H), 8.09-8.12 (m, 2H); **^{13}C NMR (75 MHz, CDCl3)** δ: 13.43, 125.27, 126.15, 127.39, 127.53, 128.69, 128.72, 129.12, 130.08, 133.30, 143.41, 159.29, HRMS calc. $C_{16}H_{13}NO$ (M^+): 235.0997,

Found: 235.1001.

5-(3-Methoxy-phenyl)-2, 4-diphenyl-oxazole ($3x_1$):

The a colorless oil was obtained according to a general procedure B (49% yield), **^{1}H NMR (400 MHz, $CDCl_3$) δ** 8.17-8.15 (m, 2H), 7.71-7.68 (m, 2H), 7.49-7.47 (m, 3H), 7.41-7.34 (m, 3H), 7.32-7.29 (m, 3H), 6.93-6.89 (m, 1H), 3.80 (s, 3H); **^{13}C NMR (101 MHz, $CDCl_3$) δ** 159.81, 145.69, 136.64, 133.86, 130.37, 129.67, 128.97, 128.77, 128.67, 128.62, 128.31, 127.39, 126.72, 126.49, 120.58, 114.50, 113.15, 55.30.. HRMS calc. $C_{22}H_{17}NO_2(M^+)$: 327.1259, Found: 327.1262.

4-(3-Methoxy-phenyl)-2, 5-diphenyl-oxazole ($3x_2$):

The a colorless oil was obtained according to a general procedure B (21% yield), **^{1}H NMR (400 MHz, $CDCl_3$)** δ^1H NMR (400 MHz, $CDCl_3$) δ 8.17-8.14 (m, 2H), 7.75-7.73 (m, 2H), 7.50-7.45 (m, 3H), 7.43-7.35 (m, 3H), 7.29-7.27 (m, 2H), 7.22-7.20(m, 1H), 6.90-6.87(m, 1H), 3.75 (s, 3H); **^{13}C NMR (101 MHz, $CDCl_3$) δ** 160.10, 159.70, 145.39, 137.03, 132.58, 130.38, 130.15, 129.79, 128.77, 128.58, 128.31, 127.37, 126.49, 118.97, 114.54, 111.70, 55.25. HRMS calc. $C_{22}H_{17}NO_2(M^+)$: 327.1259, Found: 327.1261.

2, 5-Diphenyl-4-(4-trifluoromethyl-phenyl)-oxazole ($3y_1$):

The white solid was obtained according to a general procedure B (44% yield), mp 116-117 ˚C, **^{1}H NMR (400 MHz, $CDCl_3$)** δ: 8.18-8.14 (m, 2H), 7.79 (d, *J* =7.2Hz, 2H), 7.71-7.68 (m, 2H), 7.67-7.61 (m, 2H), 7.53-7.49 (m, 3H), 7.46-7.35 (m, 3H); **^{13}C NMR (101 MHz, CDCl3)** δ: 160.82, 144.02, 138.59, 132.32, 132.11, 130.76, 128.91, 128.87, 128.85, 128.79, 128.31, 128.17, 127.03, 126.93, 126.62, 126.51, 126.31, 125.75-125.64 (q, *J* = 15Hz). HRMS calc. $C_{22}H_{14}F_3NO(M^+)$: 365.1027, Found: 365.1029.

2, 4-Diphenyl-5-(4-trifluoromethyl-phenyl)-oxazole ($3y_2$):

The white solid was obtained according to a general procedure B (23% yield), mp 112-113 ˚C, **^{1}H NMR (400 MHz, $CDCl_3$)** δ: 8.17-8.14 (m, 2H), 7.87 (d, *J* = 4.4 Hz, 2H), 7.68-7.64 (m, 4H), 7.53-7.49 (m, 3H), 7.46-7.38 (m, 3H); **^{13}C NMR (101 MHz, CDCl3)** δ: 160.51, 146.59, 136.17, 135.31, 130.62, 130.17, 129.85, 129.15, 128.91, 128.85, 128.55, 128.17, 127.11, 126.93, 126.51, 125.61-125.50(q, *J* =16Hz). HRMS calc. $C_{22}H_{14}F_3NO(M^+)$: 365.1027, Found: 365.1022.

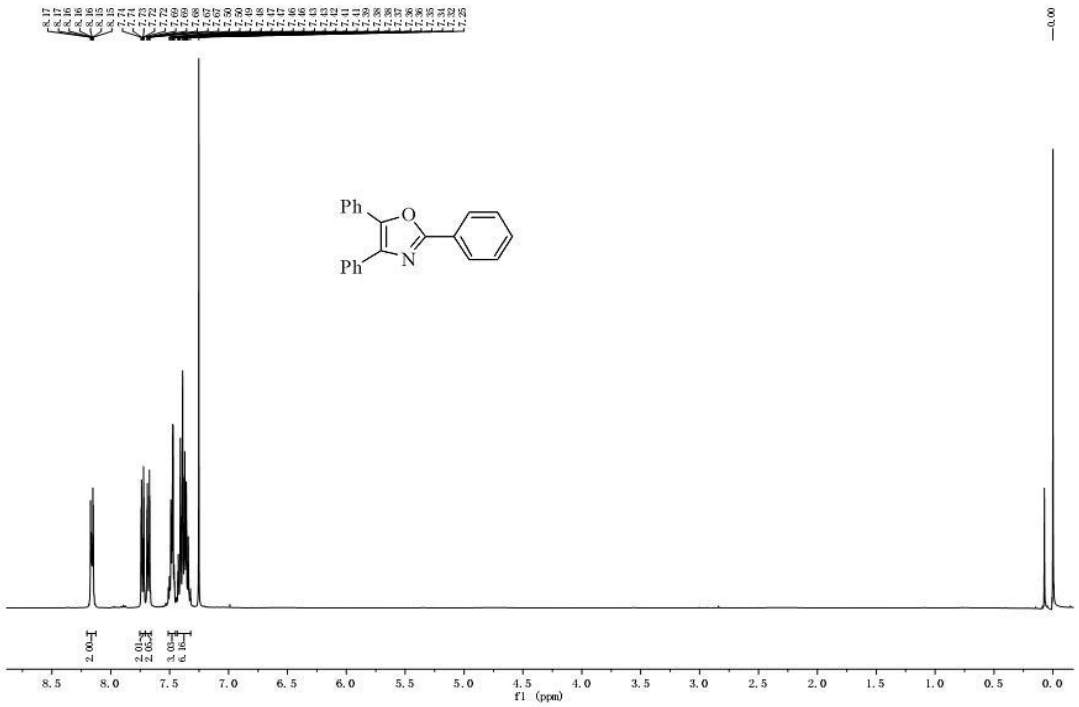
1, 2-diphenyl-2-(1-phenylethylimino)ethanone (4):

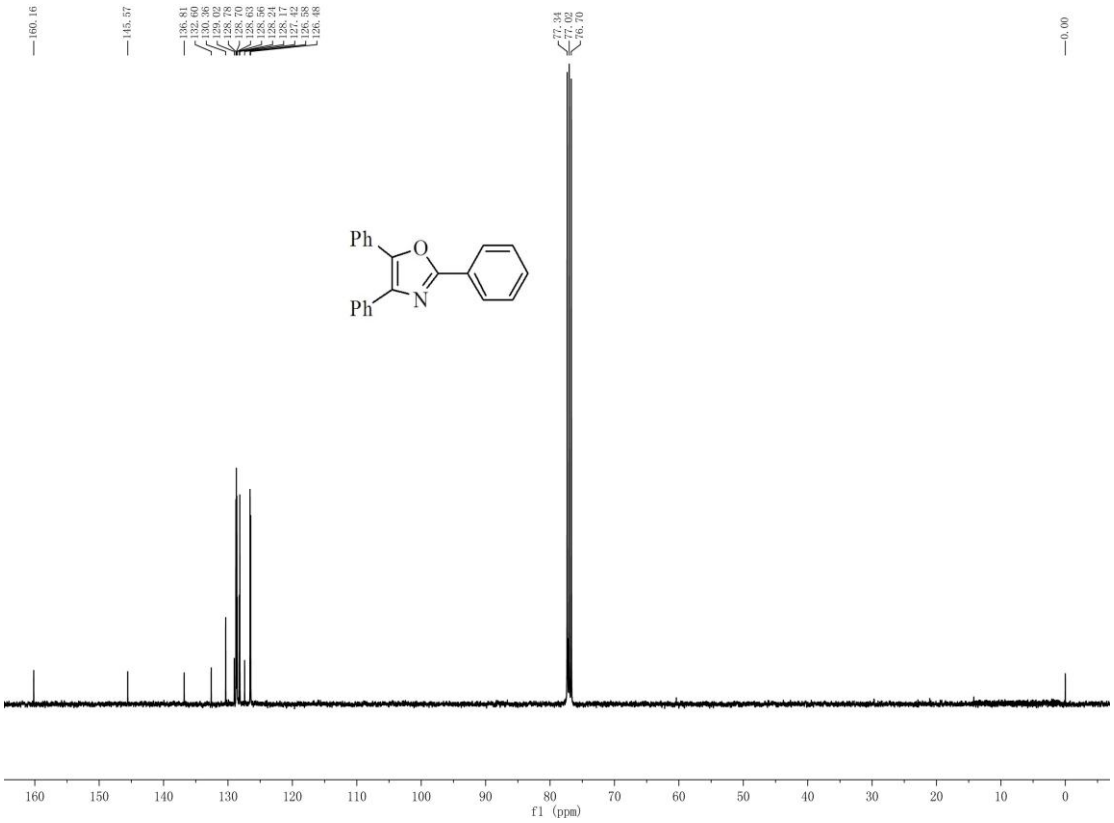
The light yellow solid was obtained according to a general procedure B (72% yield), mp 102-103˚C, **^{1}H NMR (400 MHz, $CDCl_3$)** δ: 7.85 (d, *J* = 4 Hz, 2H), 7.77 (d, *J* = 4 Hz, 2H),

7.56-7.59 (m, 1H), 7.37-7.42 (m, 5H), 7.28-7.35 (m, 4H), 7.24-7.26 (m, 1H), 4.61-4.66 (m, 1H), 1.50-1.52 (d, *J* = 8 Hz, 1H); **^{13}C NMR (101 MHz, CDCl3)** δ: 198.97, 164.37, 144.53, 135.35, 134.76, 134.67, 130.87, 129.95, 129.39, 129.14, 129.07, 128.65, 128.38, 127.53, 126.95, 126.67, 62.19, 24.74, HRMS calc. $C_{22}H_{19}NO(M^+)$: 313.3924, Found: 313.3920.

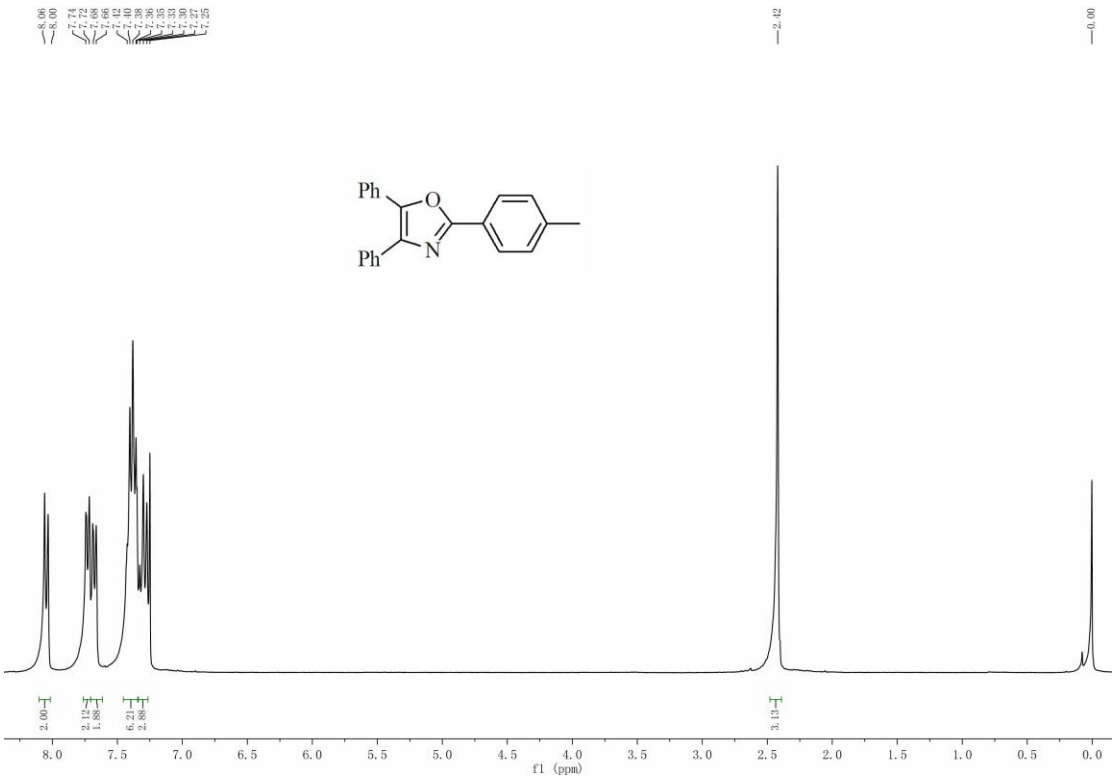
NMR Spectrum of compounds:

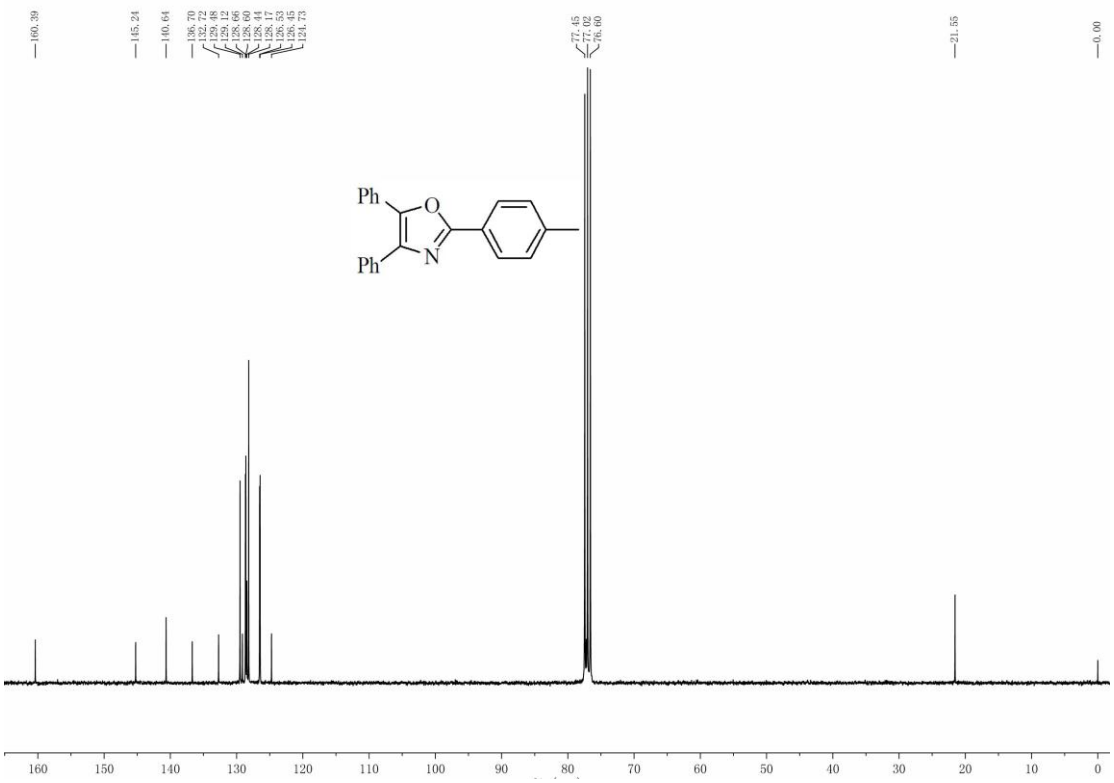
2 , 4, 5-triphenyloxazole (3a):



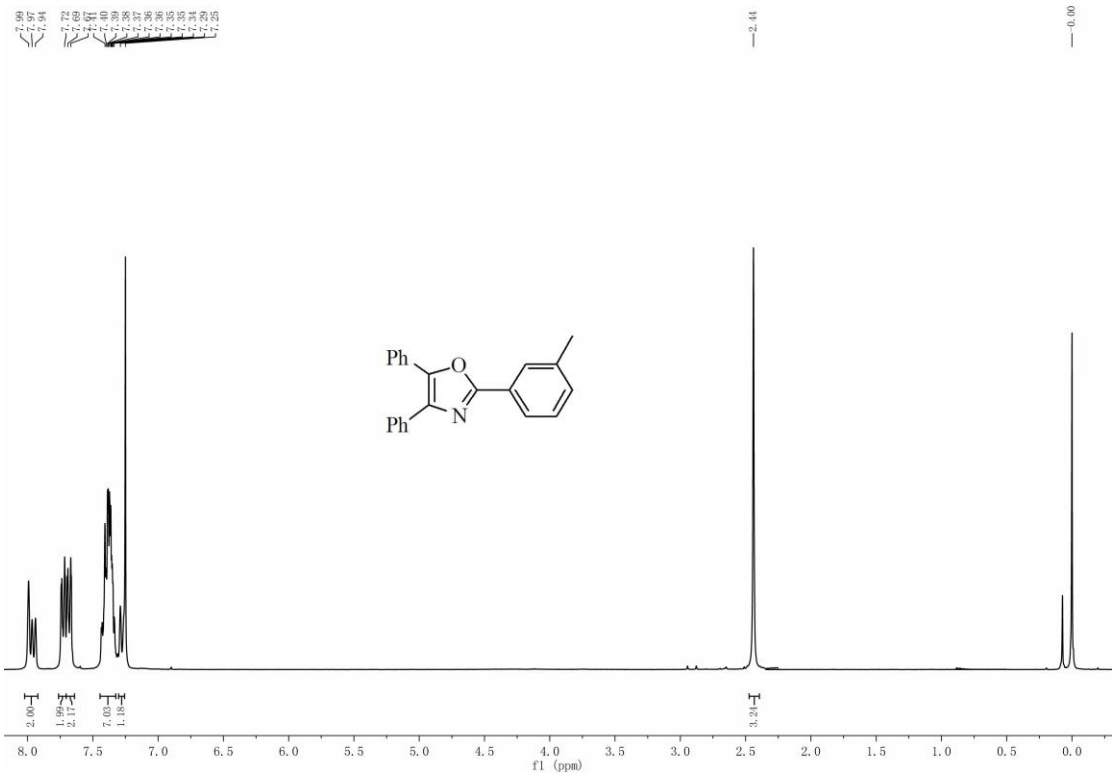


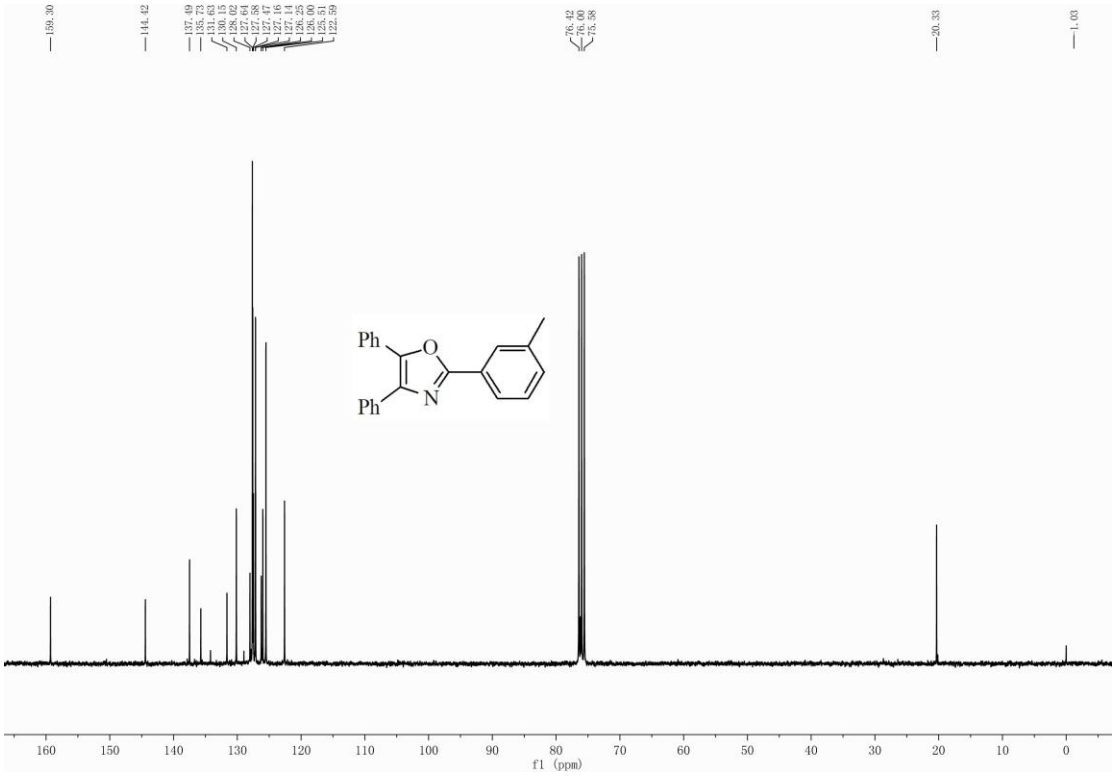
4, 5-diphenyl-2-p-tolyloxazole (3b):



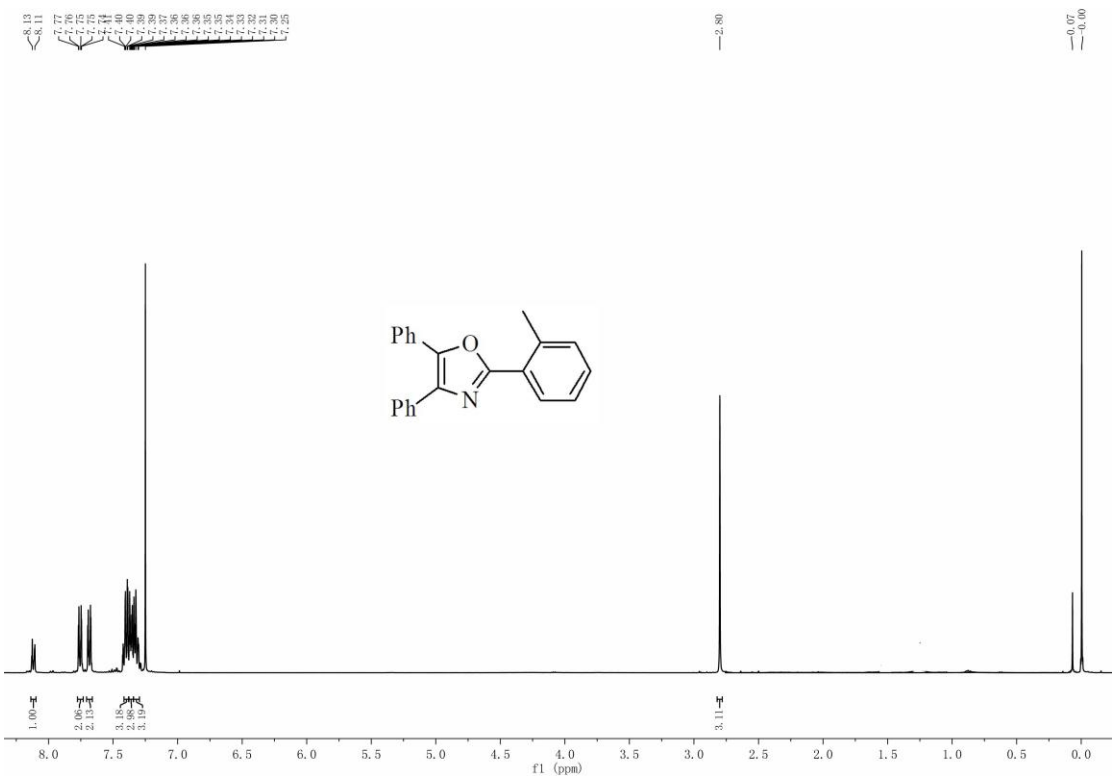


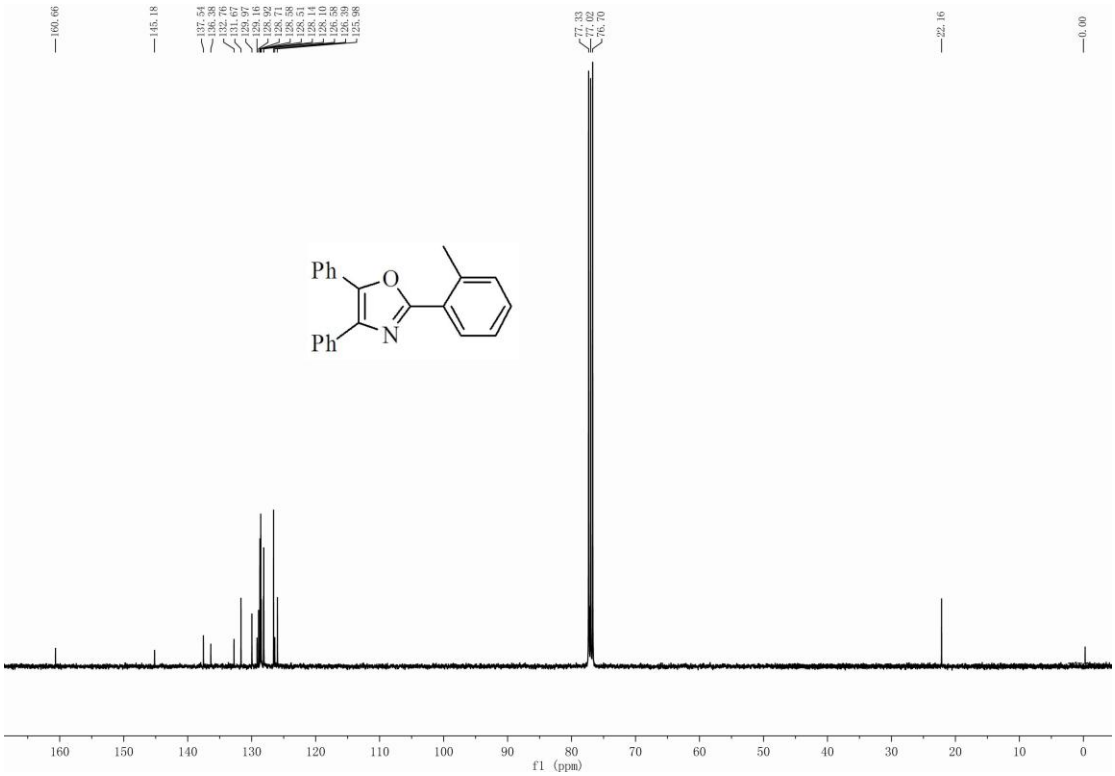
4, 5-diphenyl-2-m-tolyloxazole (3c):



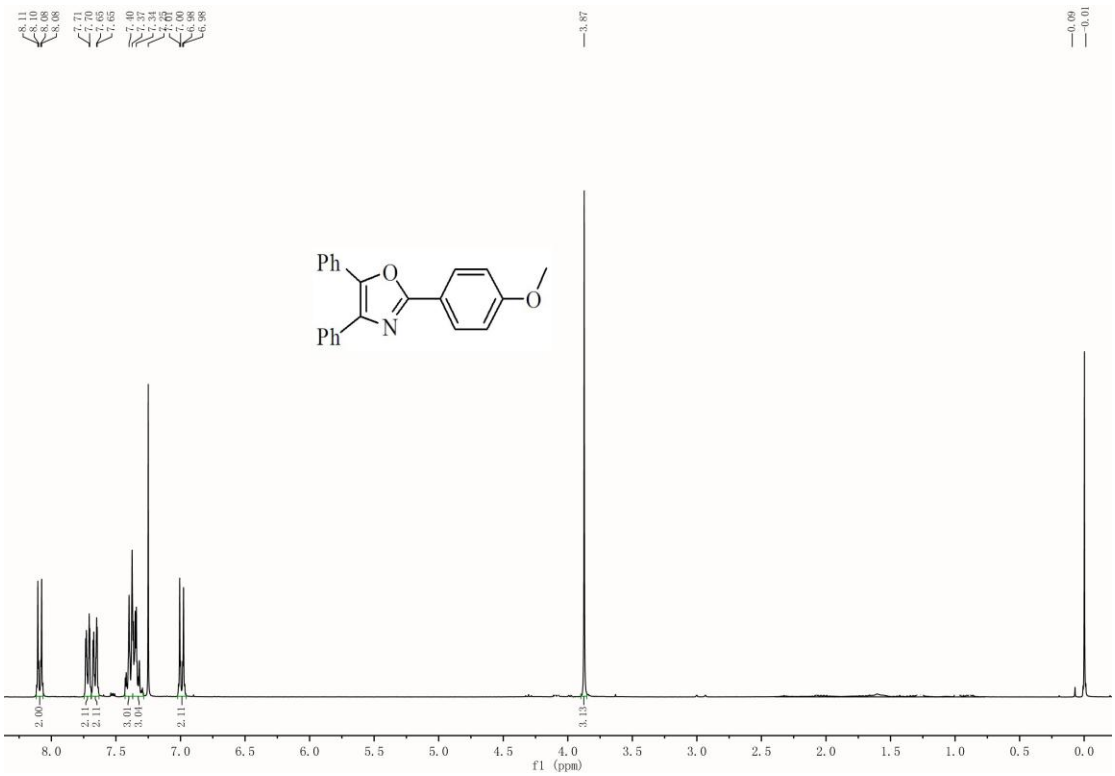


4, 5-diphenyl-2-o-tolyloxazole (3d):

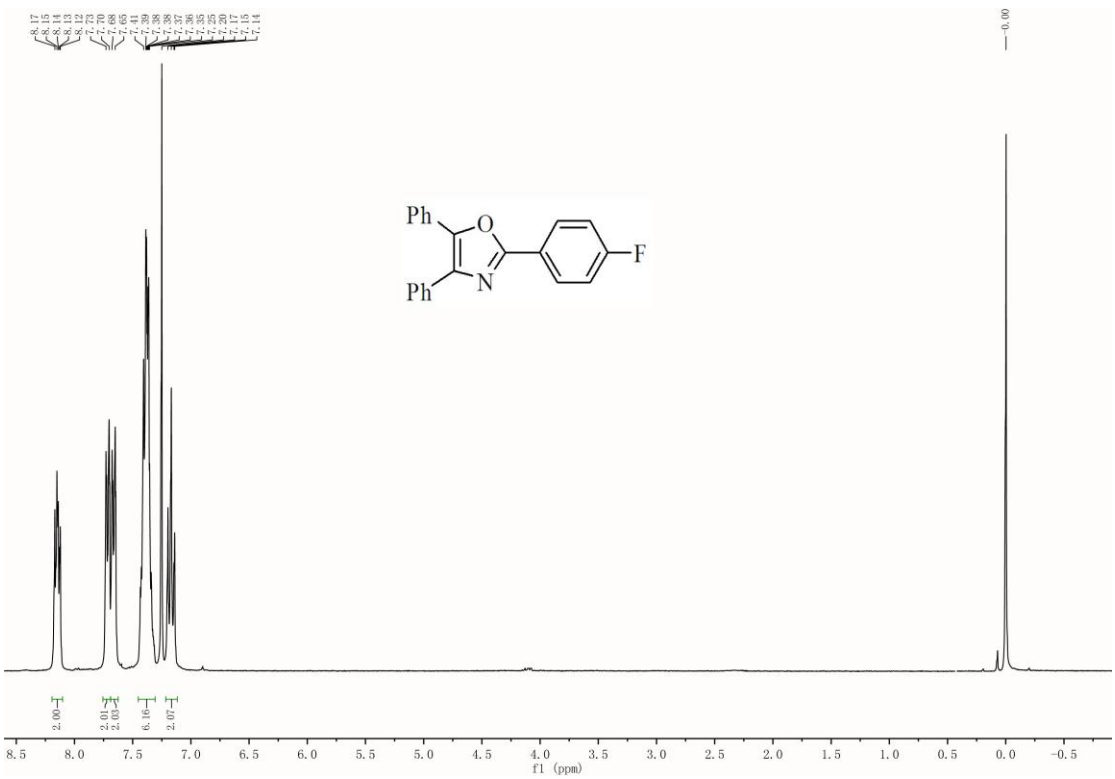


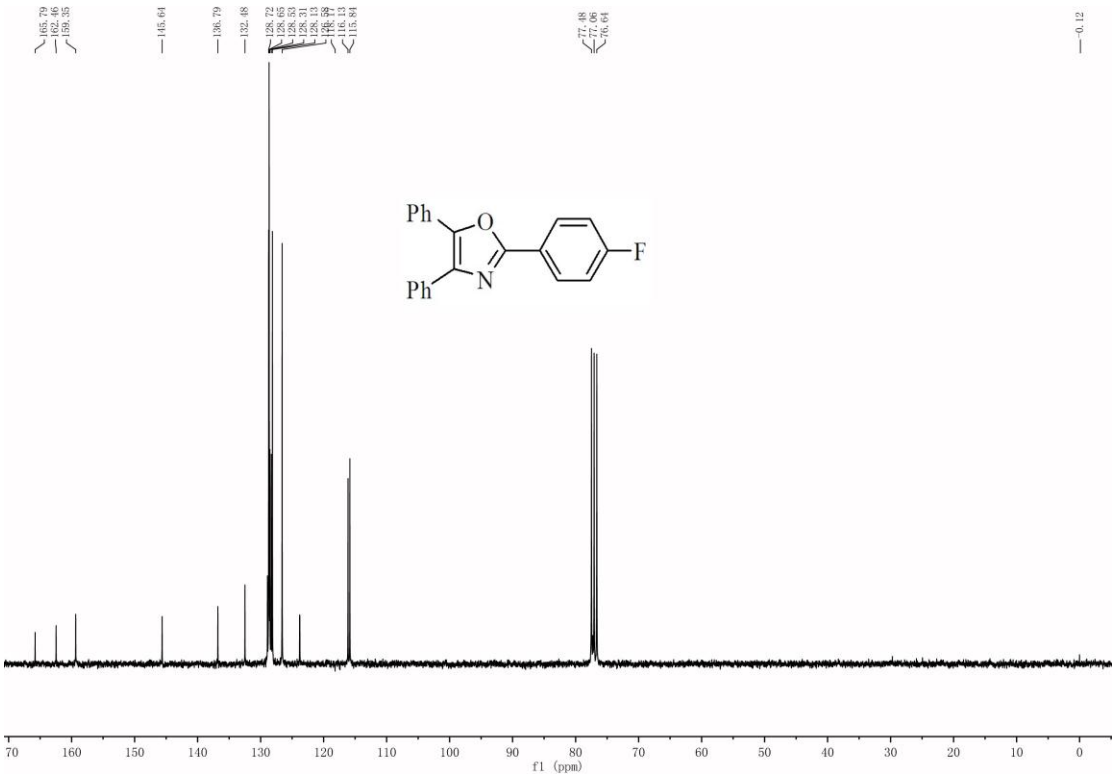


2-(4-methoxyphenyl)-4, 5-diphenyloxazole (3e):

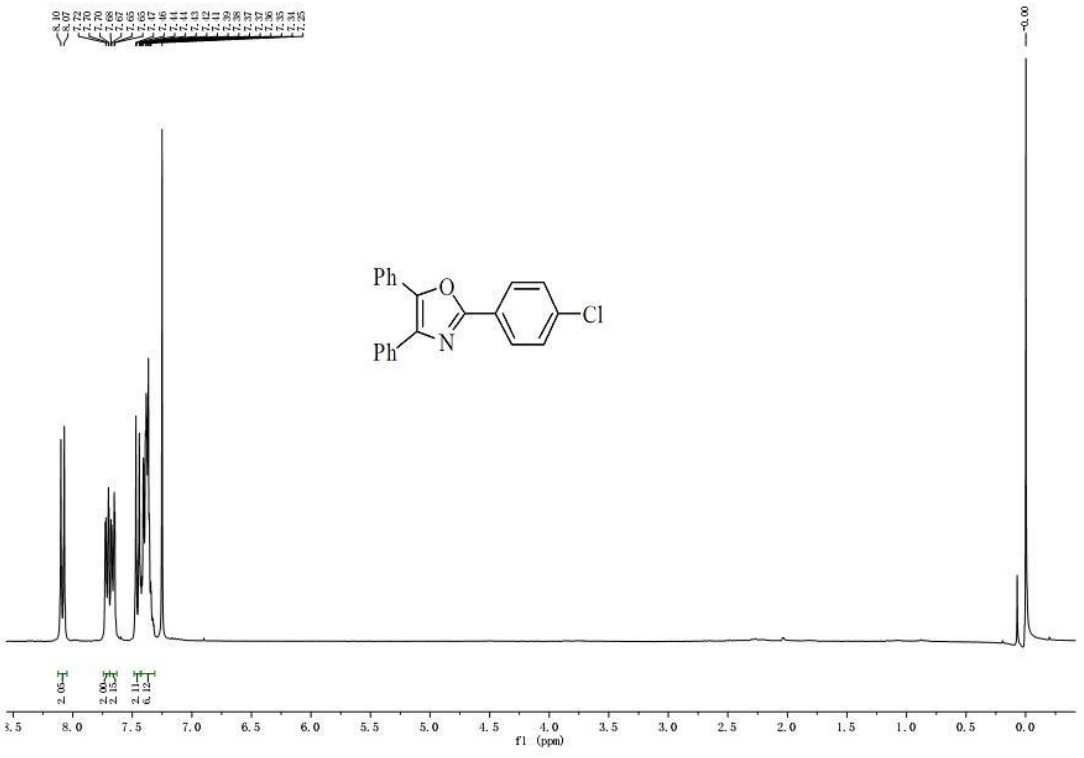


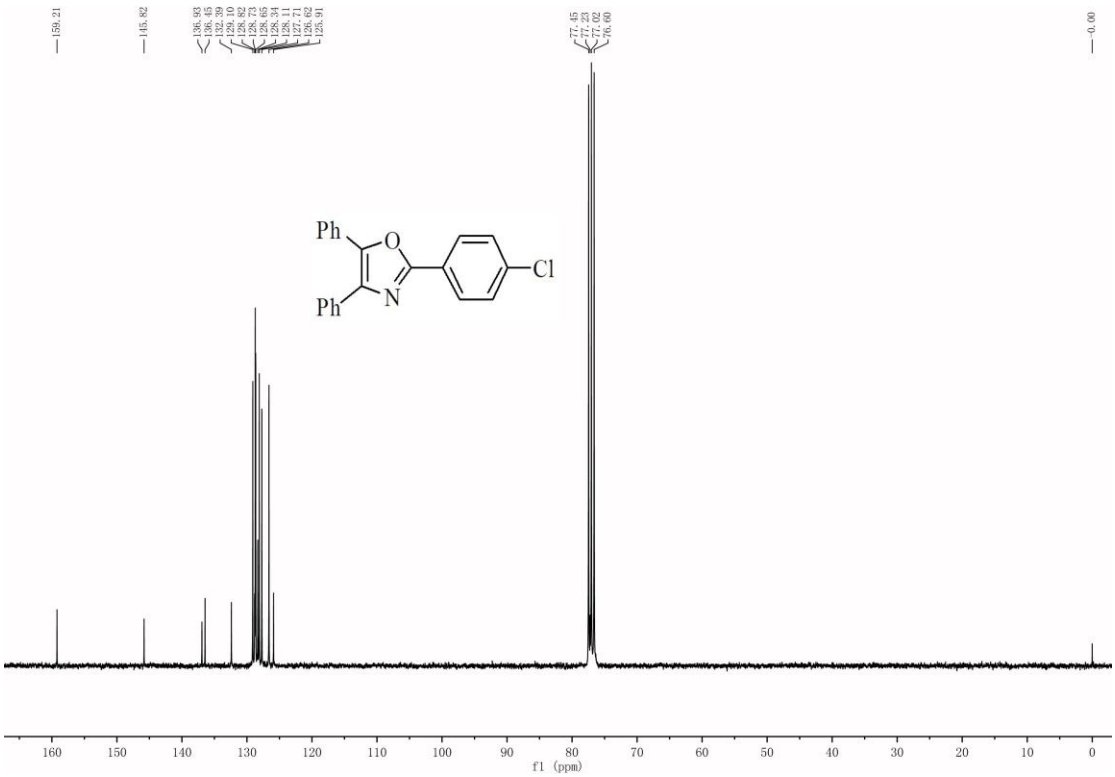
2-(4-fluorophenyl)-4, 5-diphenyloxazole (3f):



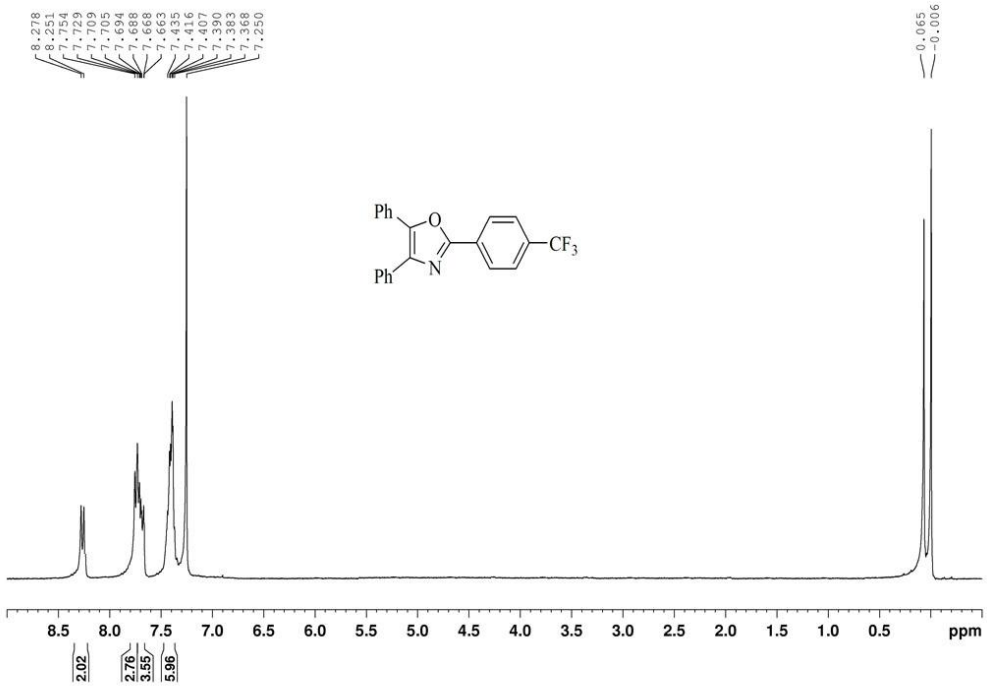


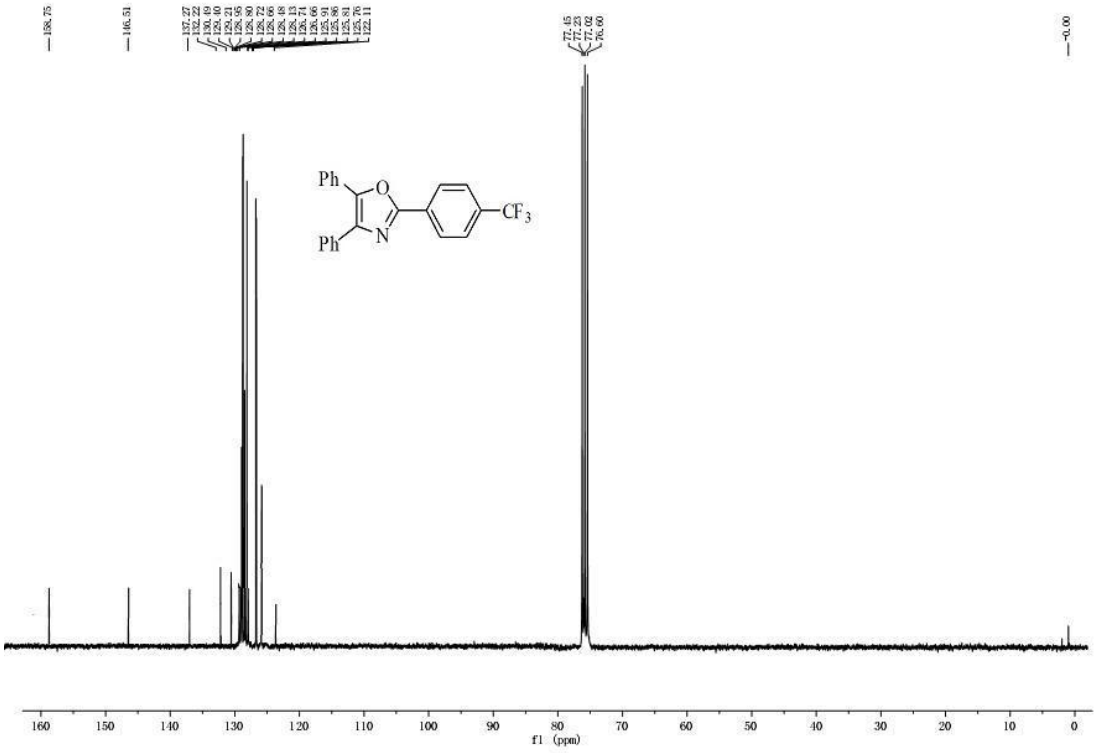
2-(4-chlorophenyl)-4, 5-diphenyloxazole (3g):



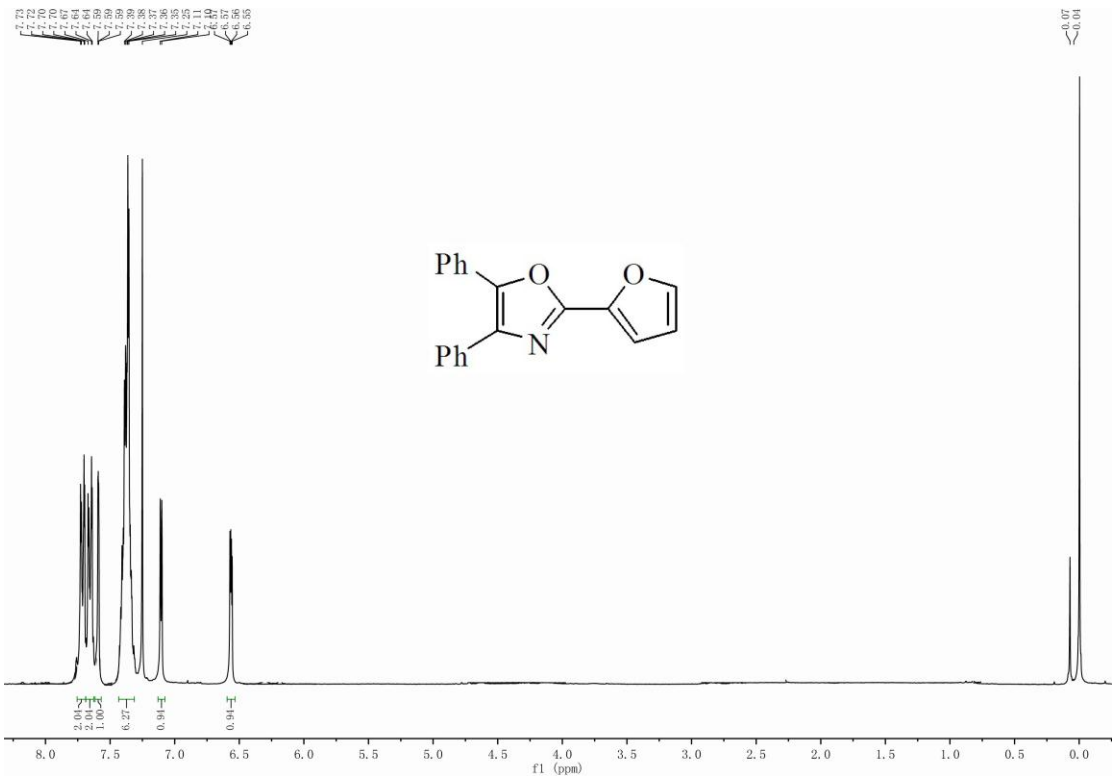


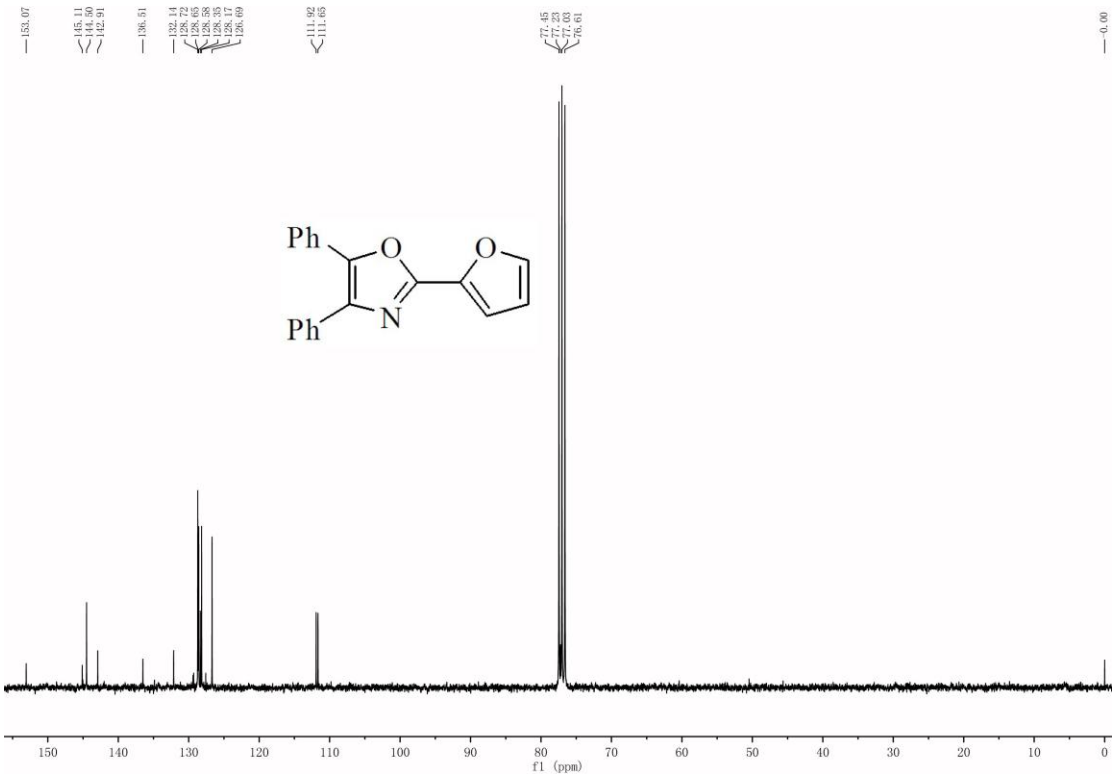
4, 5-diphenyl-2-(4-(trifluoromethyl)phenyl)oxazole (3h):



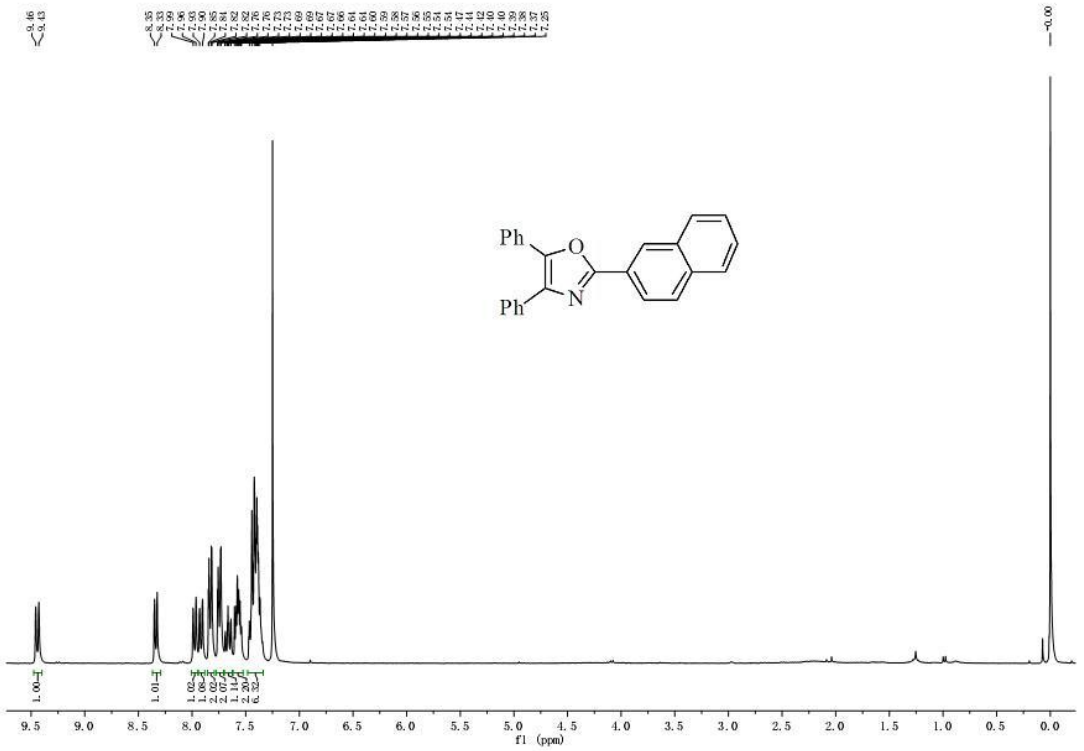


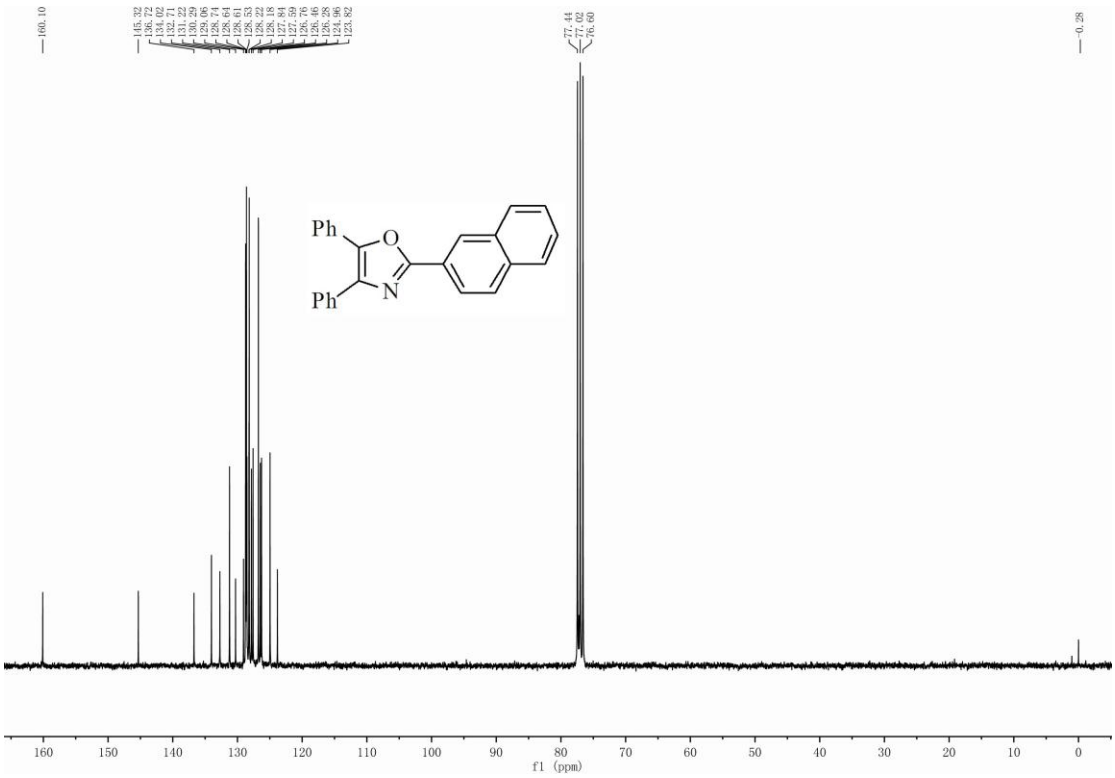
2-(furan-2-yl)-4, 5-diphenyloxazole (3i):



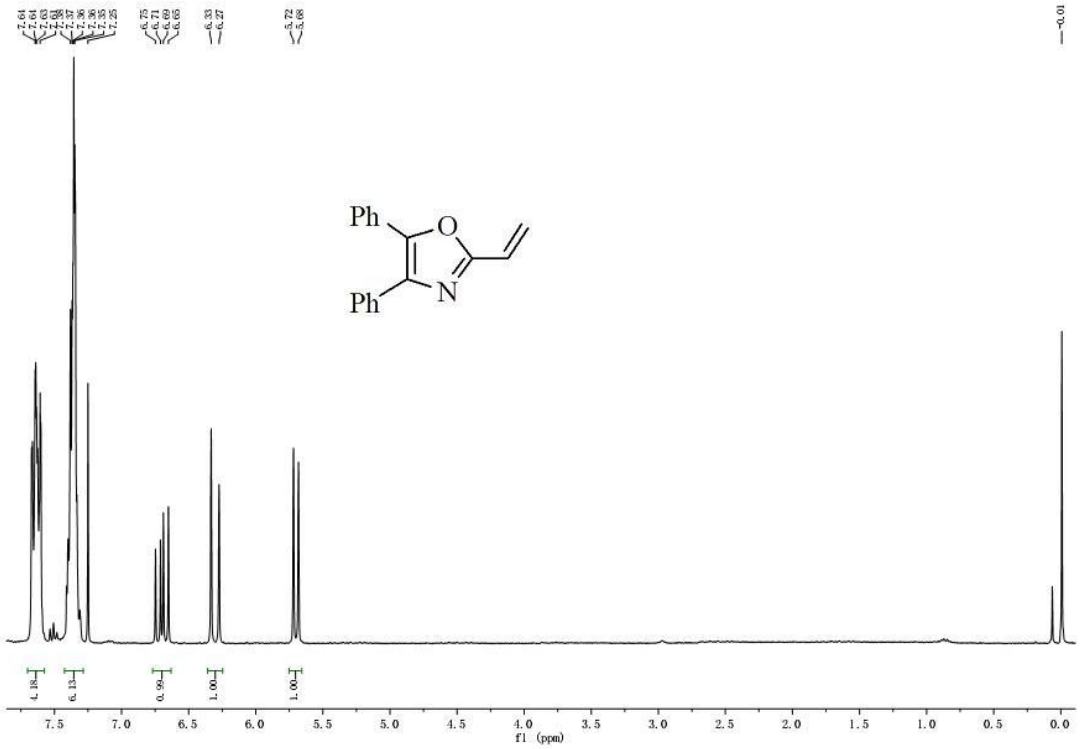


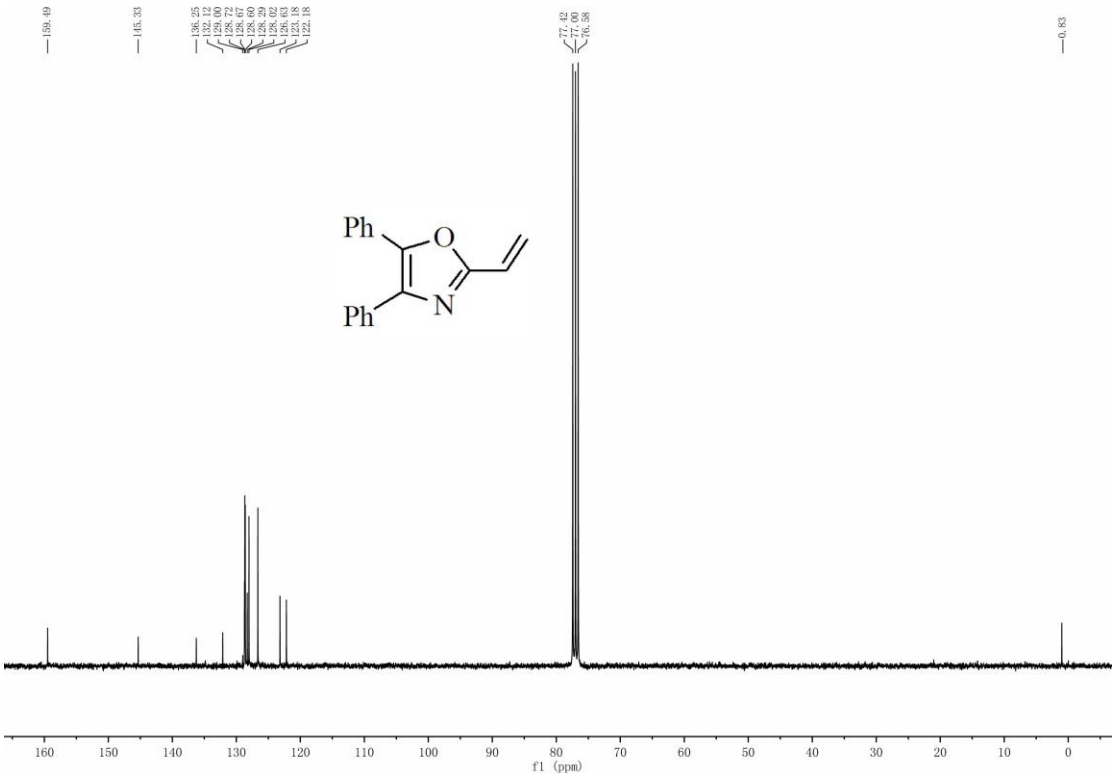
2-(naphthalen-2-yl)-4, 5-diphenyloxazole (3j):



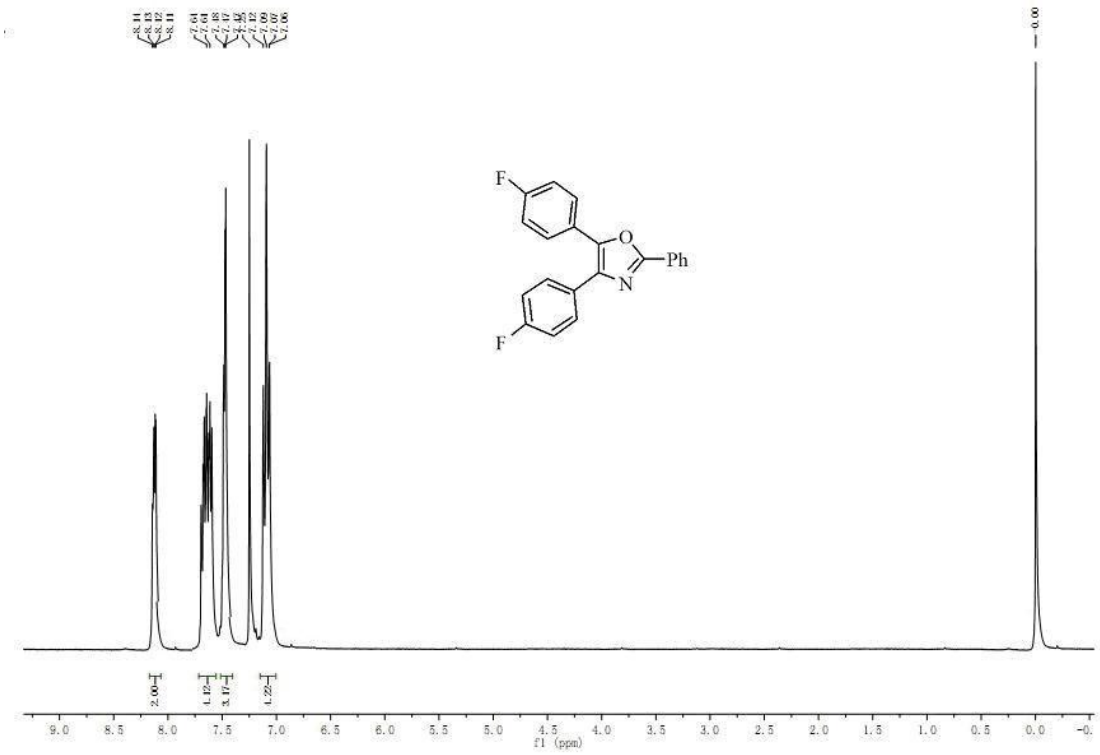


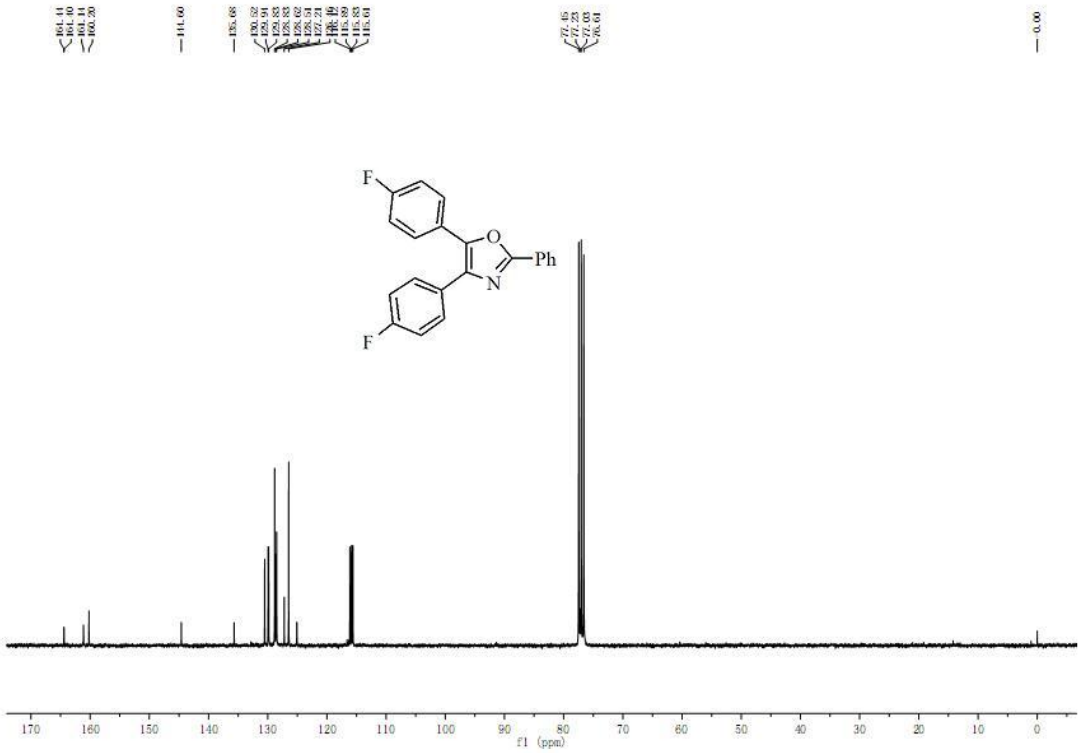
4, 5-diphenyl-2-vinyloxazole (3k):



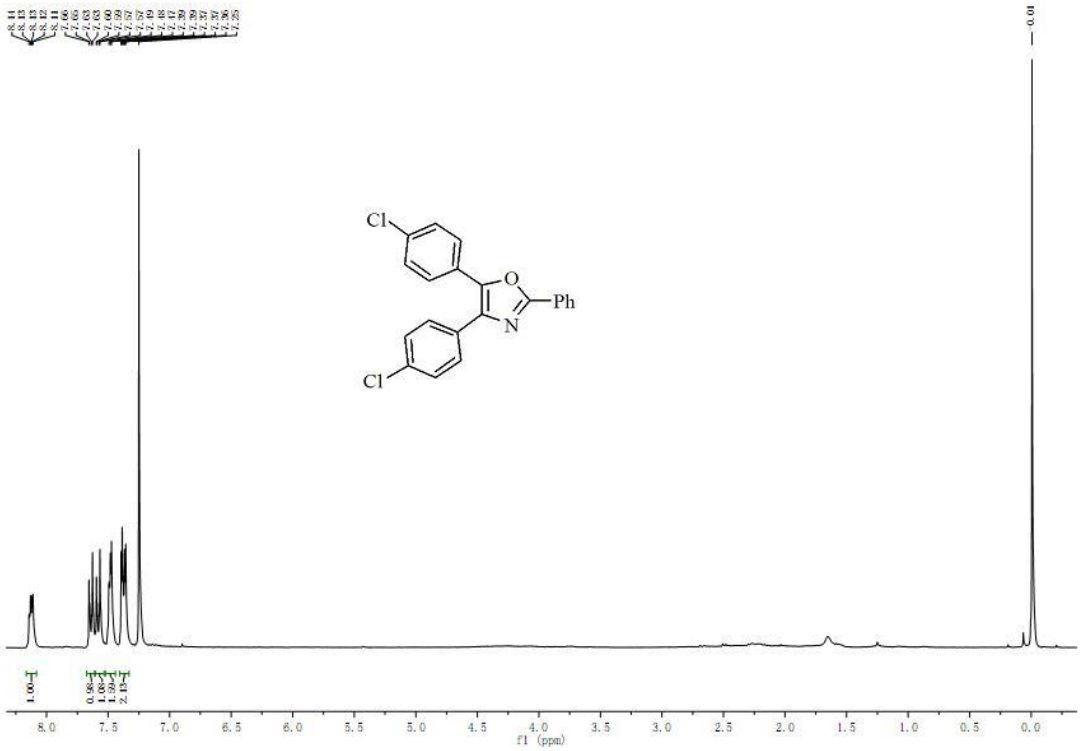


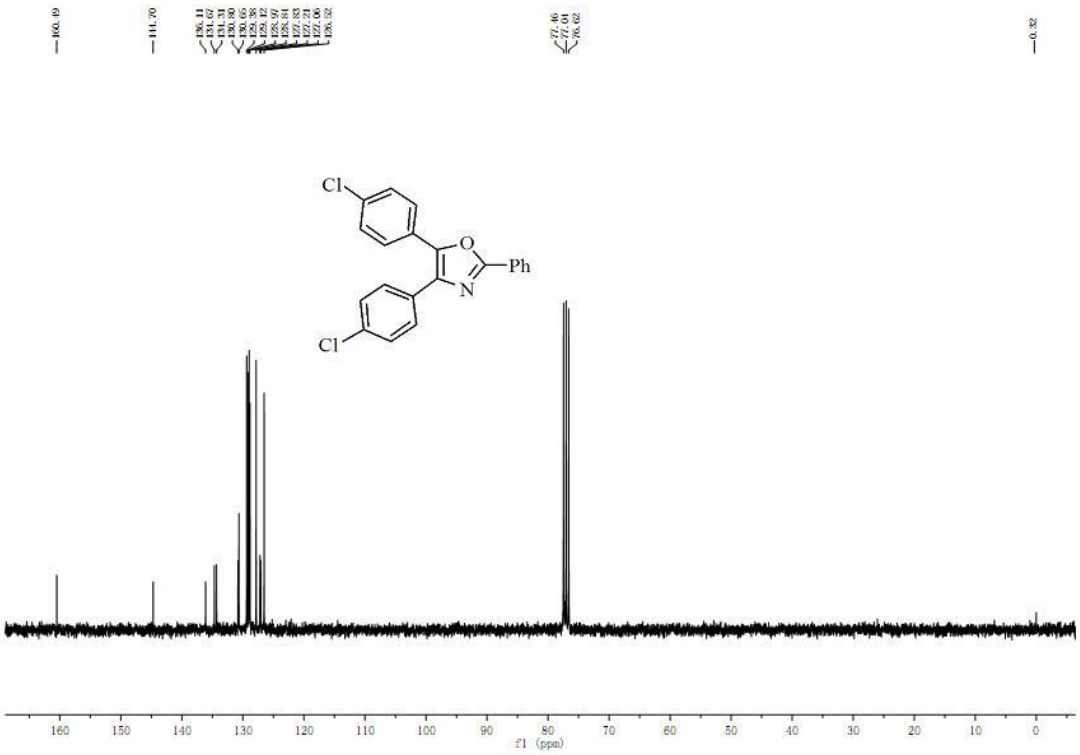
4, 5-bis(4-fluorophenyl)-2-phenyloxazole (3m):



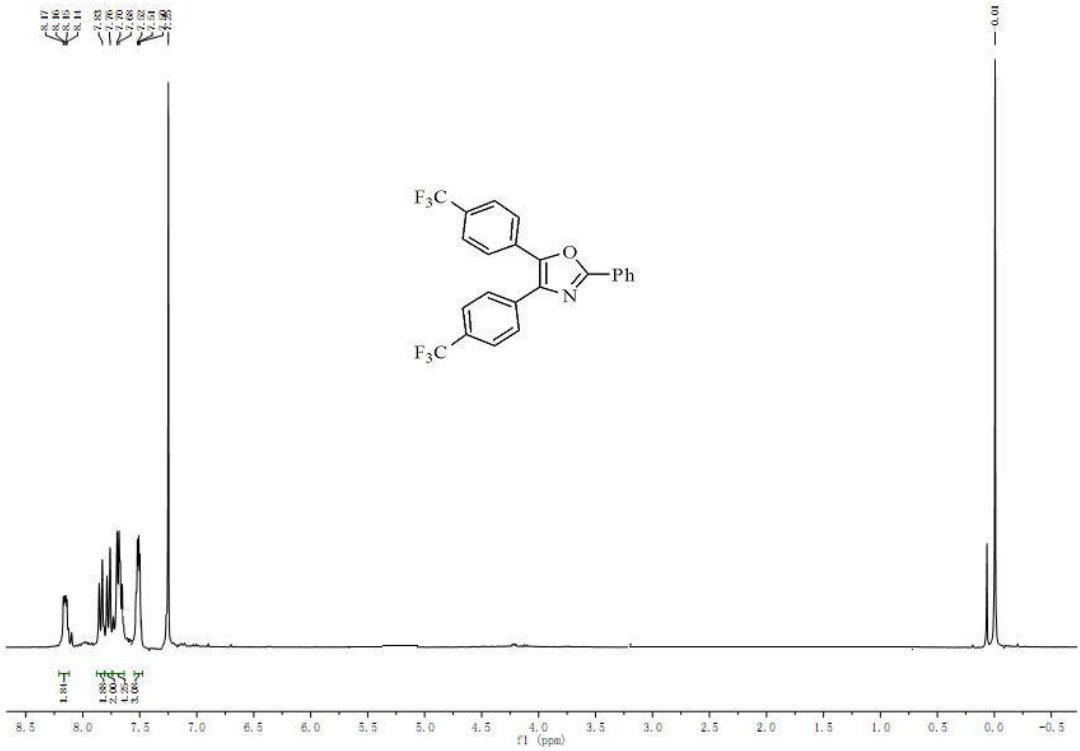


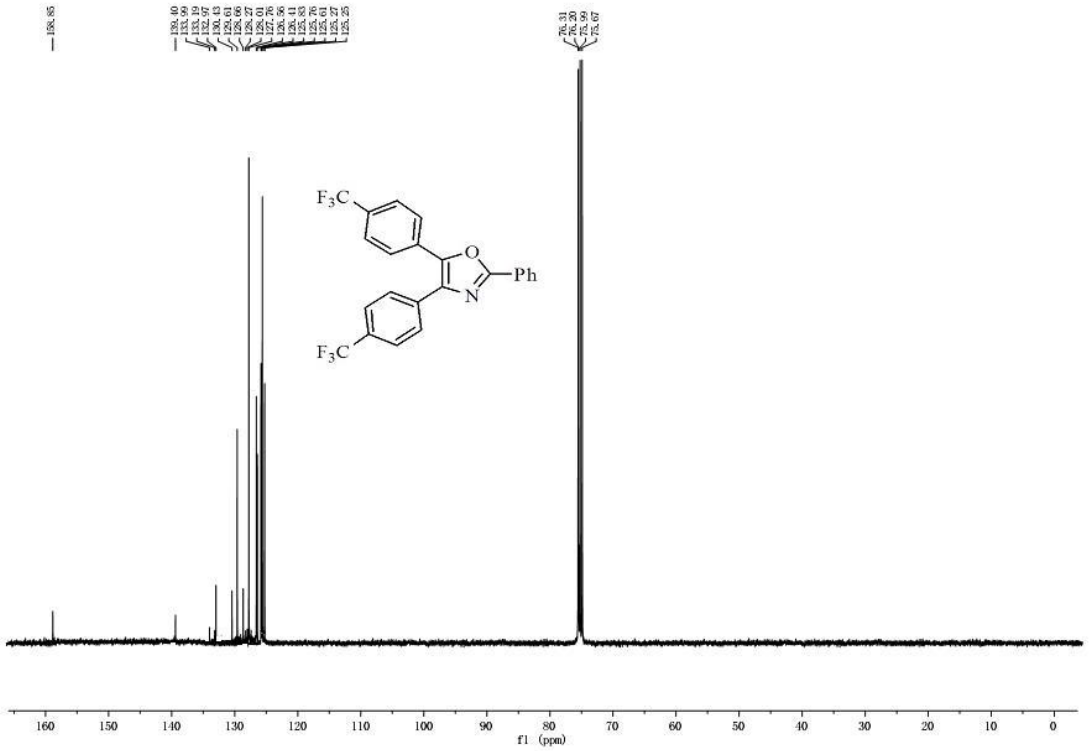
4, 5-bis(4-chlorophenyl)-2-phenyloxazole (3n):



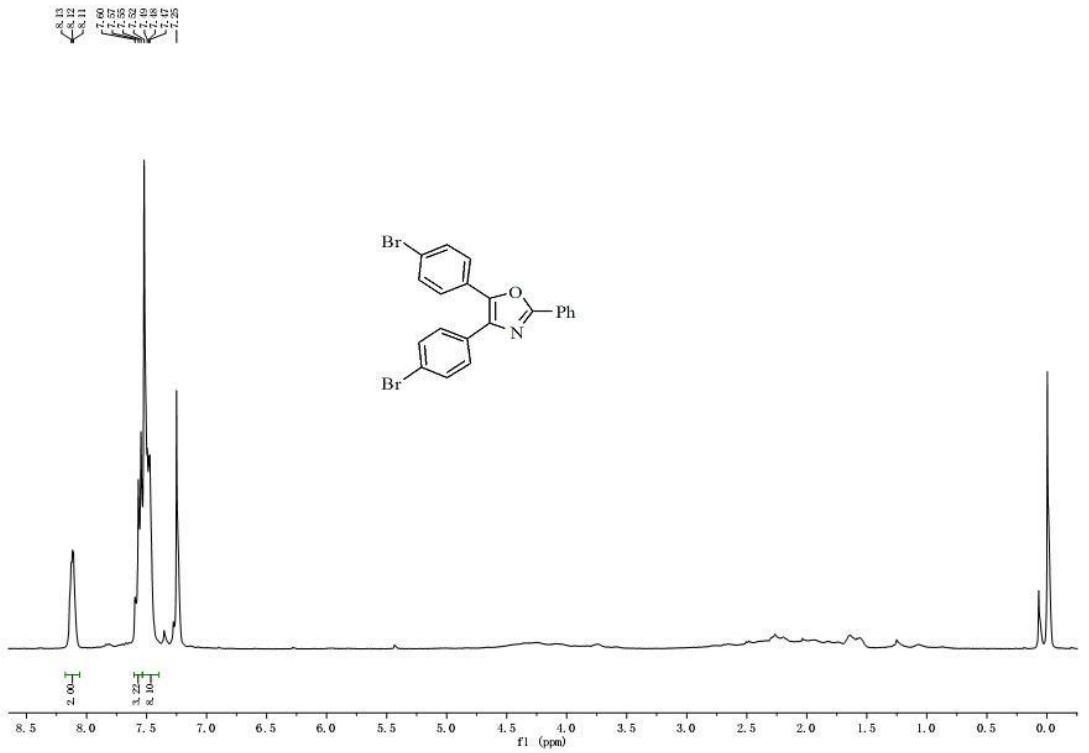


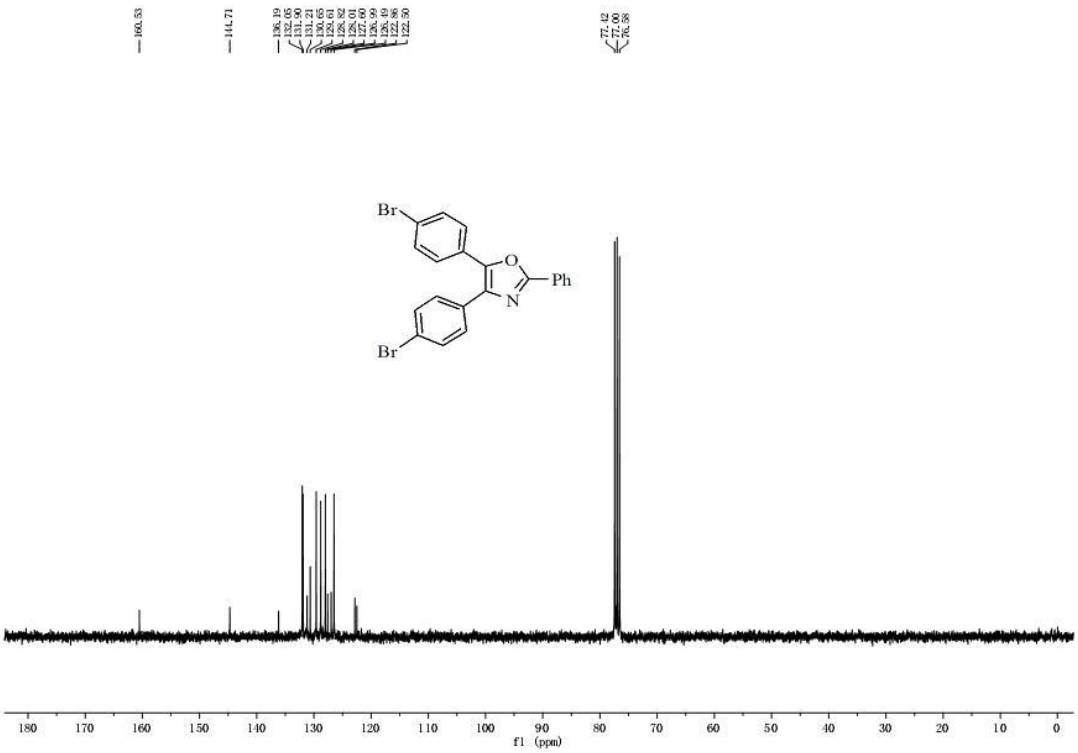
2-phenyl-4, 5-bis(4-(trifluoromethyl)phenyl)oxazole (3o):



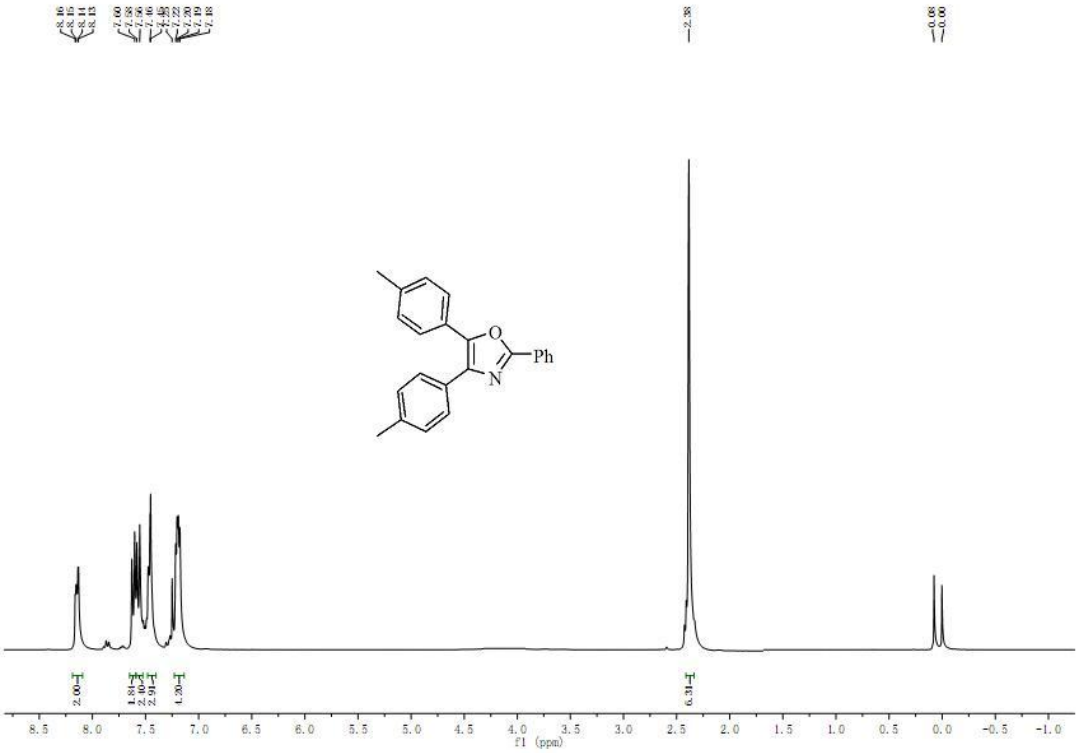


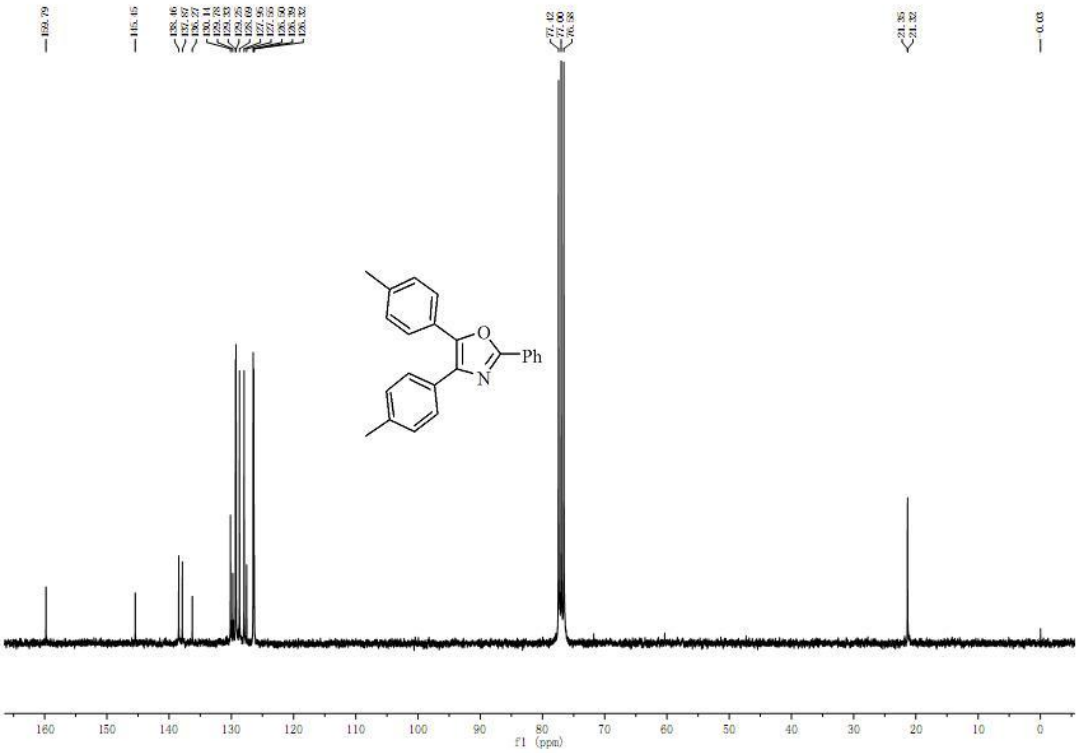
4, 5-bis(4-bromophenyl)-2-phenyloxazole (3p):



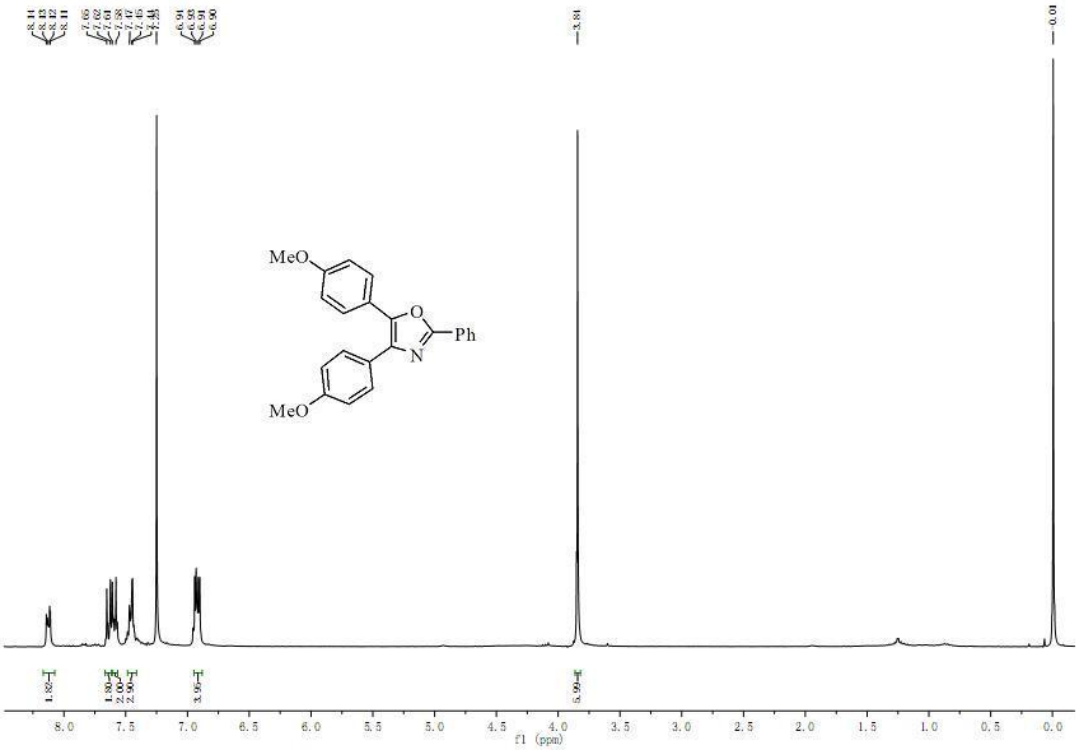


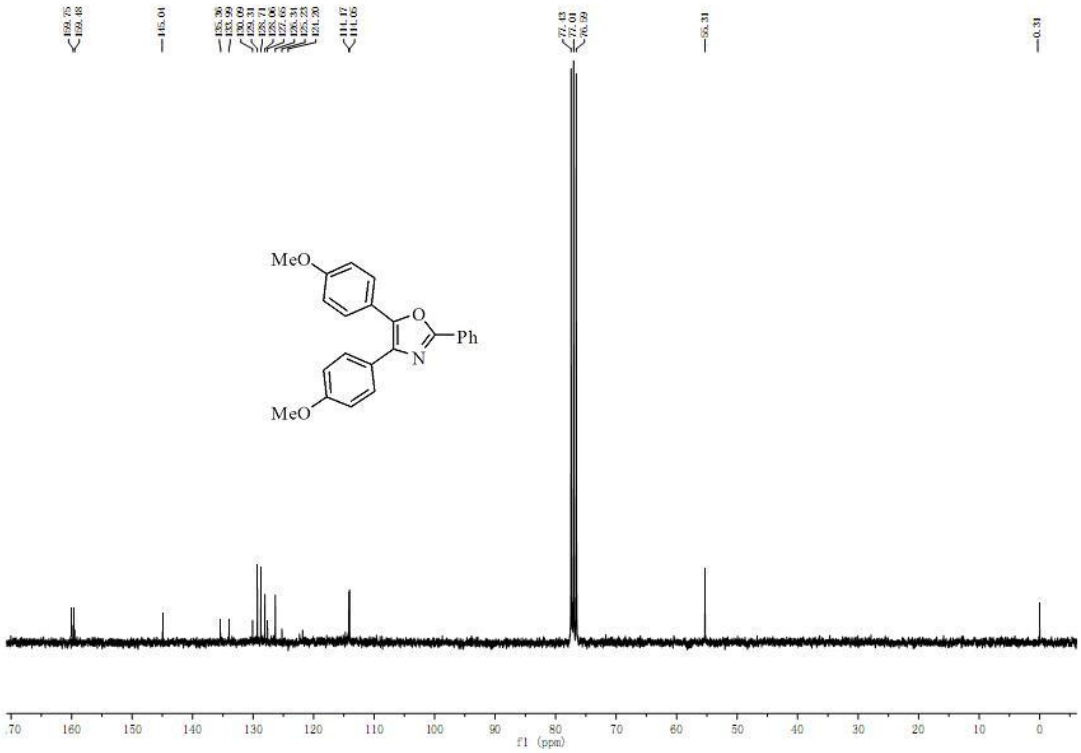
2-phenyl-4, 5-dip-tolyloxazole (3q):



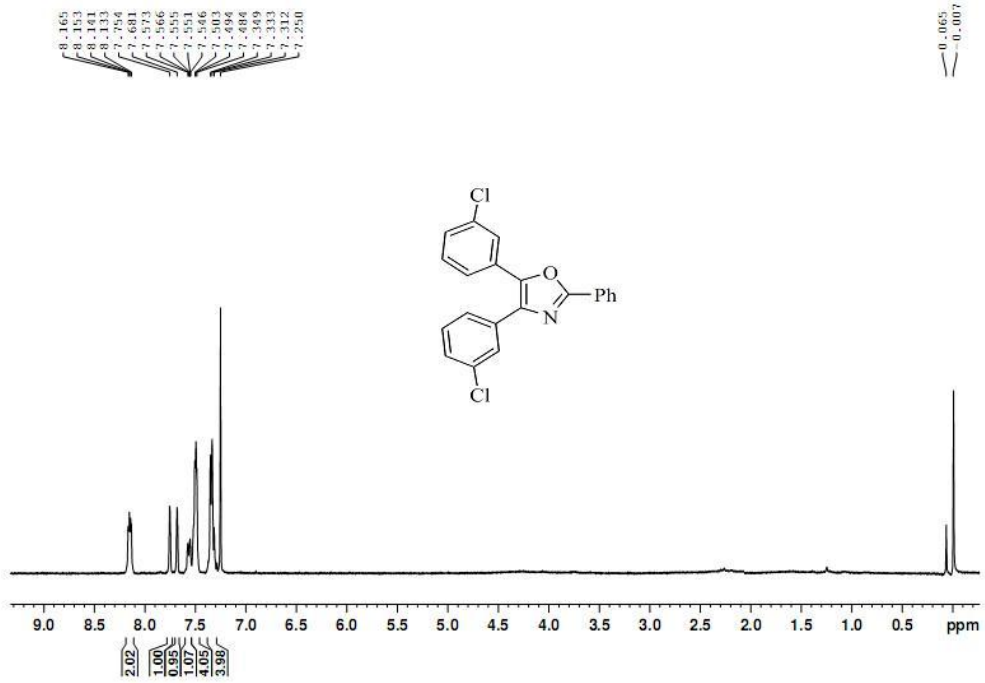


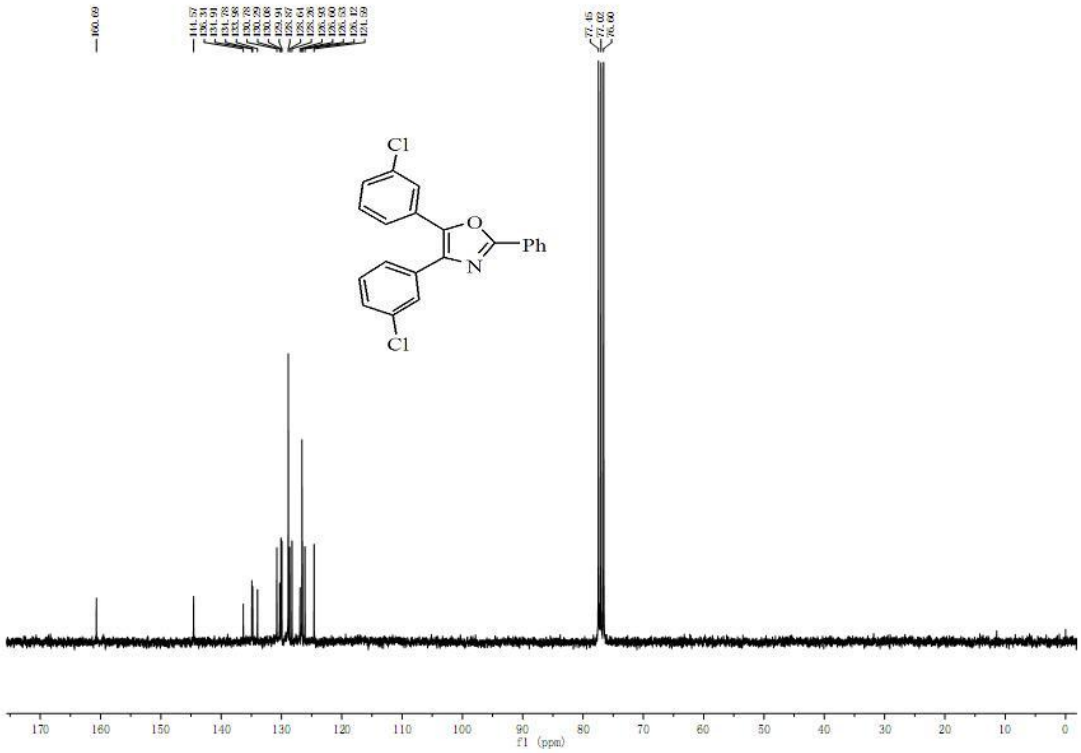
4, 5-bis(4-methoxyphenyl)-2-phenyloxazole (3r):



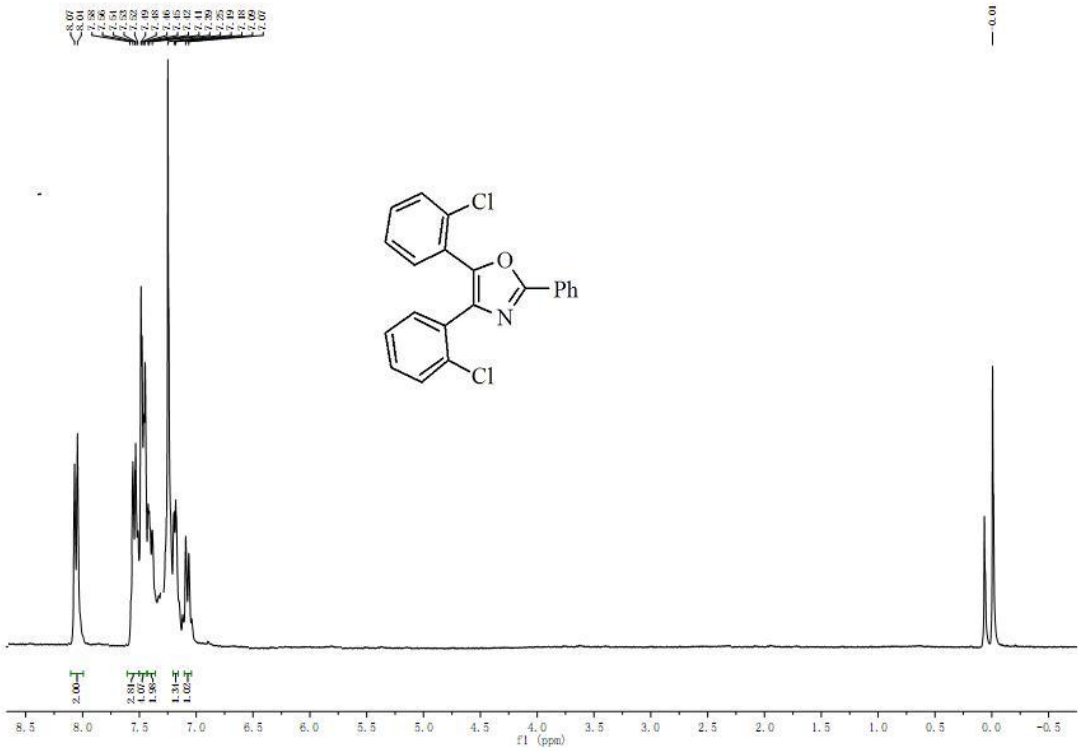


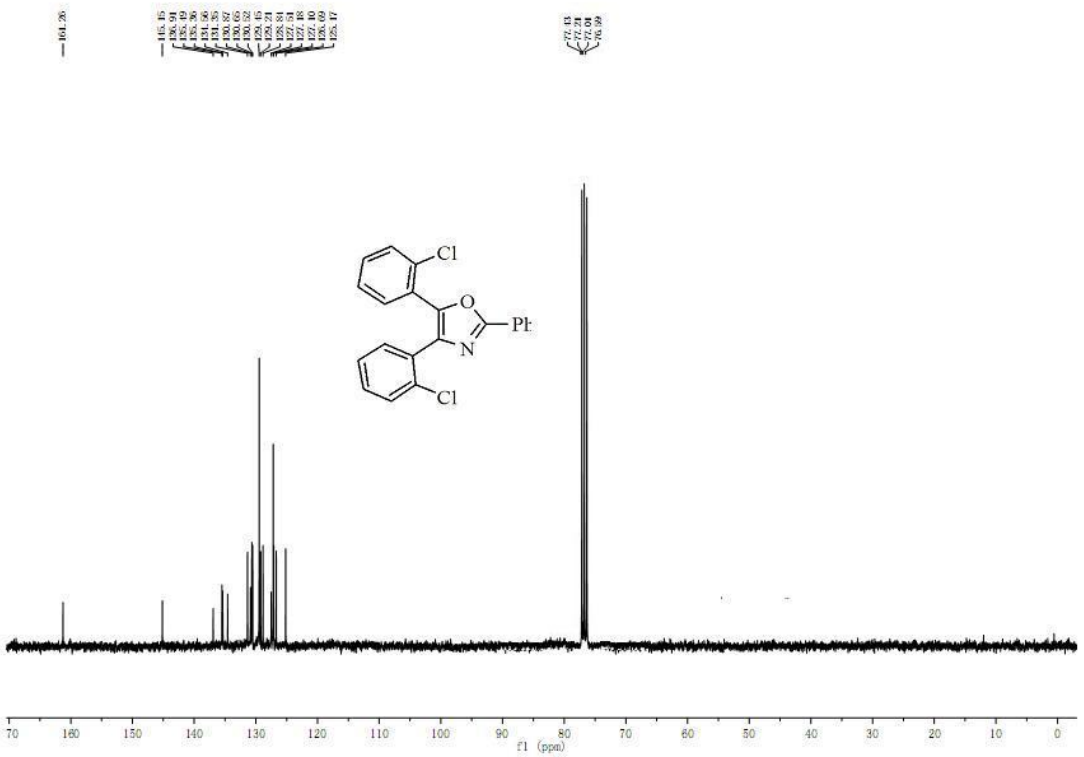
4, 5-bis(3-chlorophenyl)-2-phenyloxazole (3s):



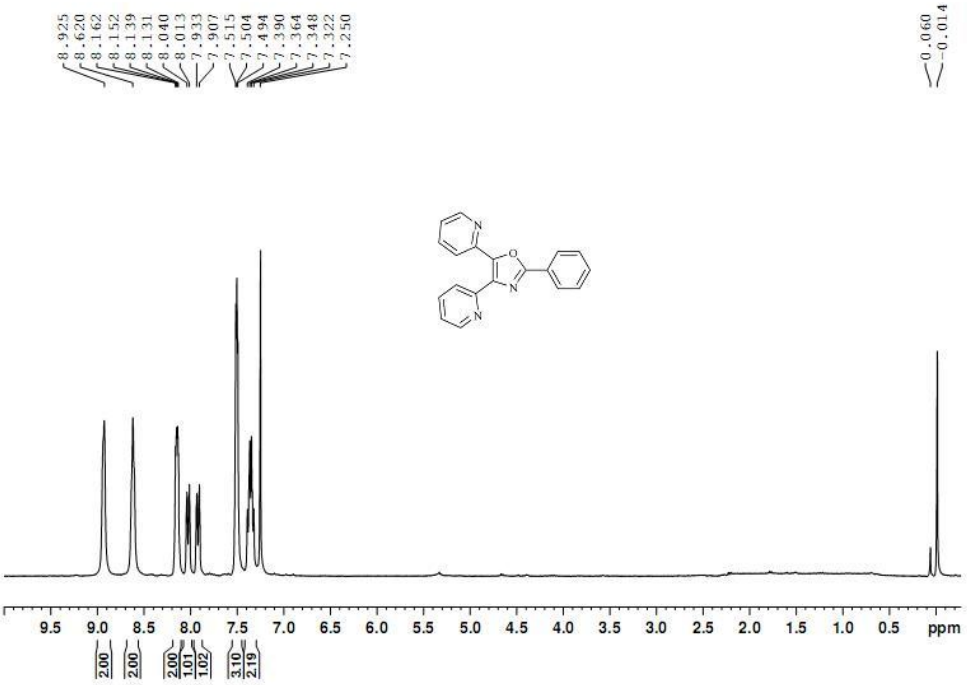


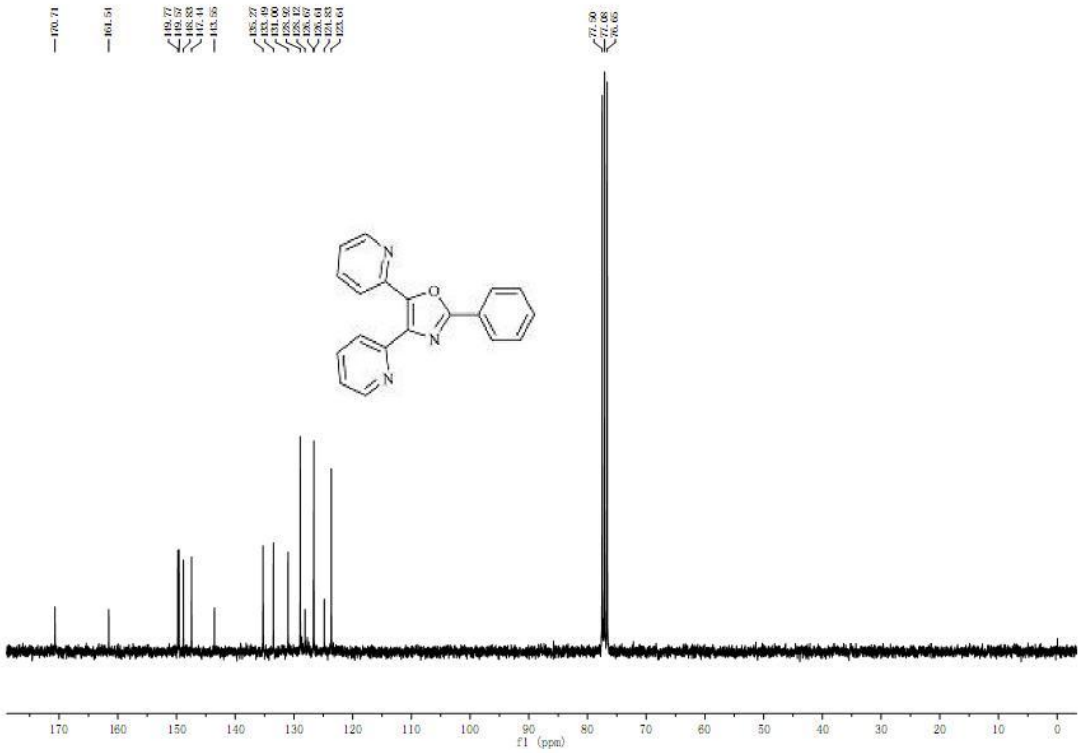
4, 5-bis(2-chlorophenyl)-2-phenyloxazole (3t):



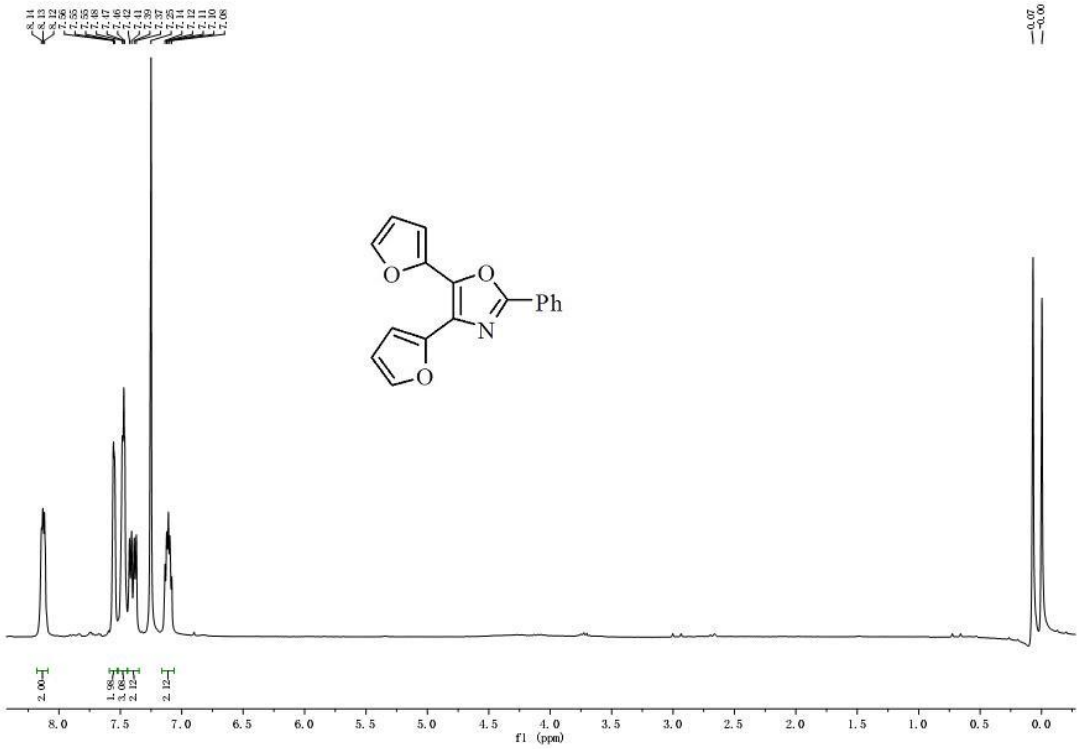


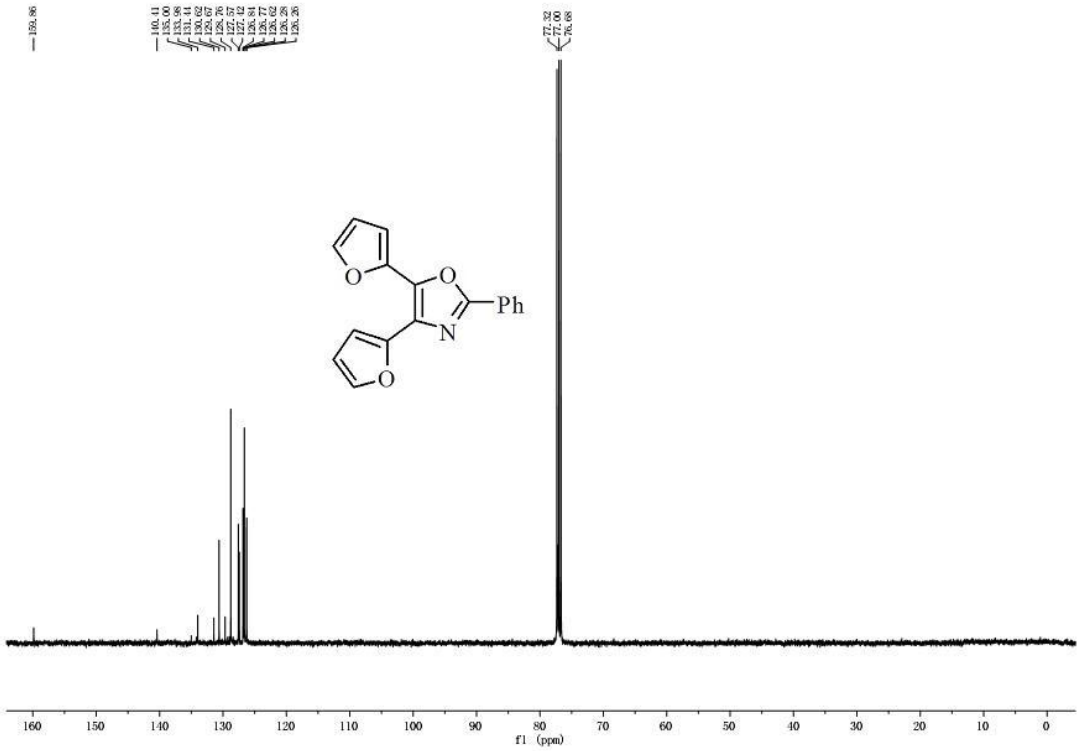
2-phenyl-4, 5-di(pyridin-2-yl)oxazole (3u):



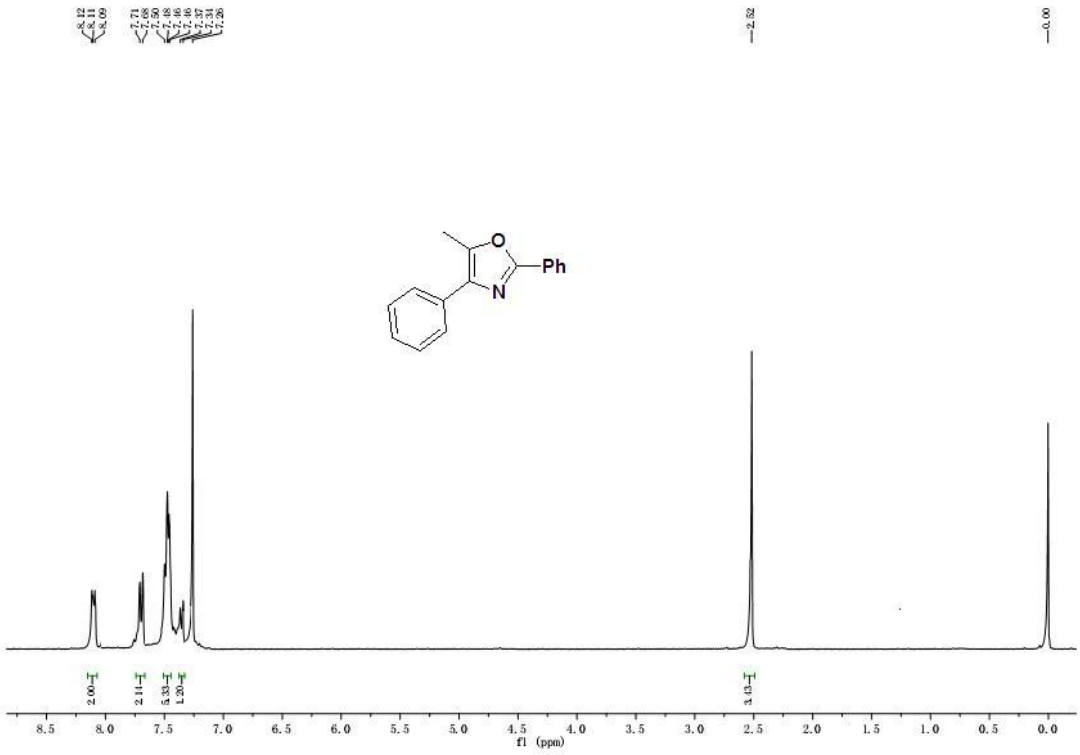


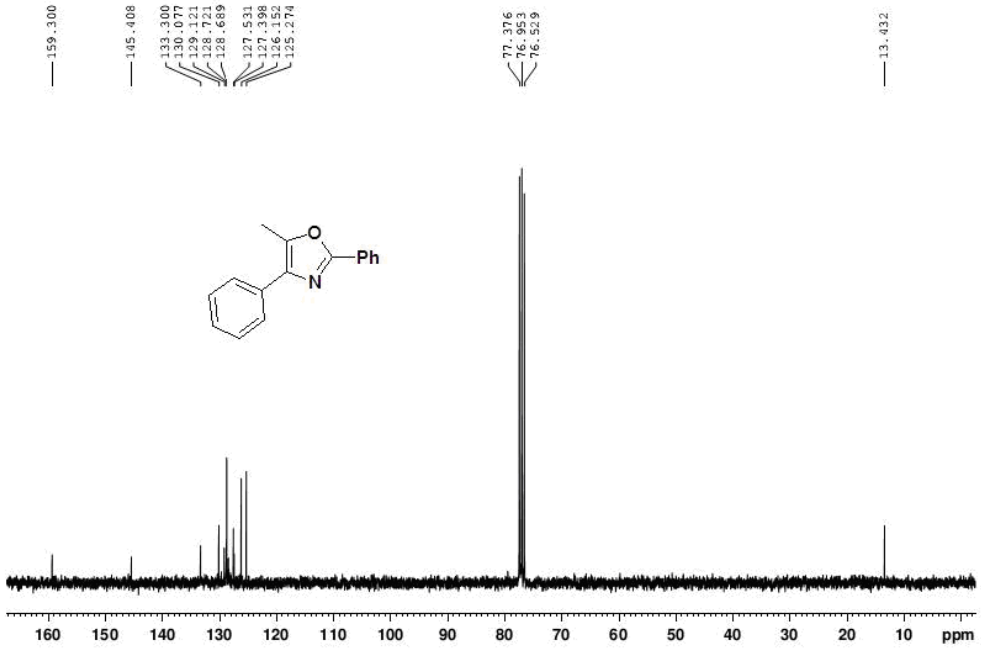
4, 5-di(furan-2-yl)-2-phenyloxazole (3v):



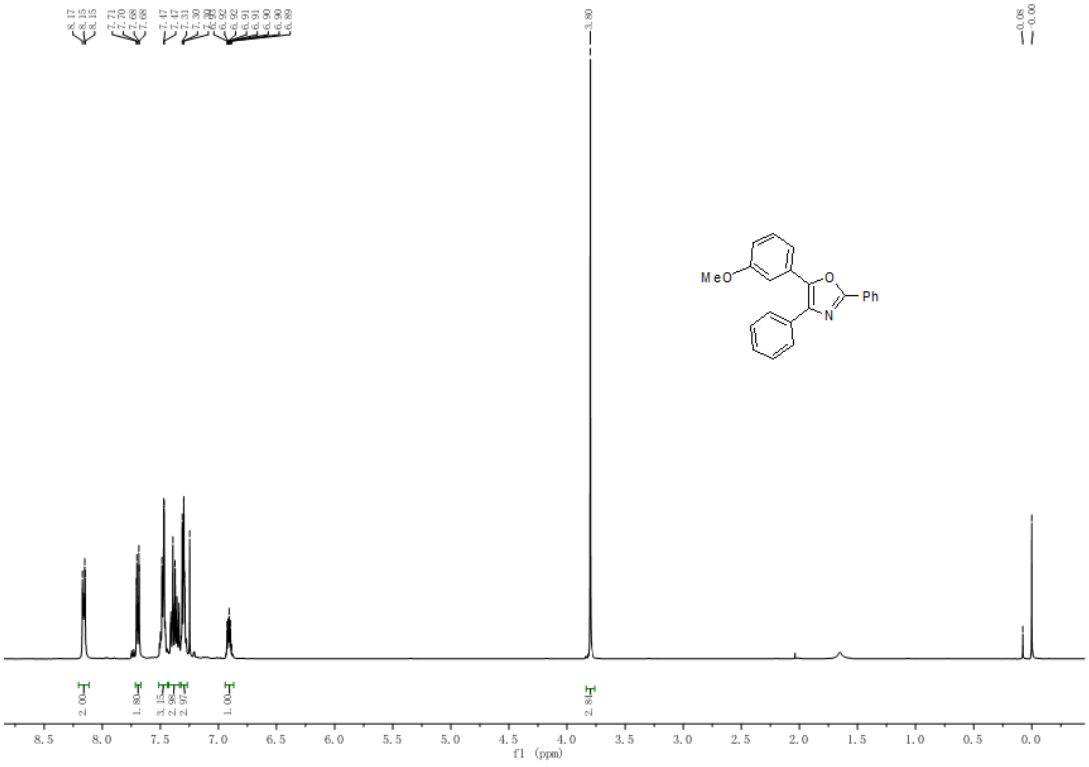


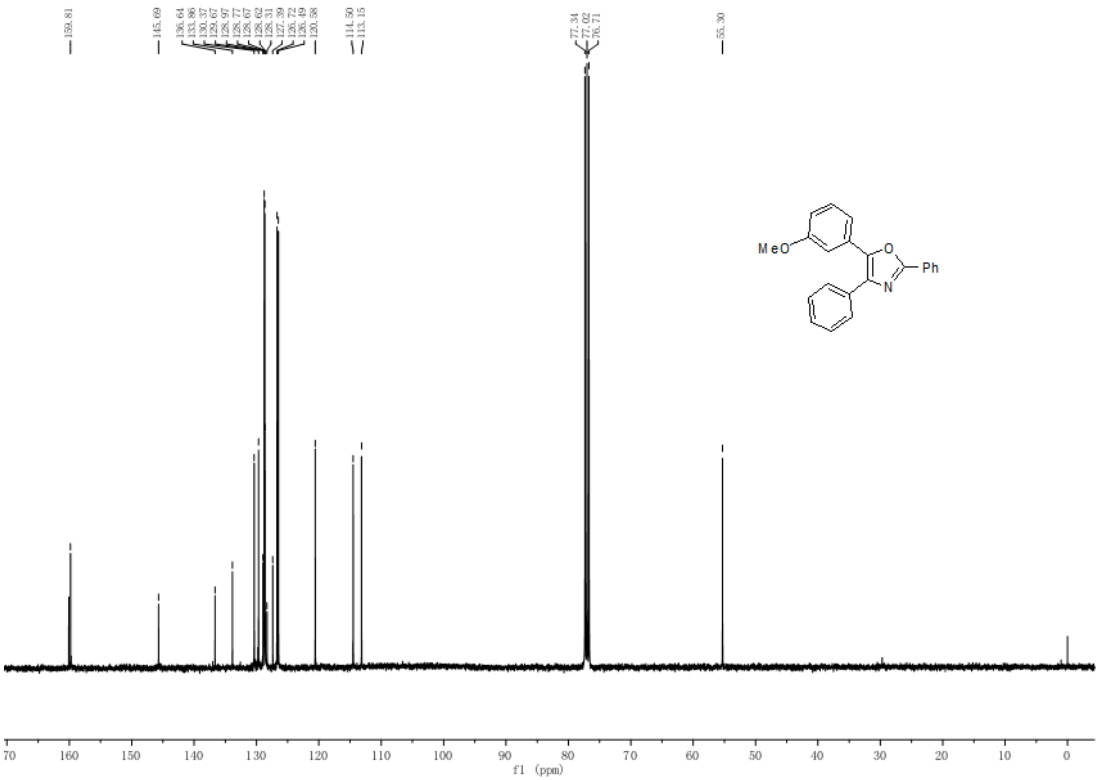
5-methyl-2, 4-diphenyloxazole (3w):



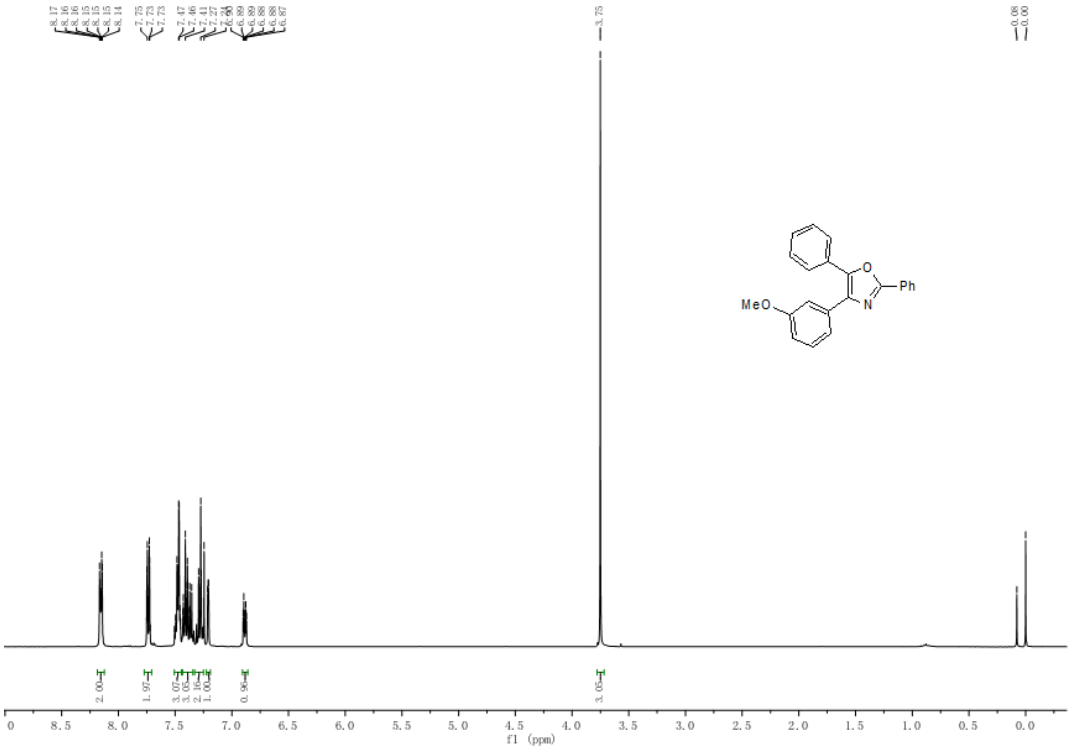


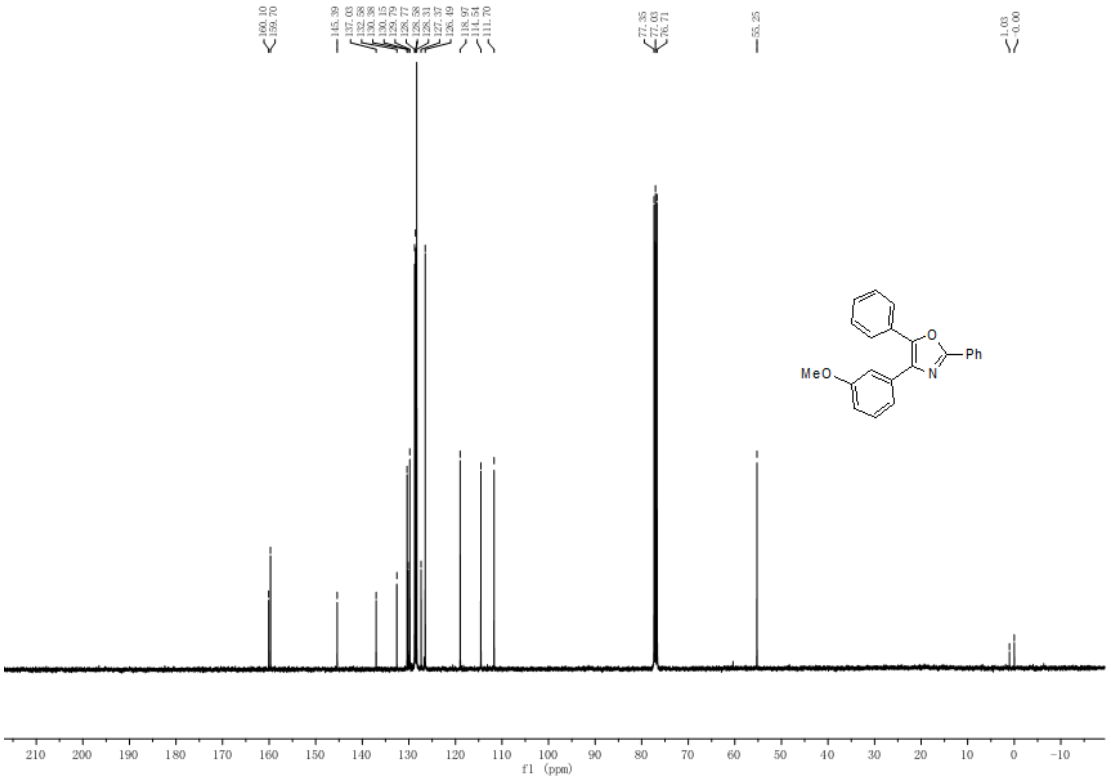
5-(3-Methoxy-phenyl)-2, 4-diphenyl-oxazole ($3x_1$):



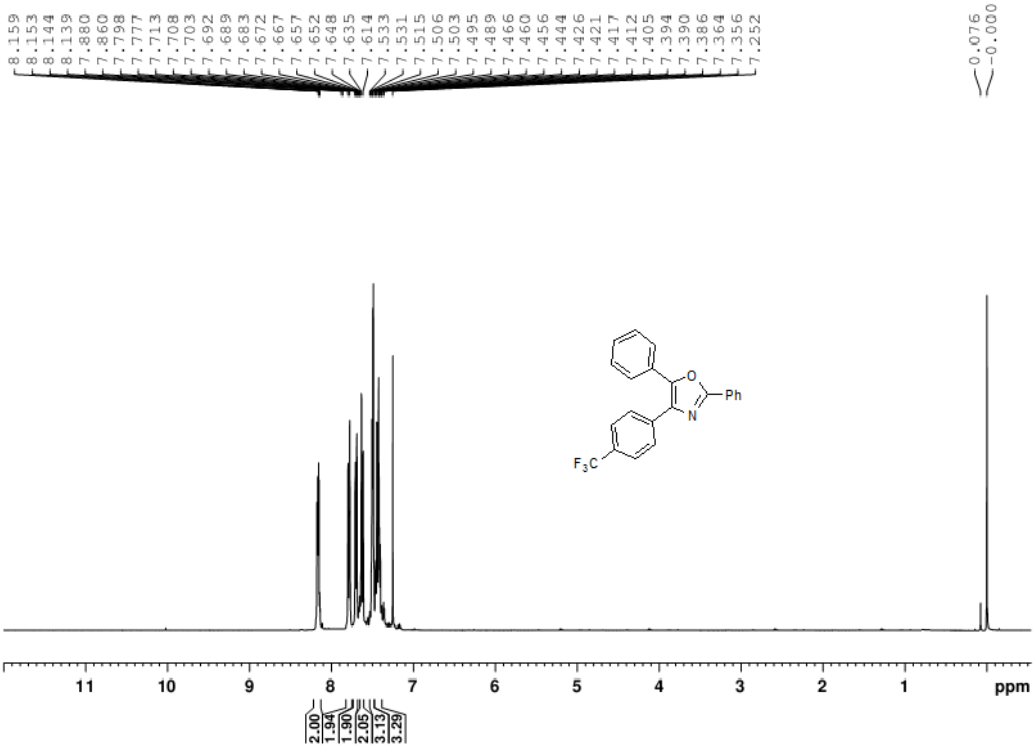


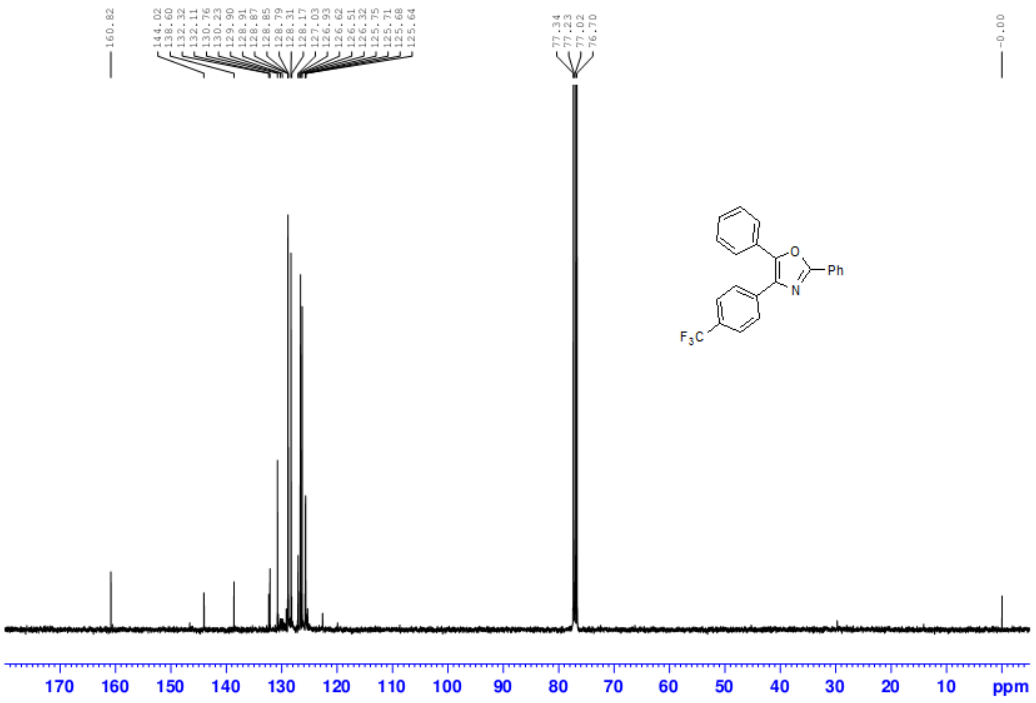
4-(3-Methoxy-phenyl)-2, 5-diphenyl-oxazole ($3x_2$):



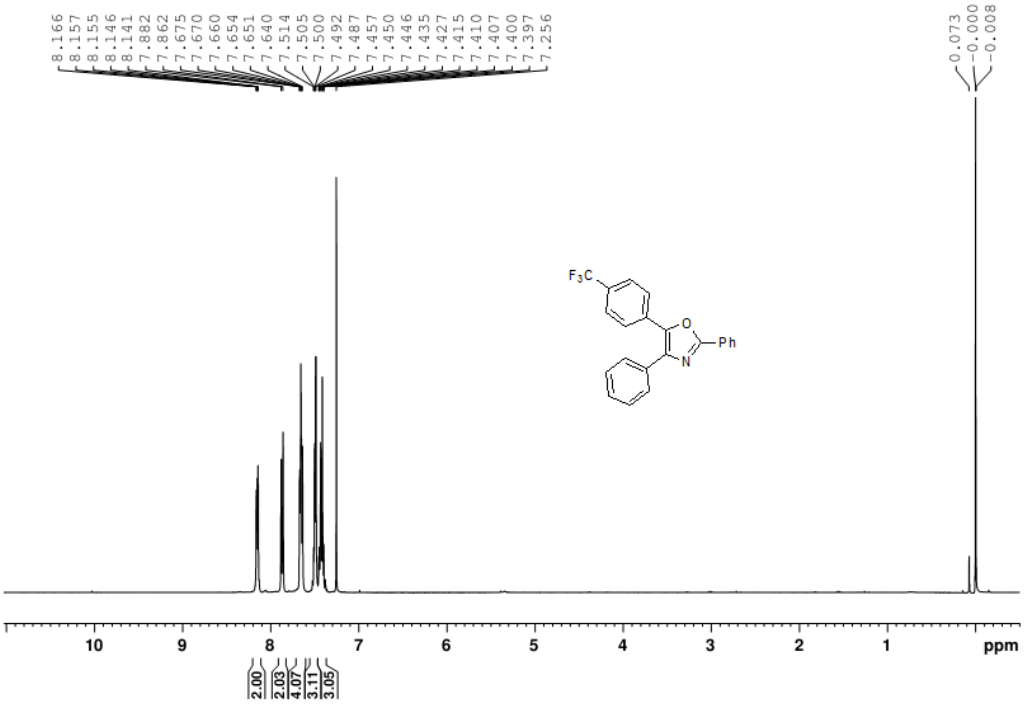


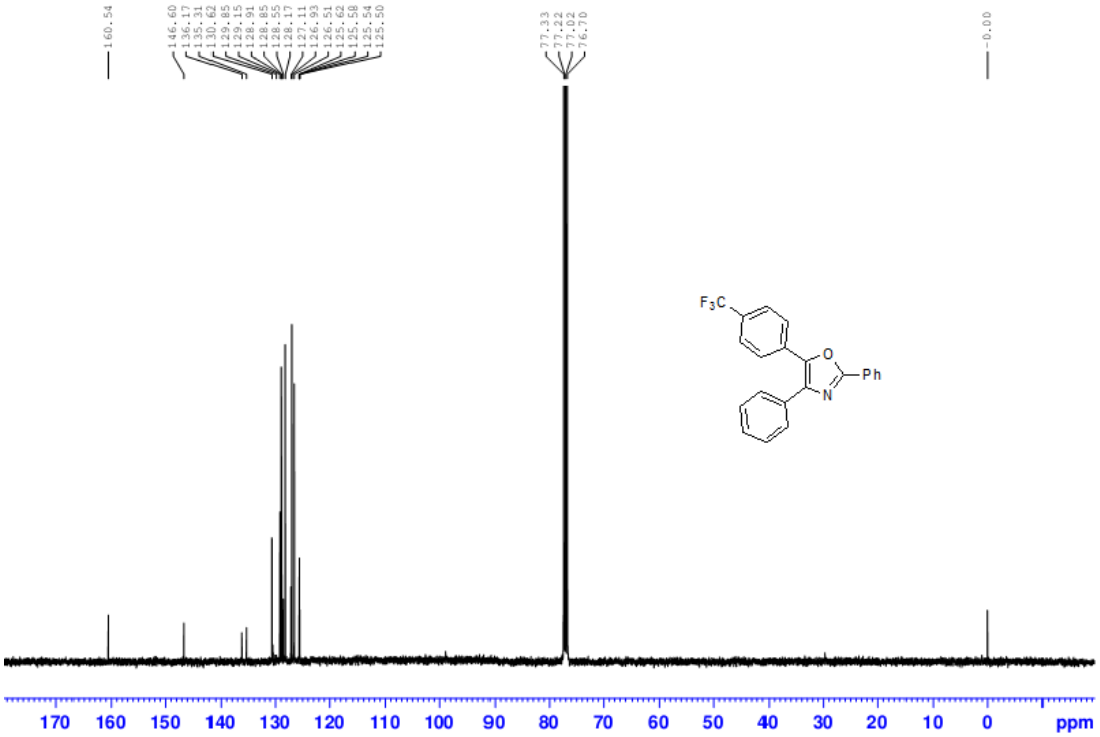
2,5-Diphenyl-4-(4-trifluoromethyl-phenyl)-oxazole ($3y_1$):





2,4-Diphenyl-5-(4-trifluoromethyl-phenyl)-oxazole ($3y_2$):





1, 2-diphenyl-2-(1-phenylethylimino)ethanone (4):