

## Supplementary Materials

# Unexpected Rearrangement of N-Allyl-2-phenyl-4,5-dihydrooxazole-4-carboxamides to Construct Aza-Quaternary Carbon Centers

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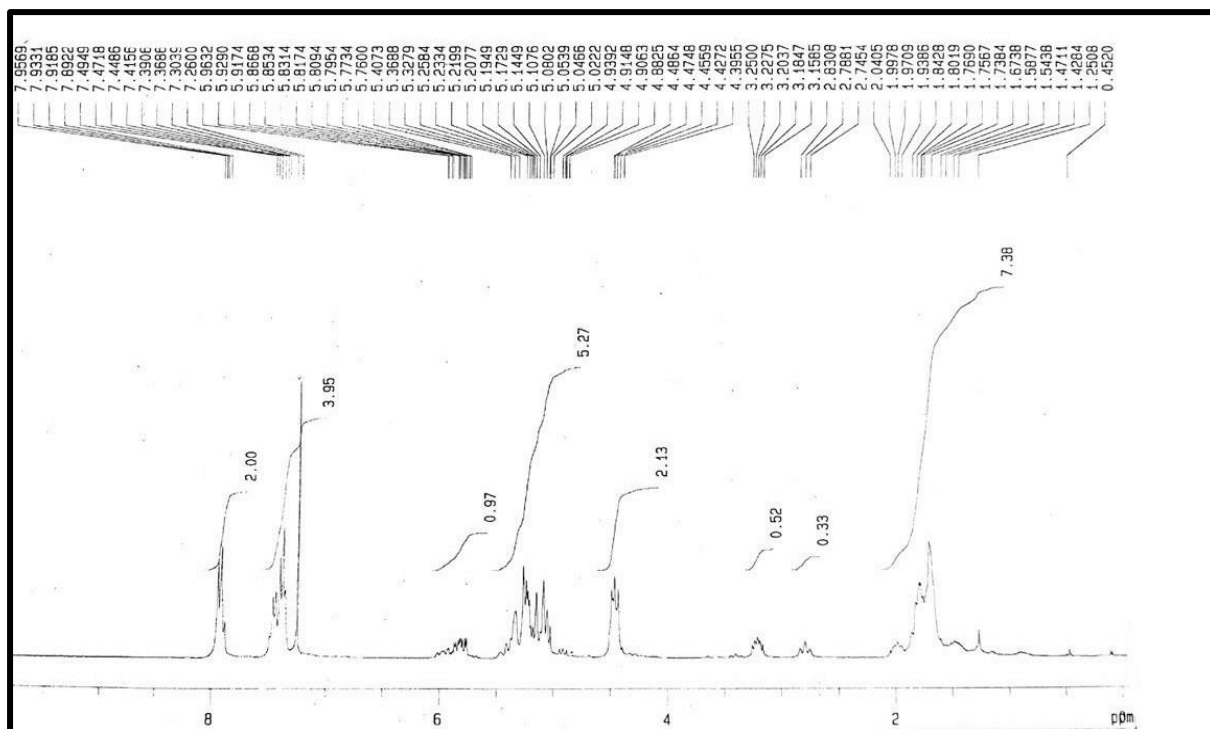
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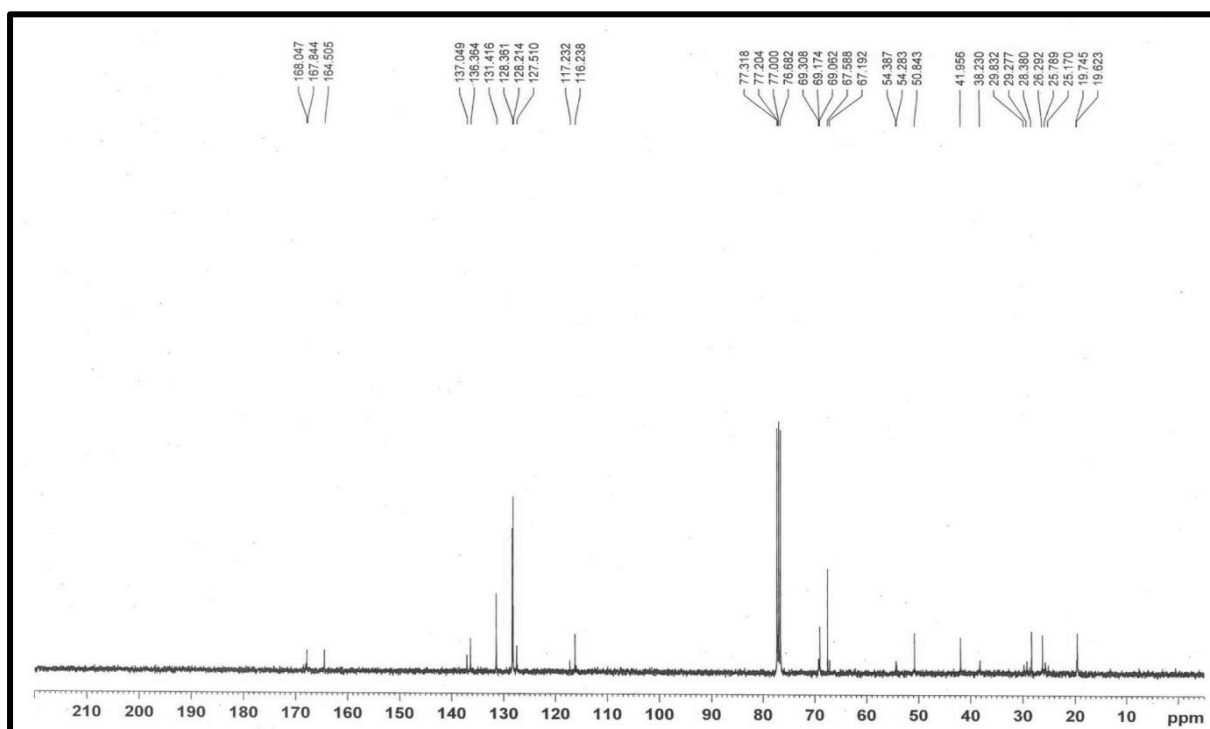
## <sup>1</sup>H and <sup>13</sup>C NMR Spectra

(2-Phenyl-4,5-dihydrooxazol-4-yl)(2-vinylpiperidin-1-yl)methanone (**1f**)

<sup>1</sup>H-NMR

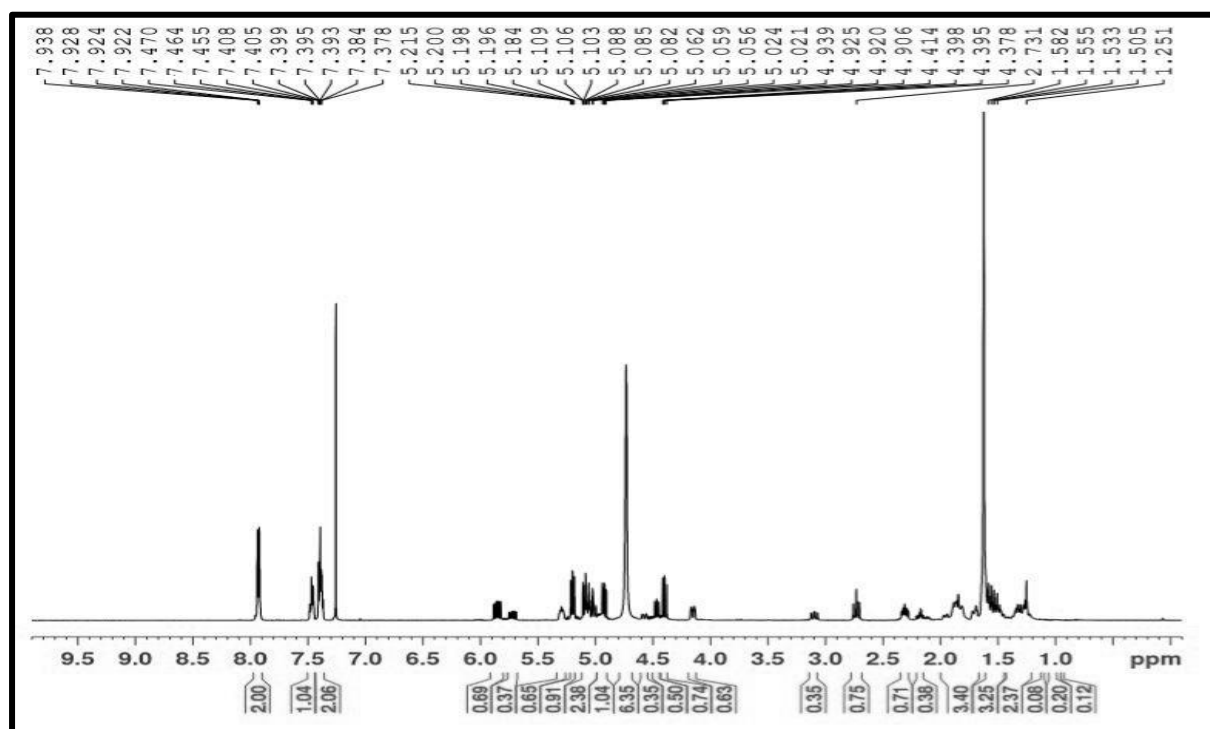


<sup>13</sup>C-NMR

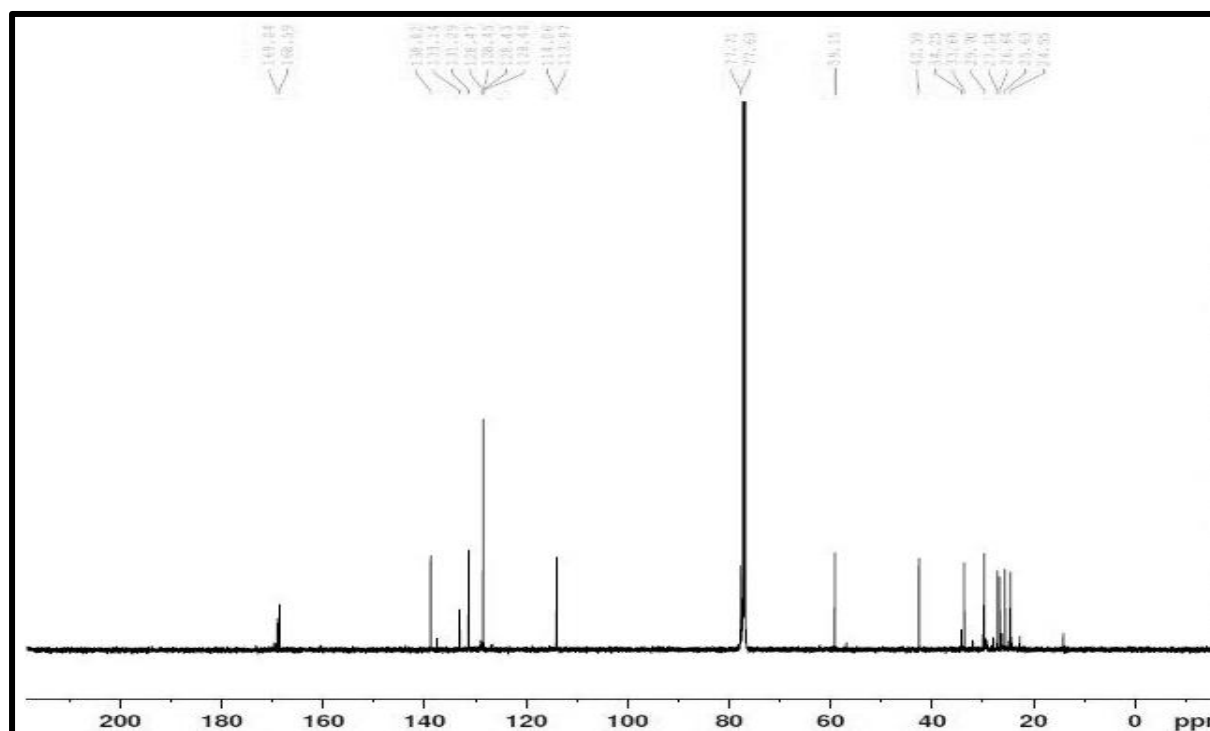


(2-Phenyl-4,5-dihydrooxazol-4-yl)(2-vinylazepan-1-yl)methanone (**1g**)

<sup>1</sup>H-NMR

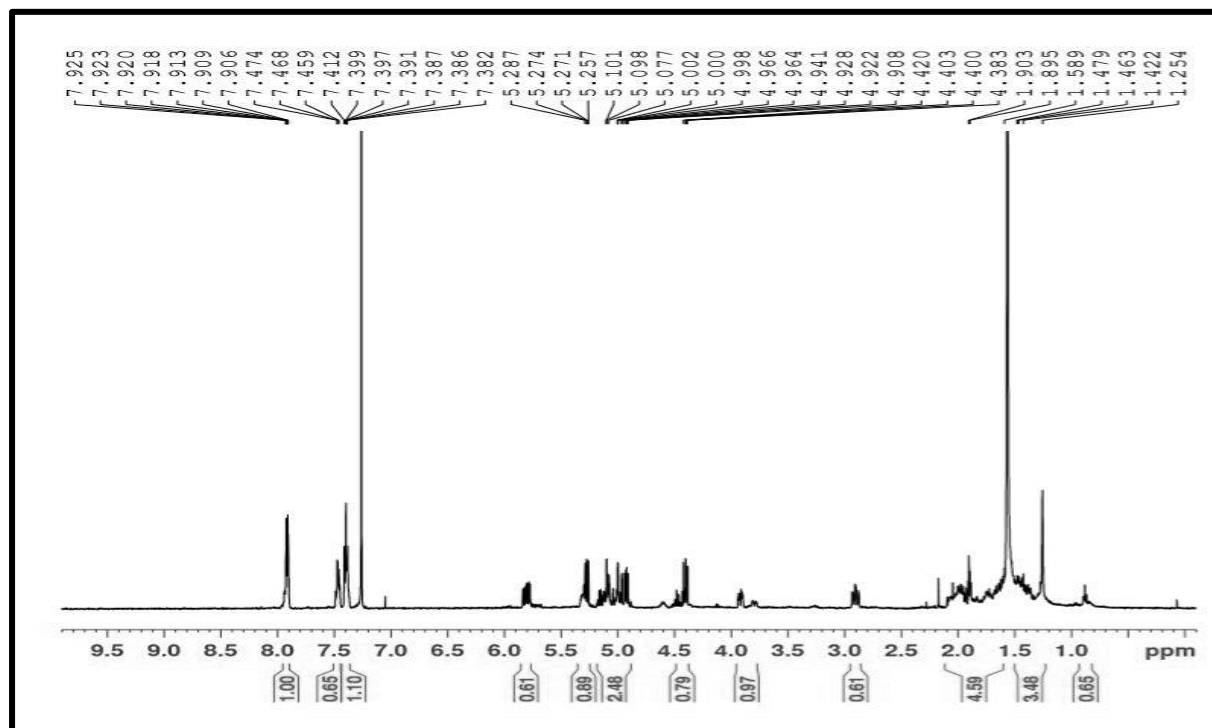


<sup>13</sup>C-NMR

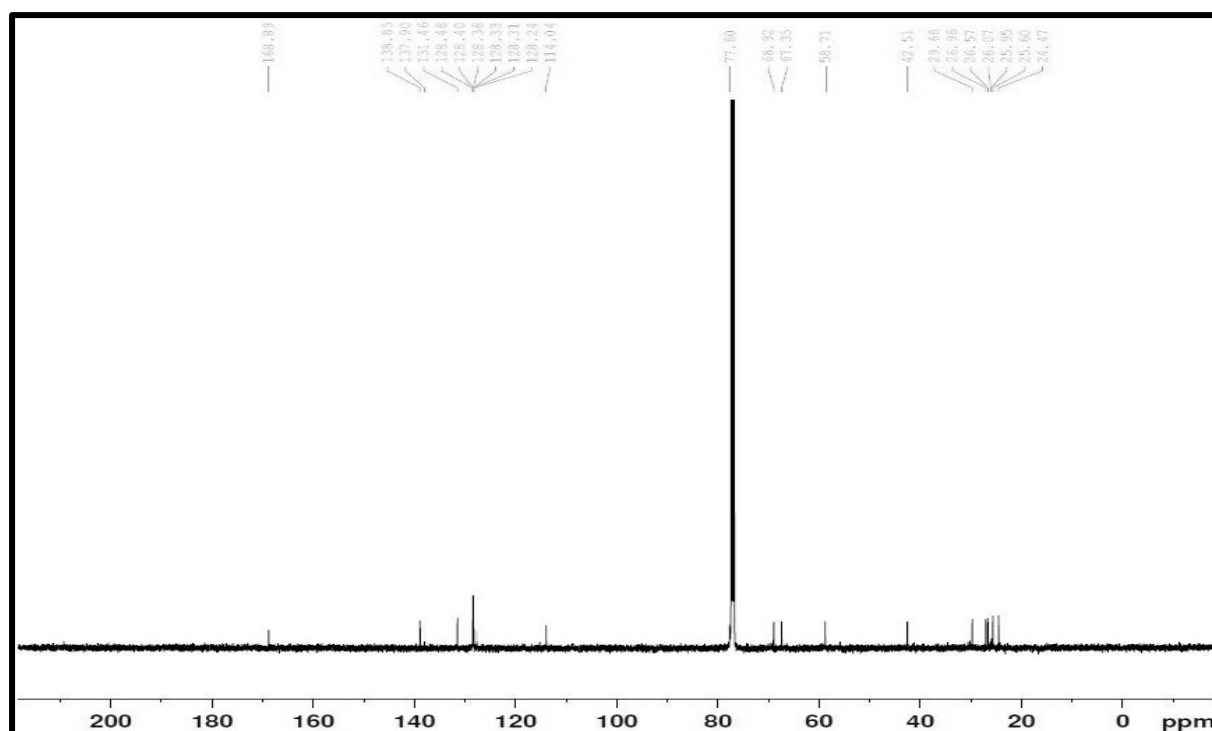


(2-Phenyl-4,5-dihydrooxazol-4-yl)(2-vinylazocan-1-yl)methanone (**1h**)

$^1\text{H}$ -NMR

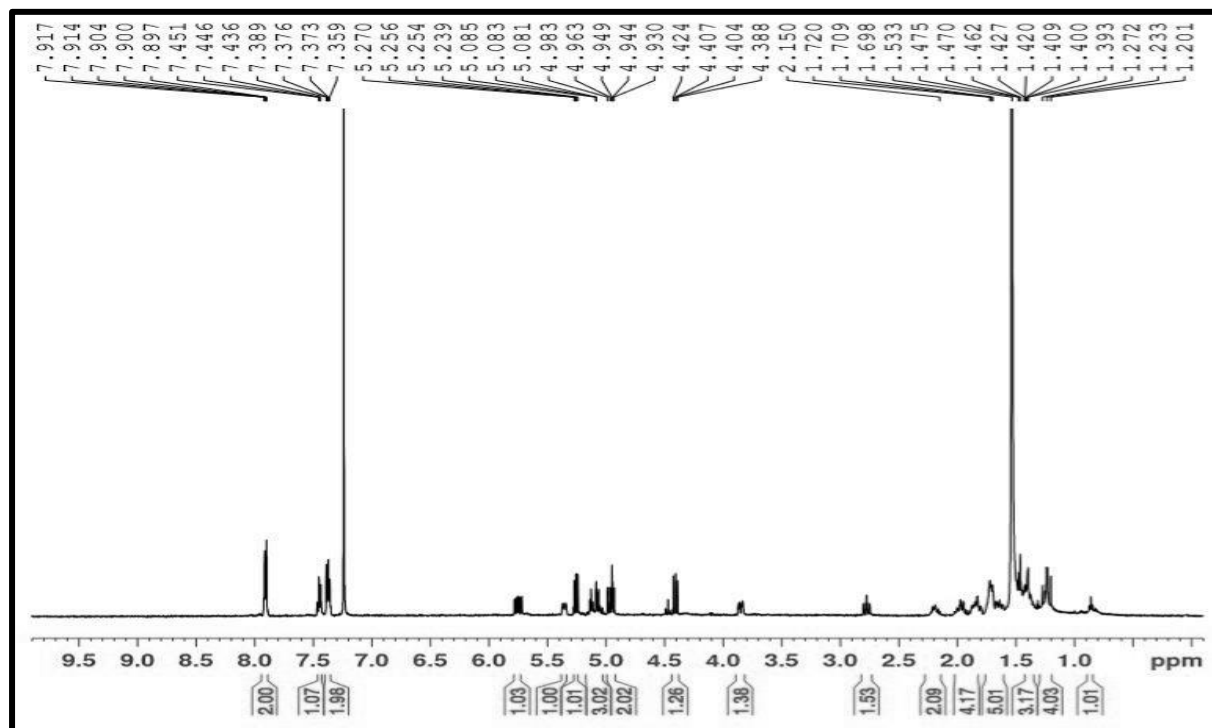


$^{13}\text{C}$ -NMR

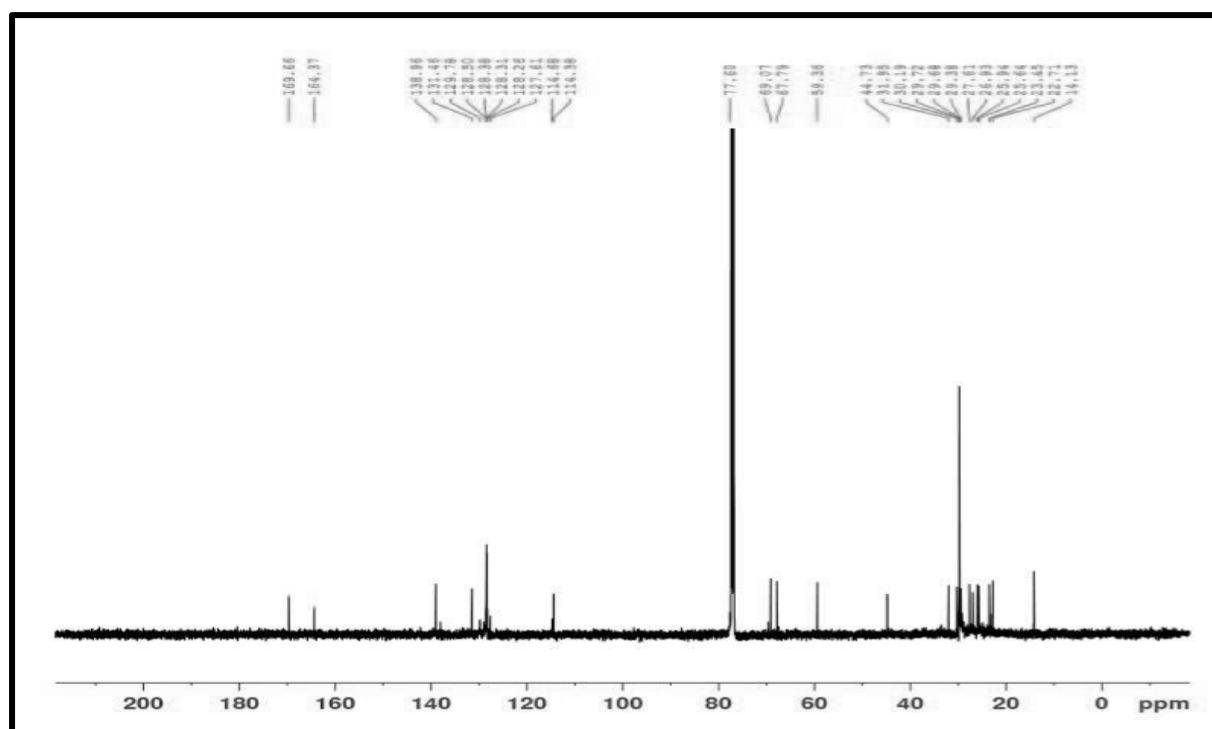


(2-Phenyl-4,5-dihydrooxazol-4-yl)(2-vinylazonan-1-yl)methanone (**1i**)

<sup>1</sup>H-NMR

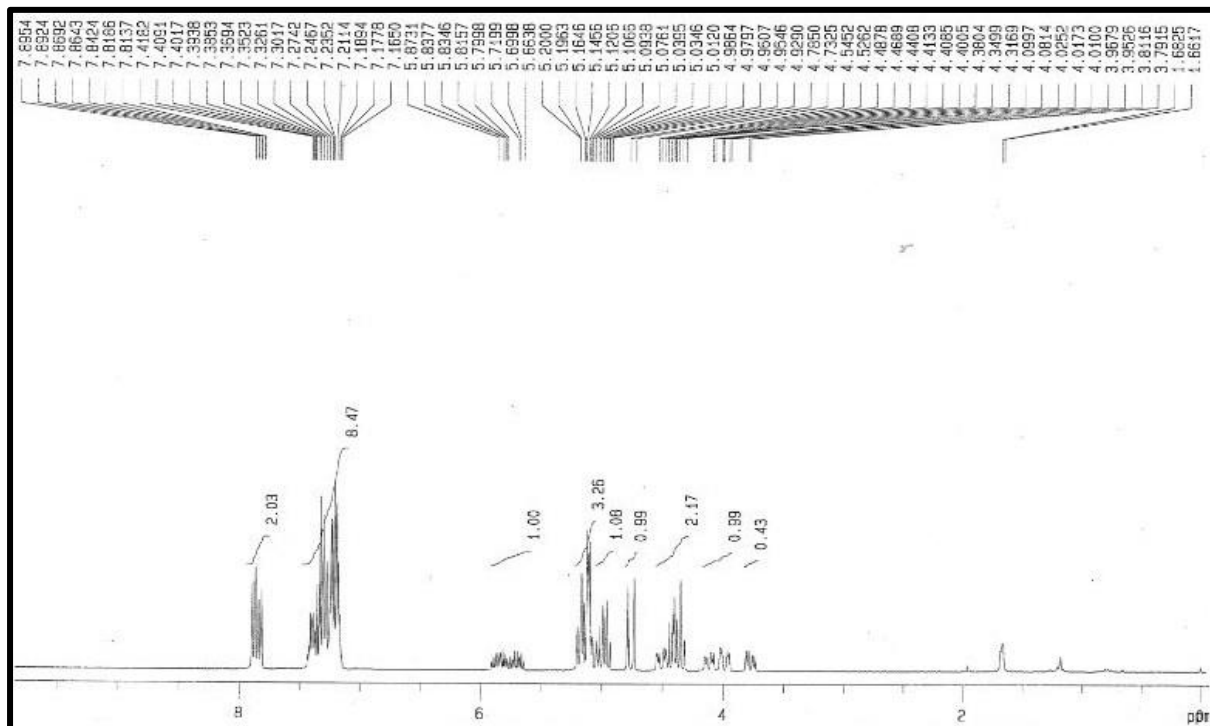


<sup>13</sup>C-NMR

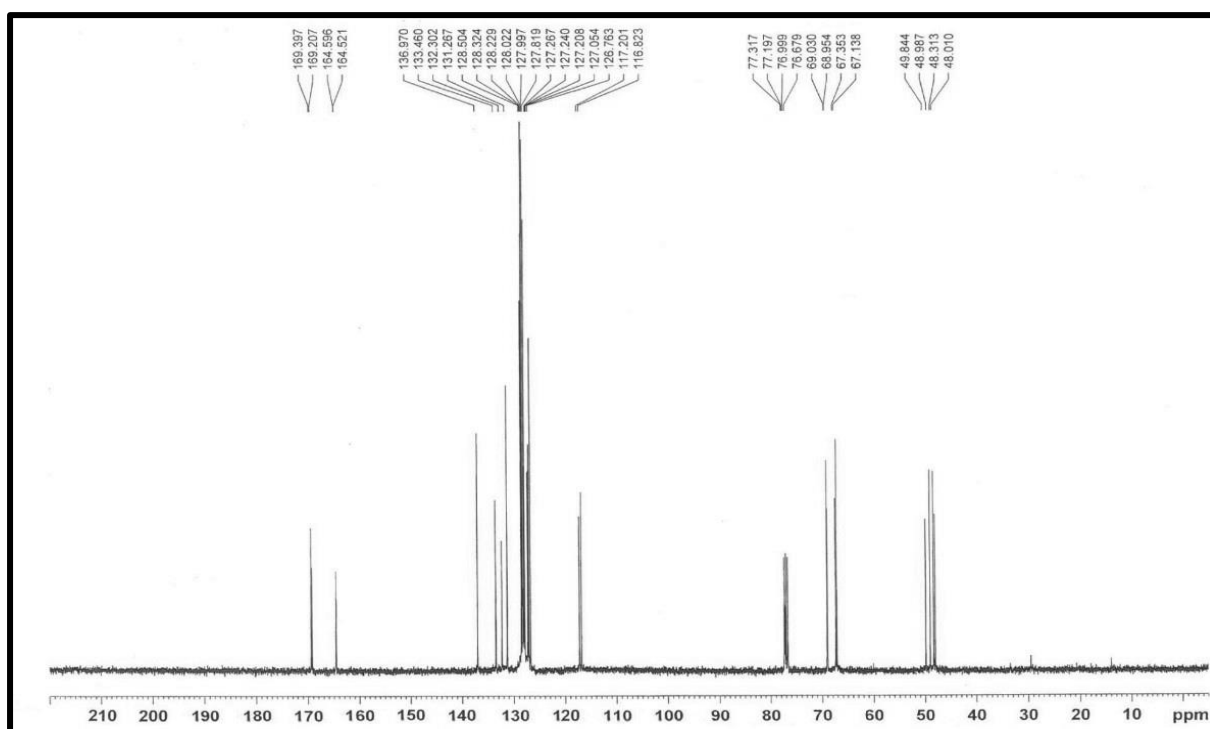


*N*-allyl-*N*-benzyl-2-phenyl-4,5-dihydrooxazole-4-carboxamide (**1j**)

<sup>1</sup>H-NMR

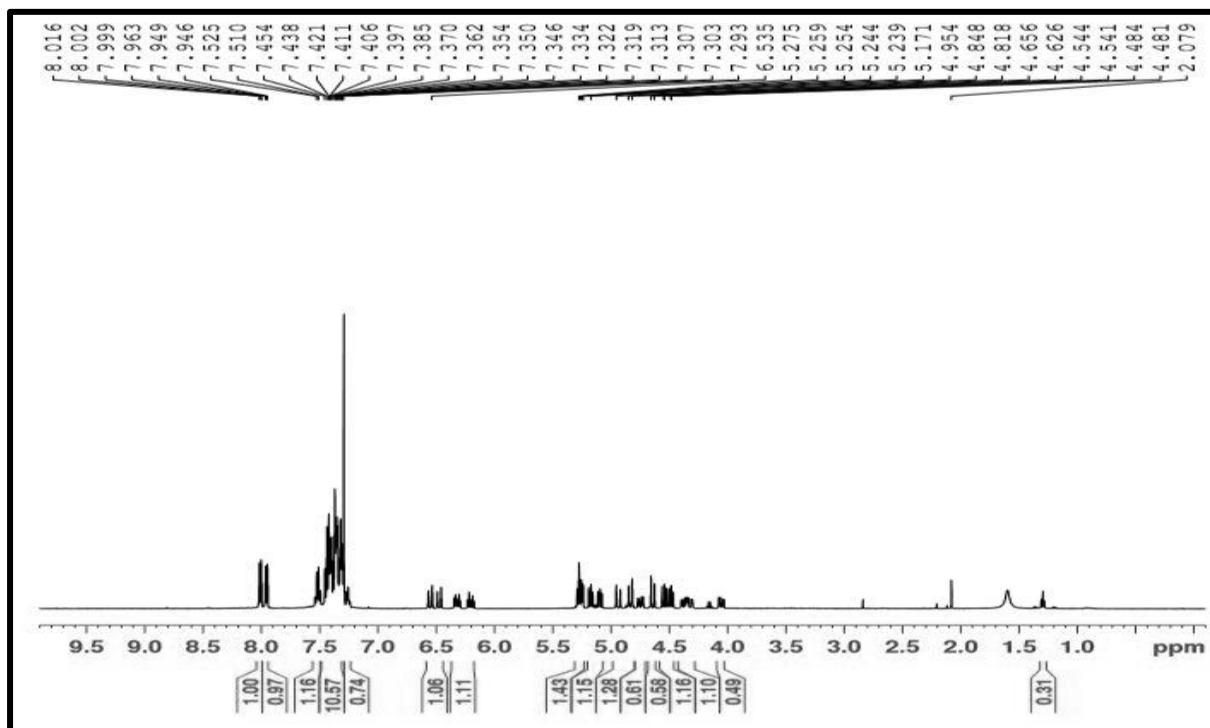


<sup>13</sup>C-NMR

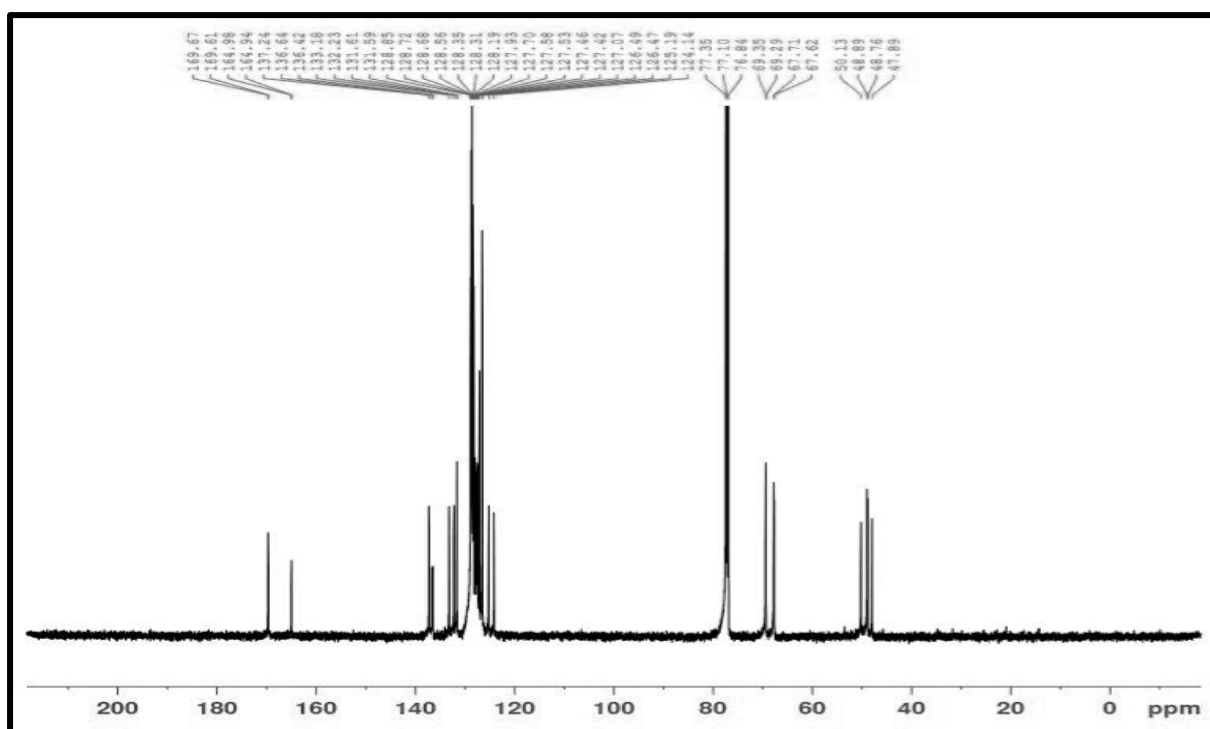


(*E*)-*N*-benzyl-*N*-cinnamyl-2-phenyl-4,5-dihydrooxazole-4-carboxamide (**1k**)

<sup>1</sup>H-NMR

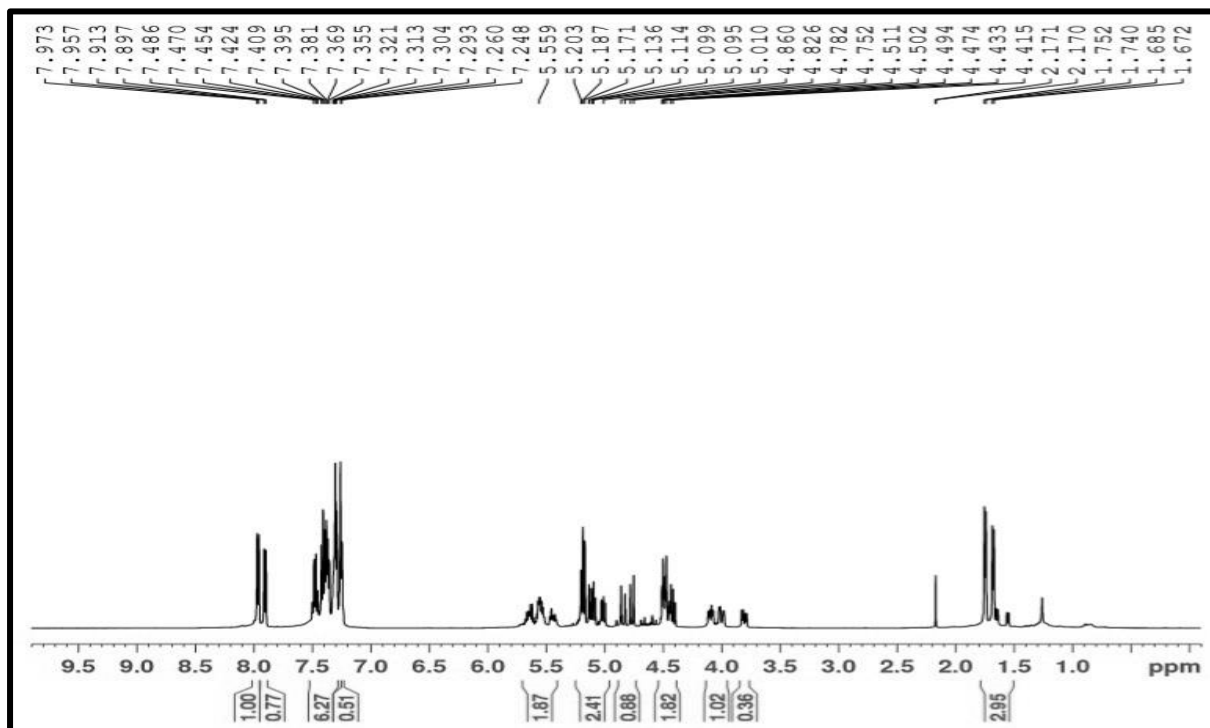


<sup>13</sup>C-NMR

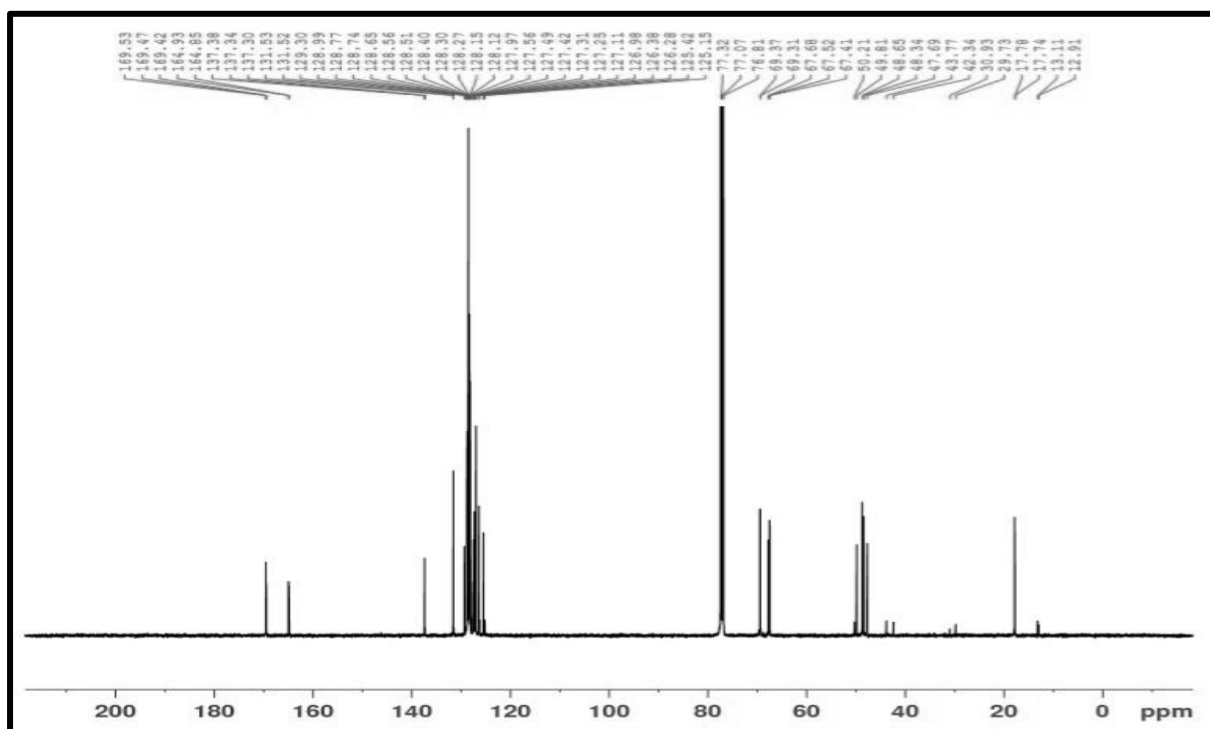


(*E*)-*N*-benzyl-*N*-(but-2-en-1-yl)-2-phenyl-4,5-dihydrooxazole-4-carboxamide (**11**)

<sup>1</sup>H-NMR



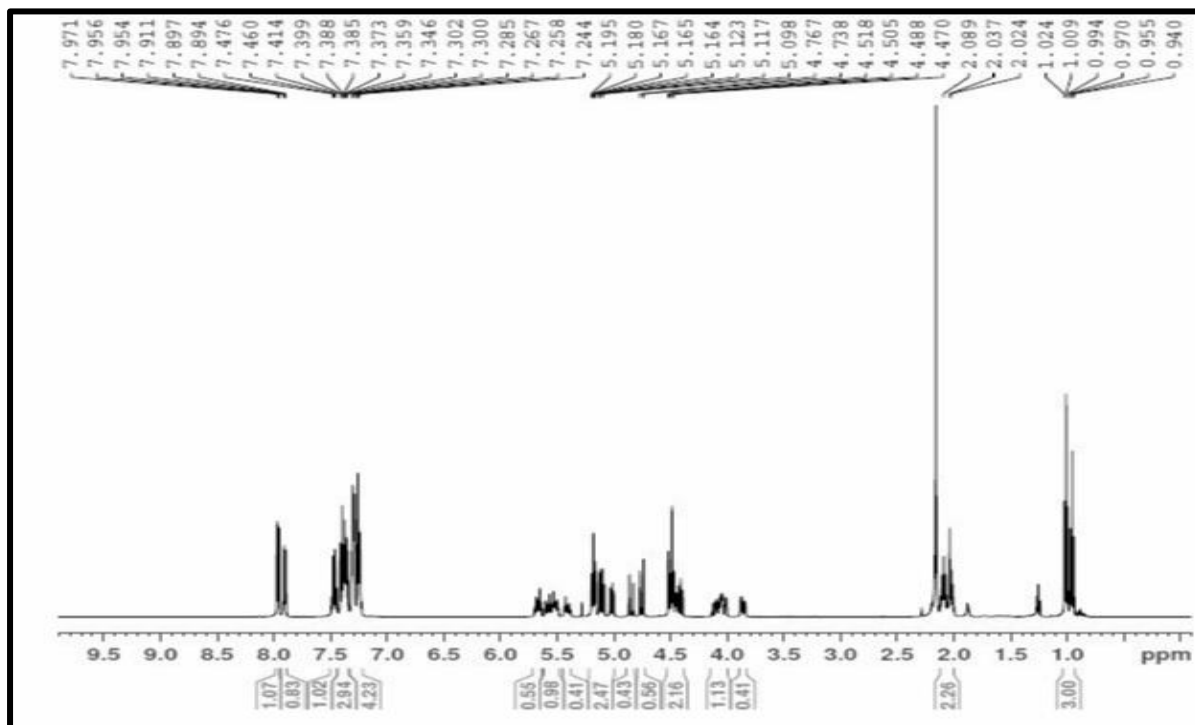
<sup>13</sup>C-NMR



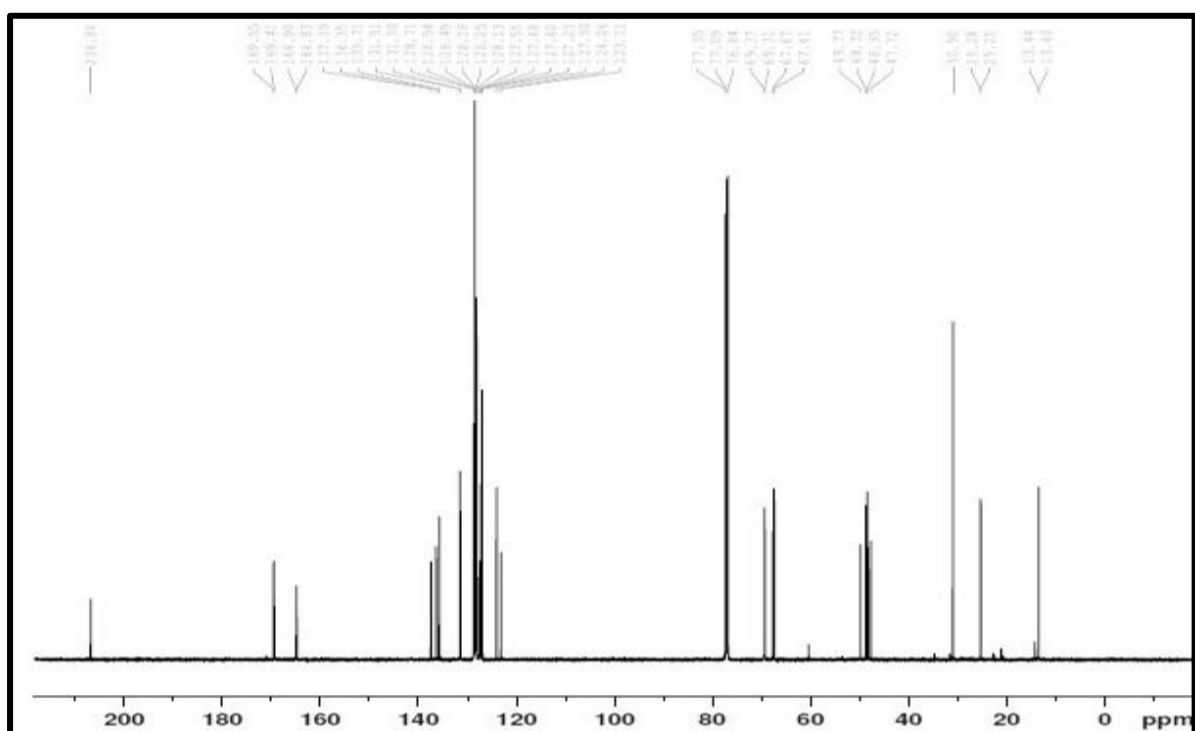


(*E*)-*N*-benzyl-*N*-(pent-2-en-1-yl)-2-phenyl-4,5-dihydrooxazole-4-carboxamide (**1m**)

<sup>1</sup>H-NMR

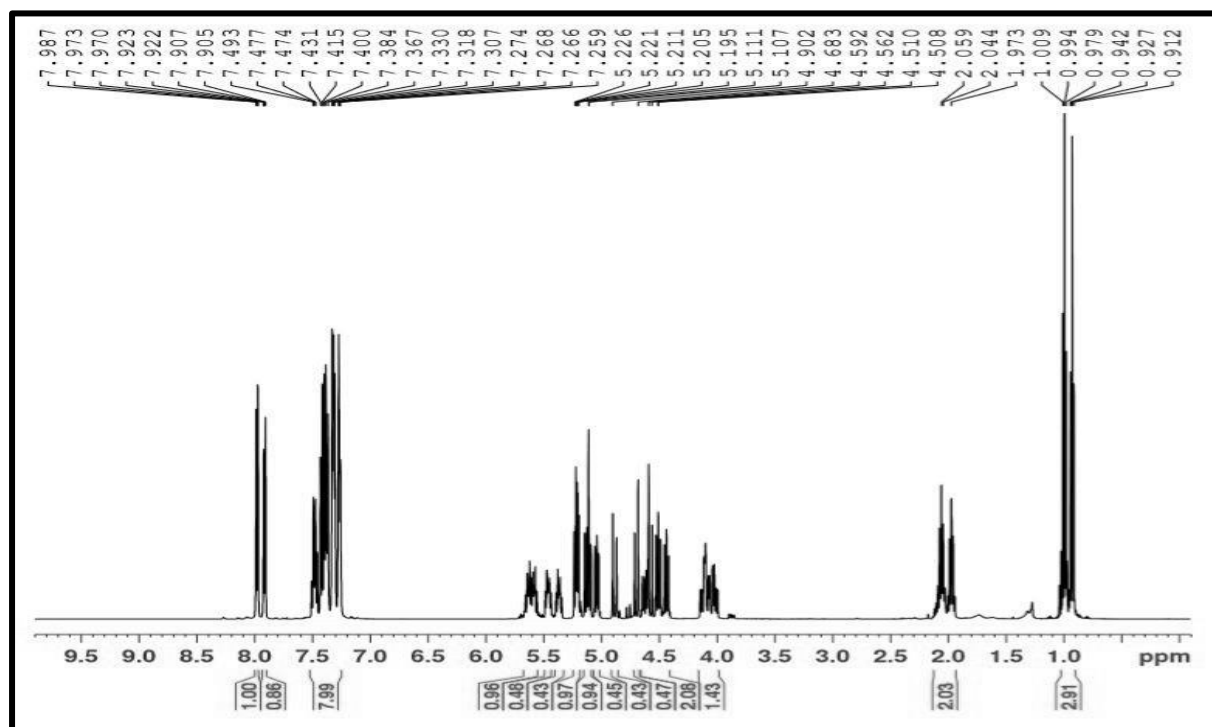


<sup>13</sup>C-NMR

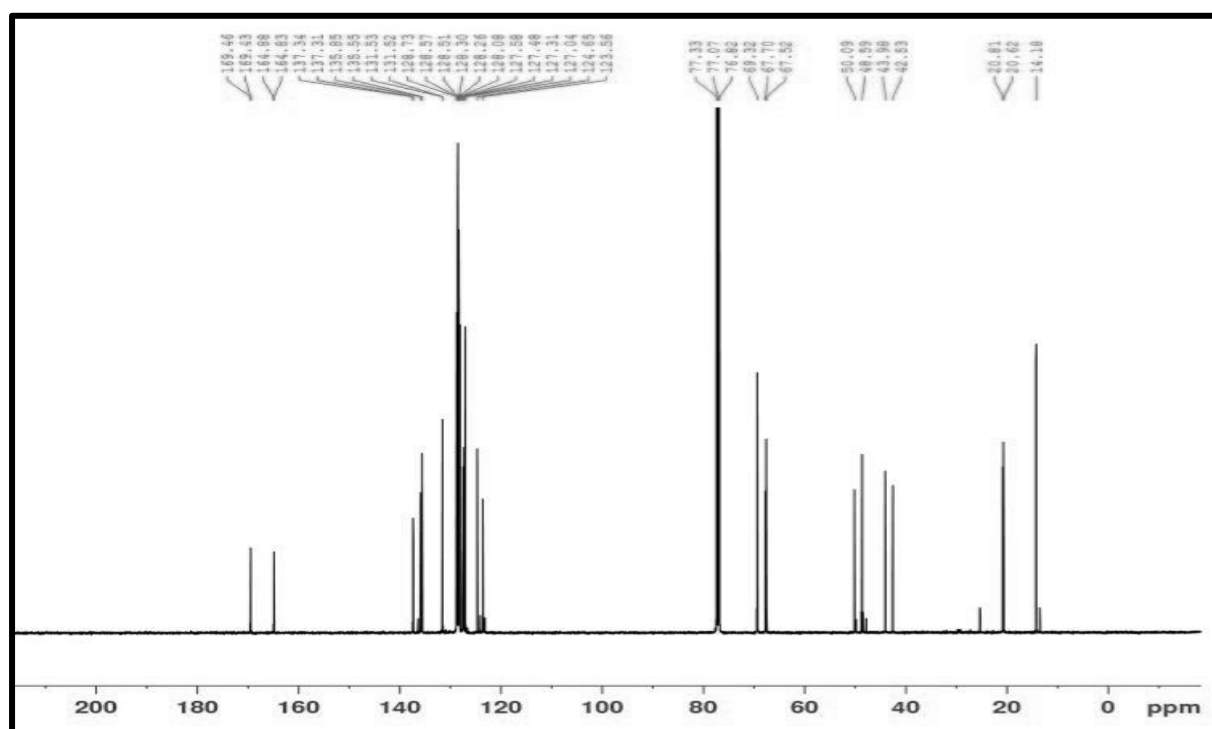


(Z)-N-benzyl-N-(pent-2-en-1-yl)-2-phenyl-4,5-dihydrooxazole-4-carboxamide (**1n**)

<sup>1</sup>H-NMR

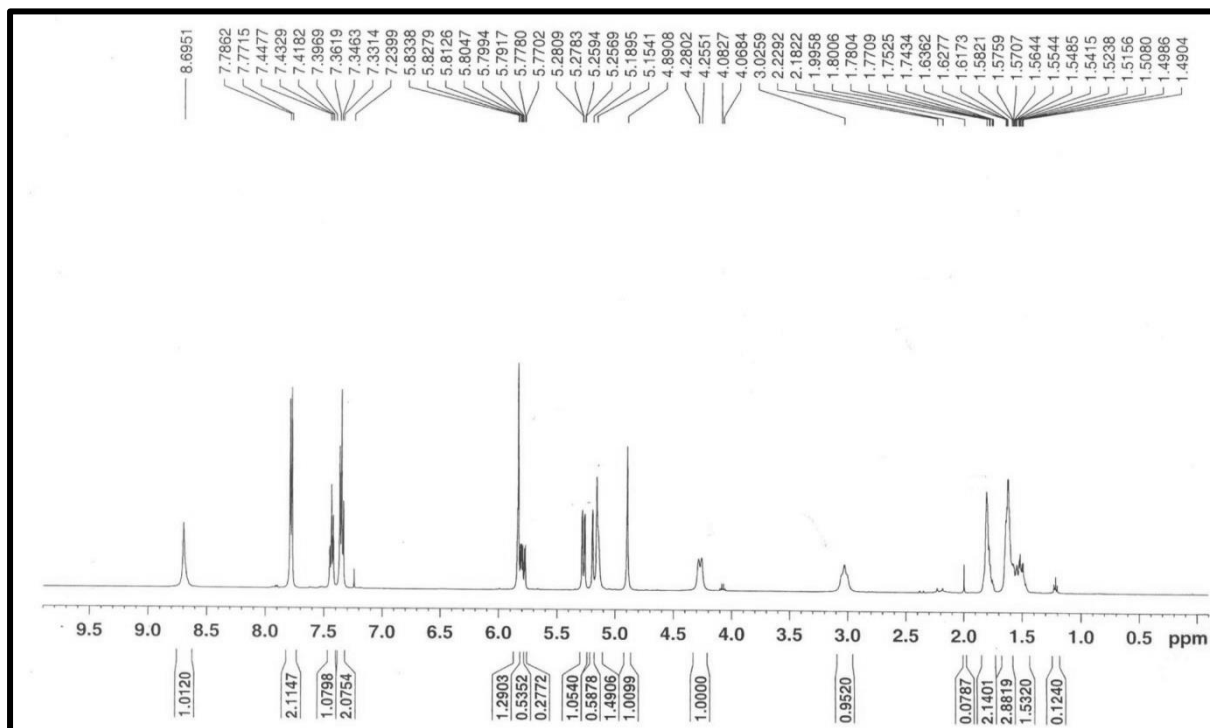


<sup>13</sup>C-NMR

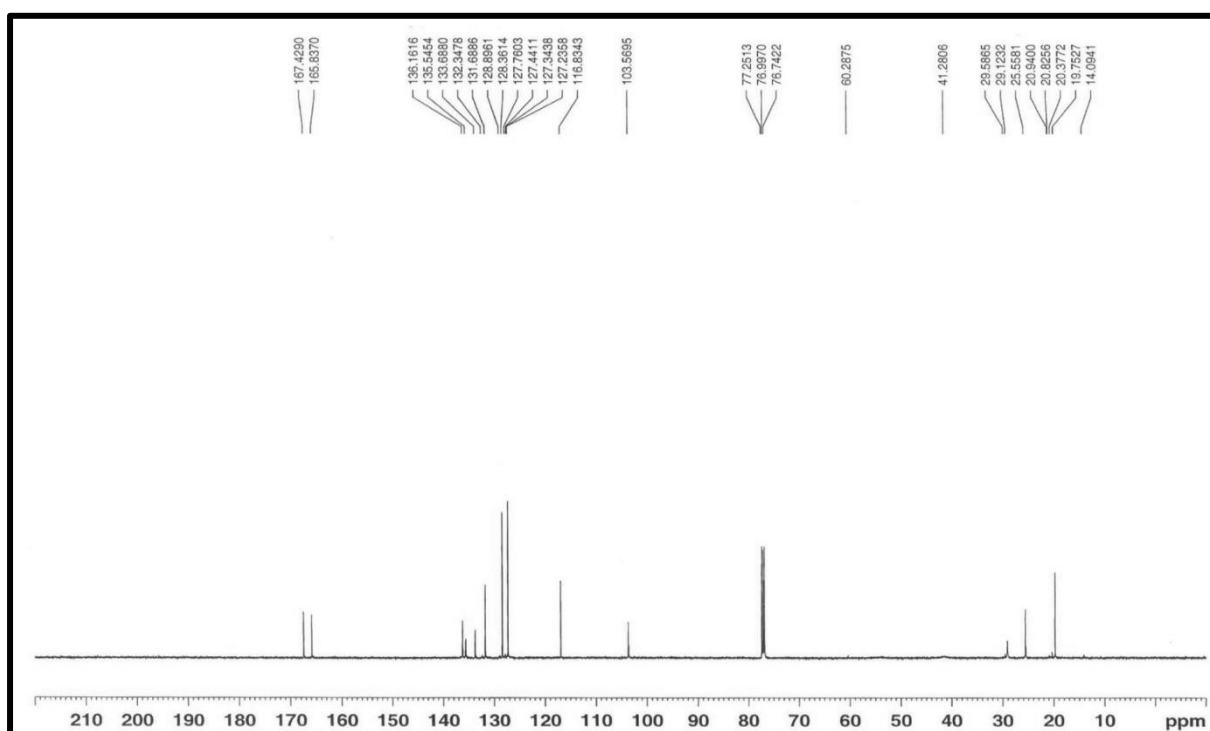


2-Phenyl-12-vinyl-3-oxa-1,7-diazaspiro[4.7]dodec-1-en-6-one (**3f**)

<sup>1</sup>H-NMR

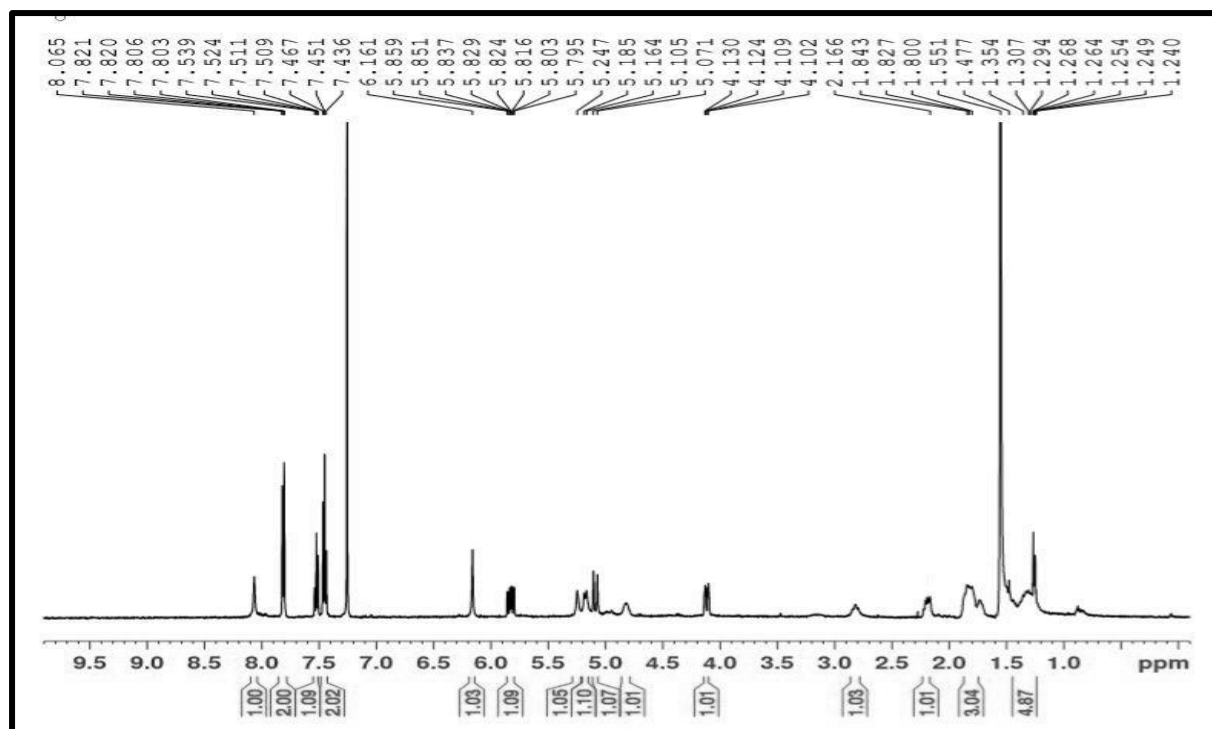


<sup>13</sup>C-NMR

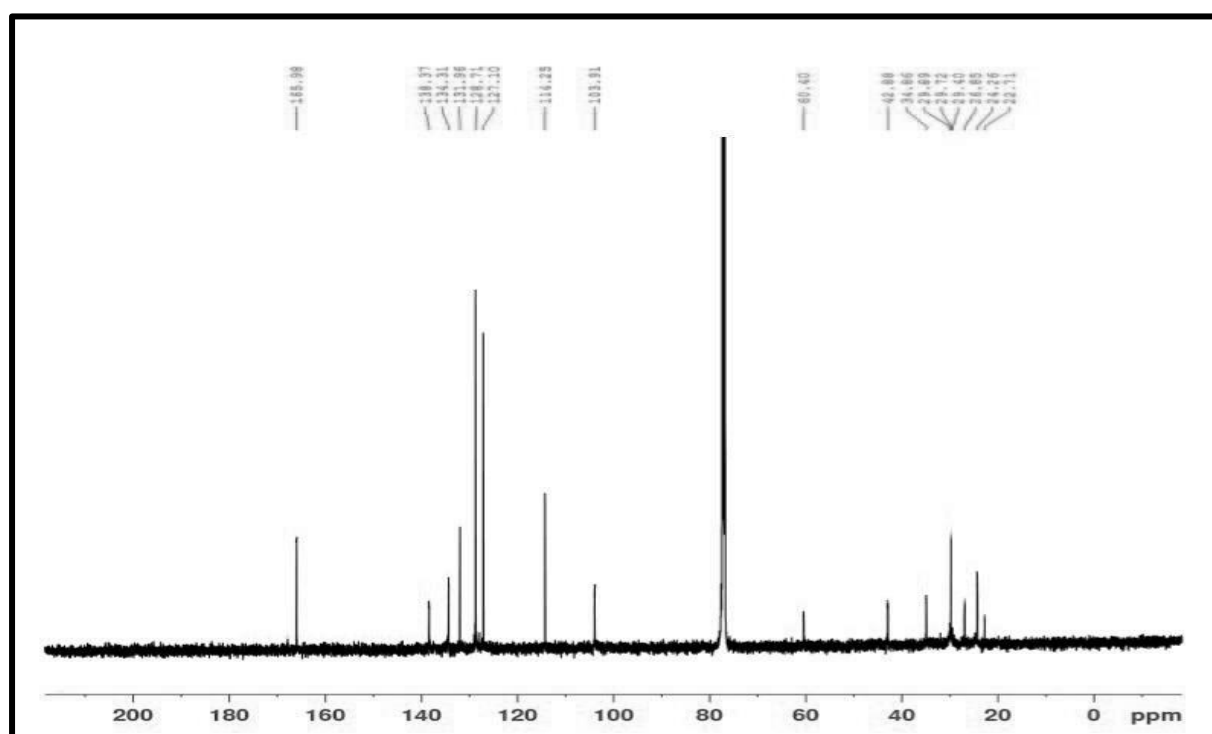


2-Phenyl-13-vinyl-3-oxa-1,7-diazaspiro[4.8]tridec-1-en-6-one (**3g**)

$^1\text{H}$ -NMR

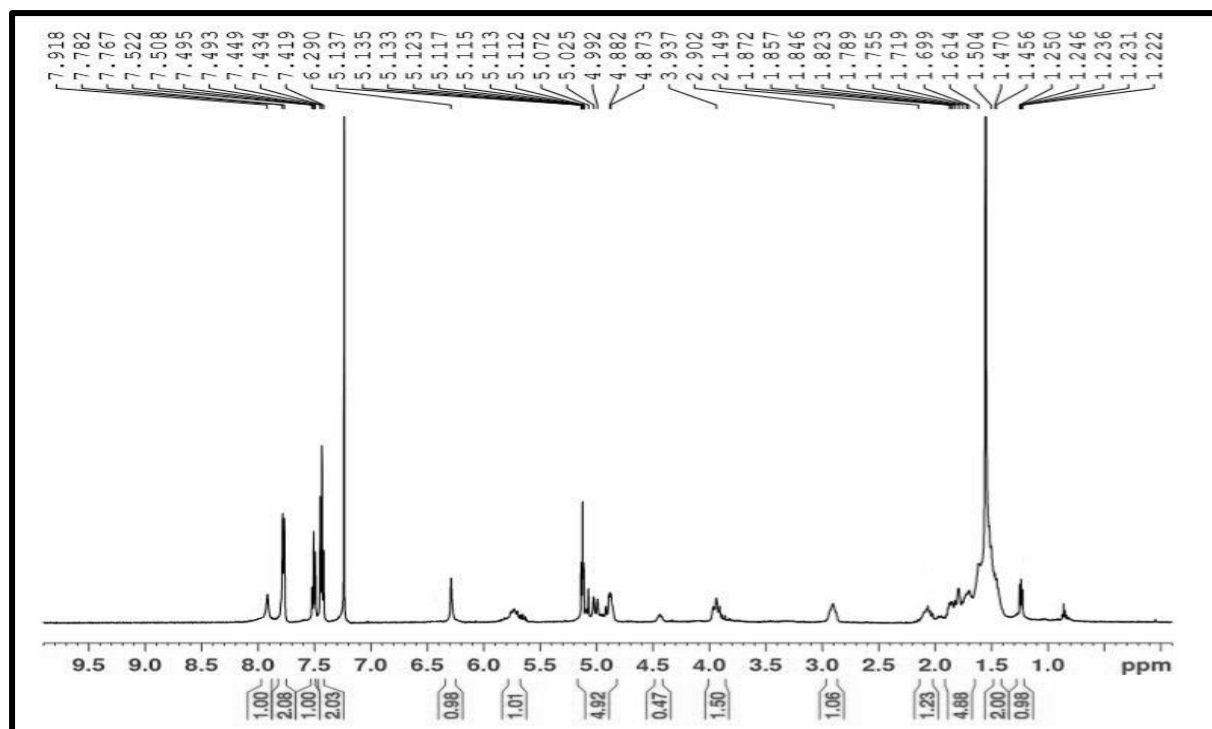


$^{13}\text{C}$ -NMR

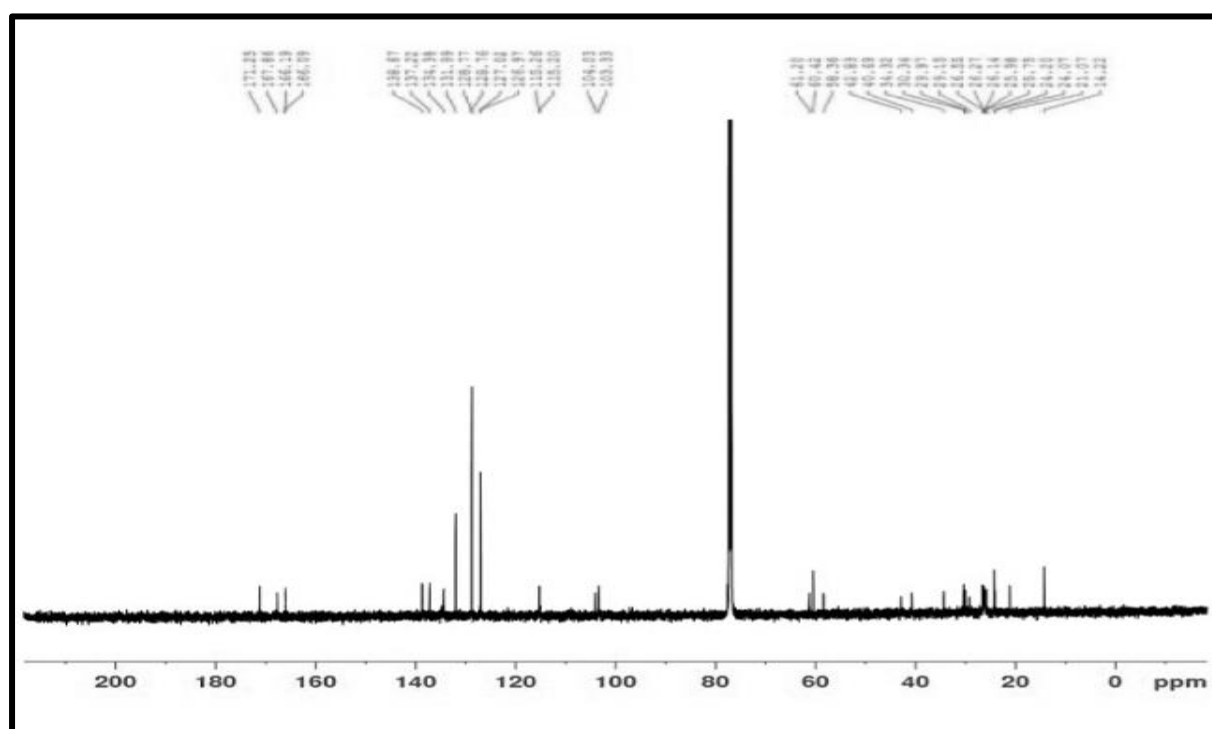


2-Phenyl-14-vinyl-3-oxa-1,7-diazaspiro[4.9]tetradec-1-en-6-one (**3h**)

<sup>1</sup>H-NMR

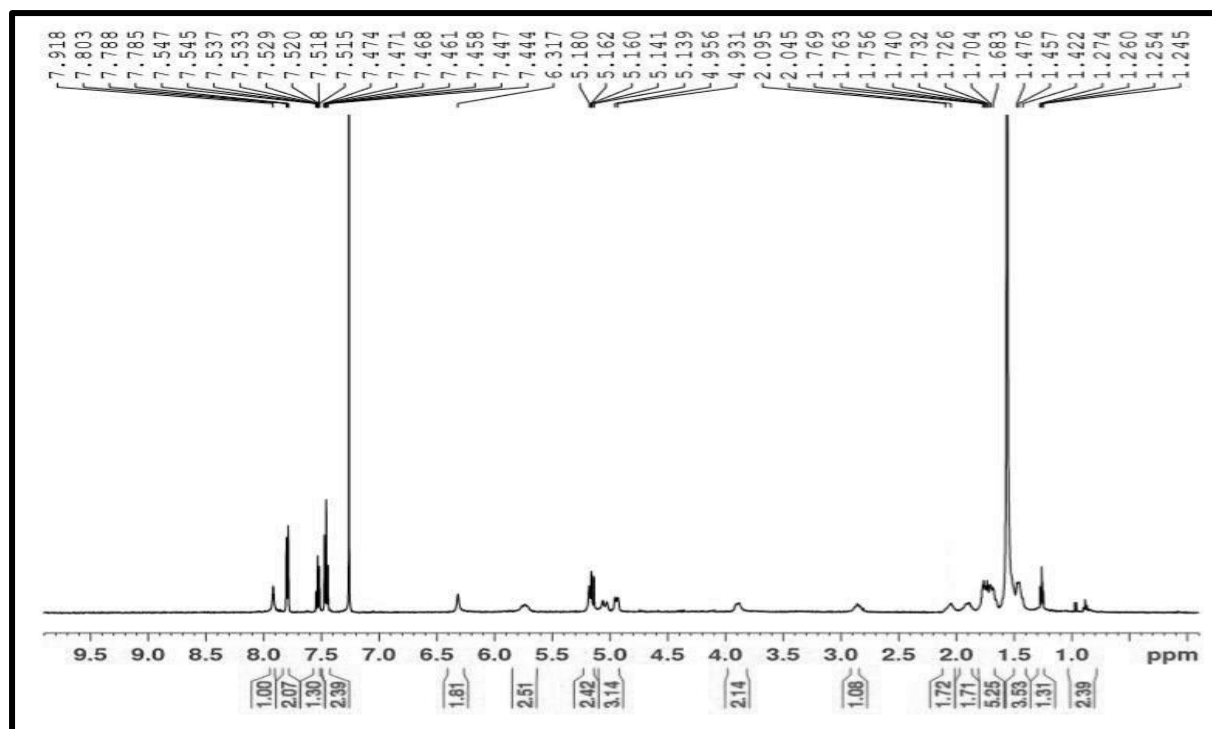


<sup>13</sup>C-NMR

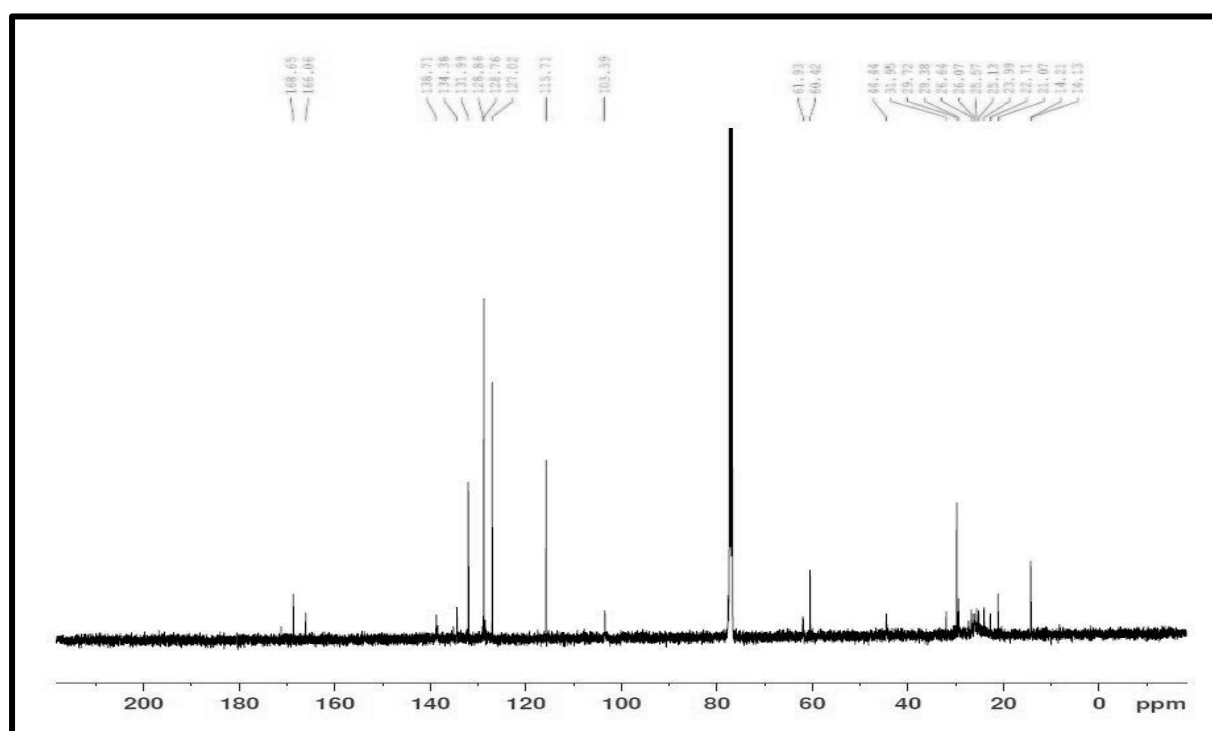


2-Phenyl-15-vinyl-3-oxa-1,7-diazaspiro[4.10]pentadec-1-en-6-one (**3i**)

$^1\text{H-NMR}$

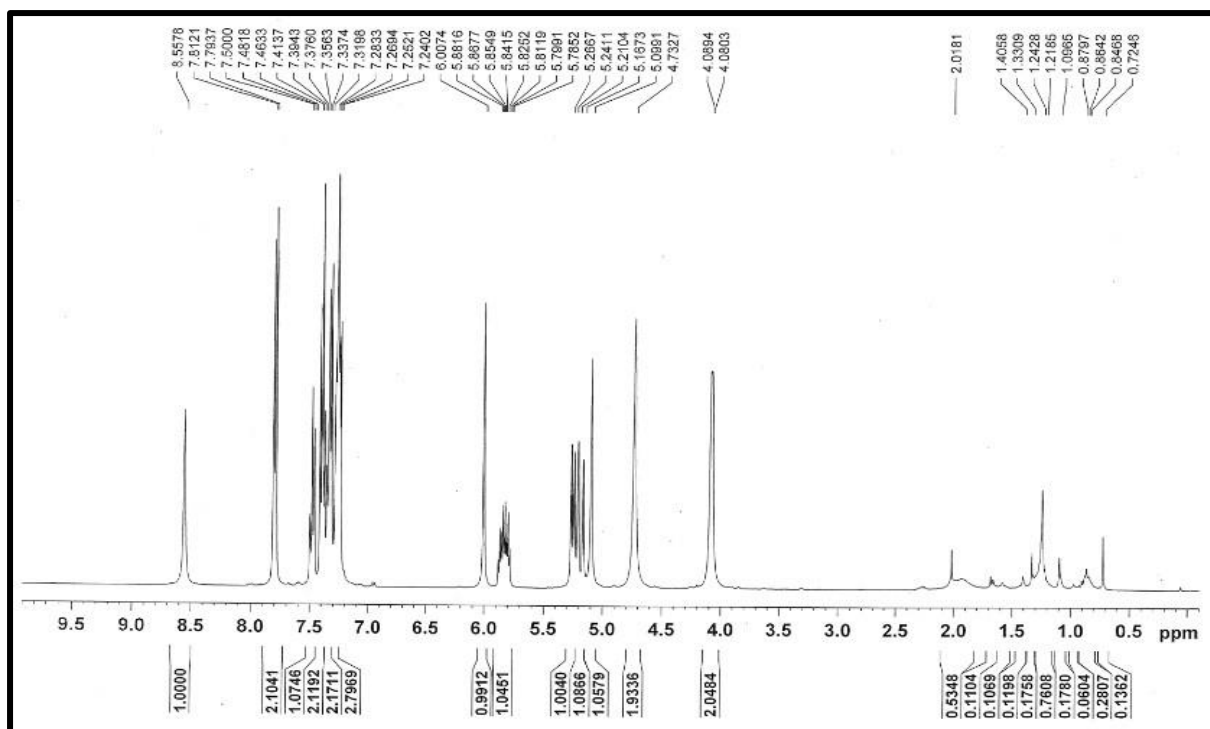


$^{13}\text{C-NMR}$

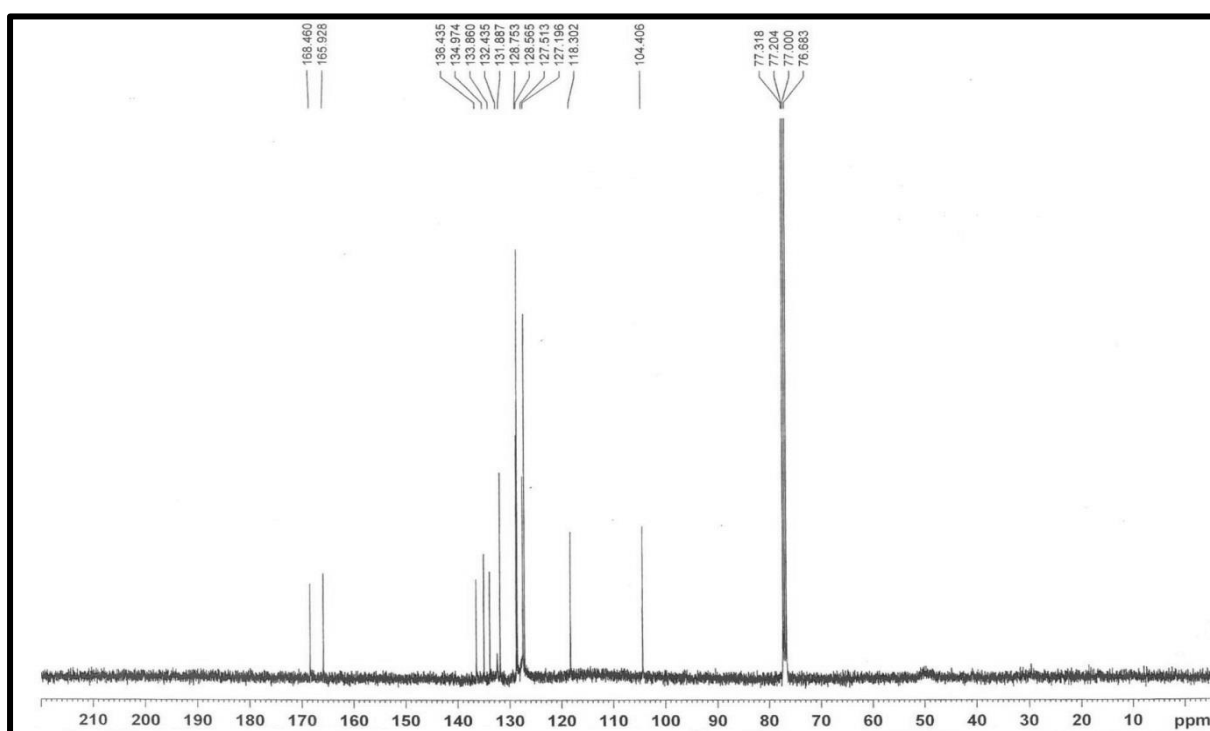


4-Allyl-*N*-benzyl-2-phenyl-4,5-dihydrooxazole-4-carboxamide (**3j**)

<sup>1</sup>H-NMR

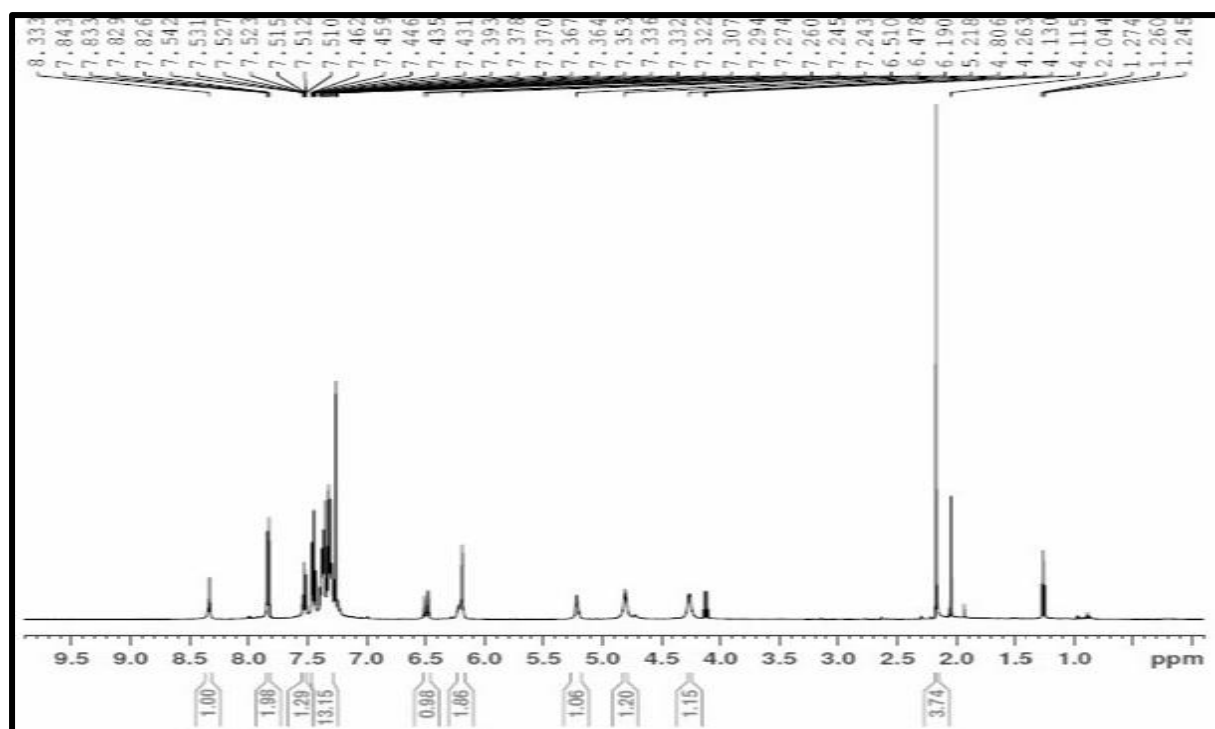


<sup>13</sup>C-NMR

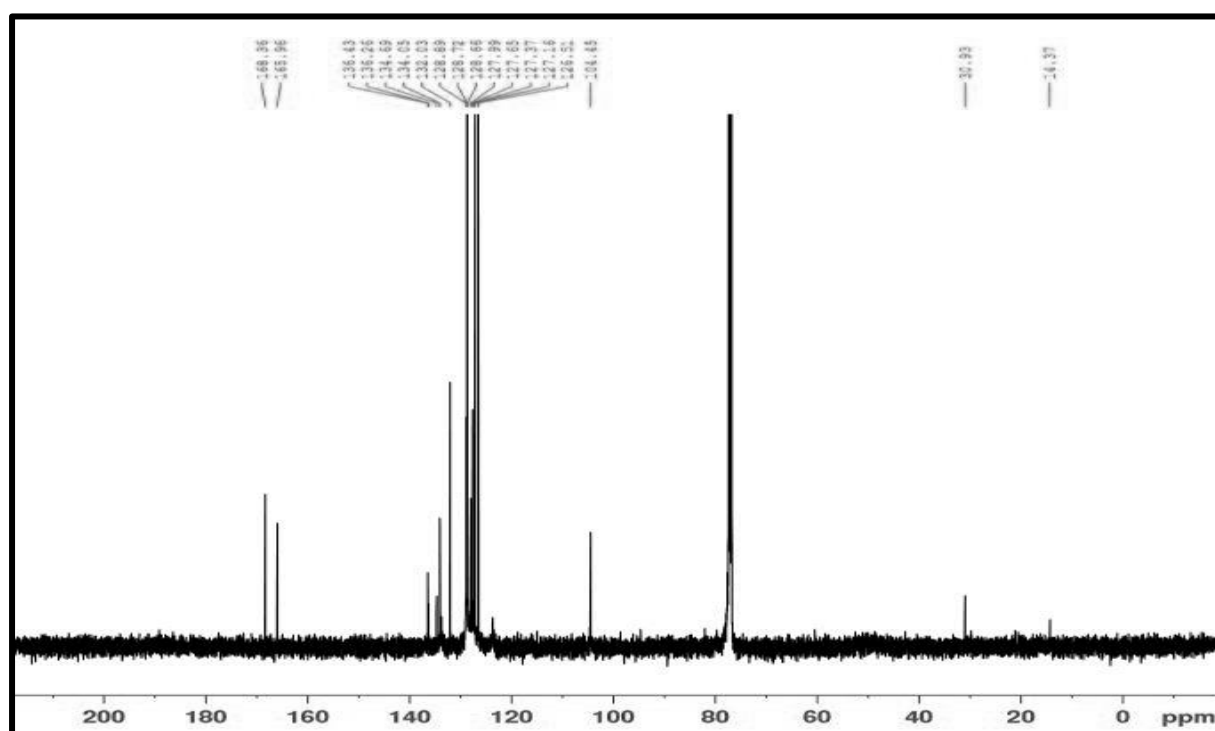


*N*-benzyl-4-cinnamyl-2-phenyl-4,5-dihydrooxazole-4-carboxamide (**3k**)

<sup>1</sup>H-NMR



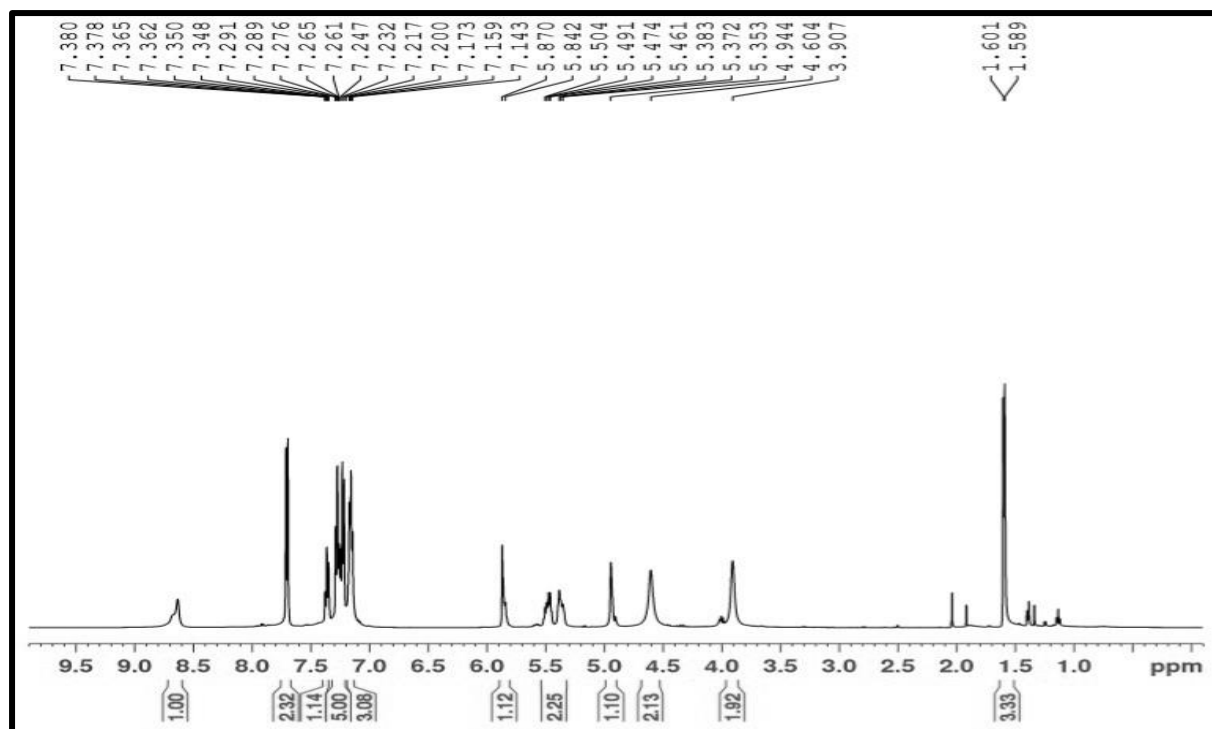
<sup>13</sup>C-NMR



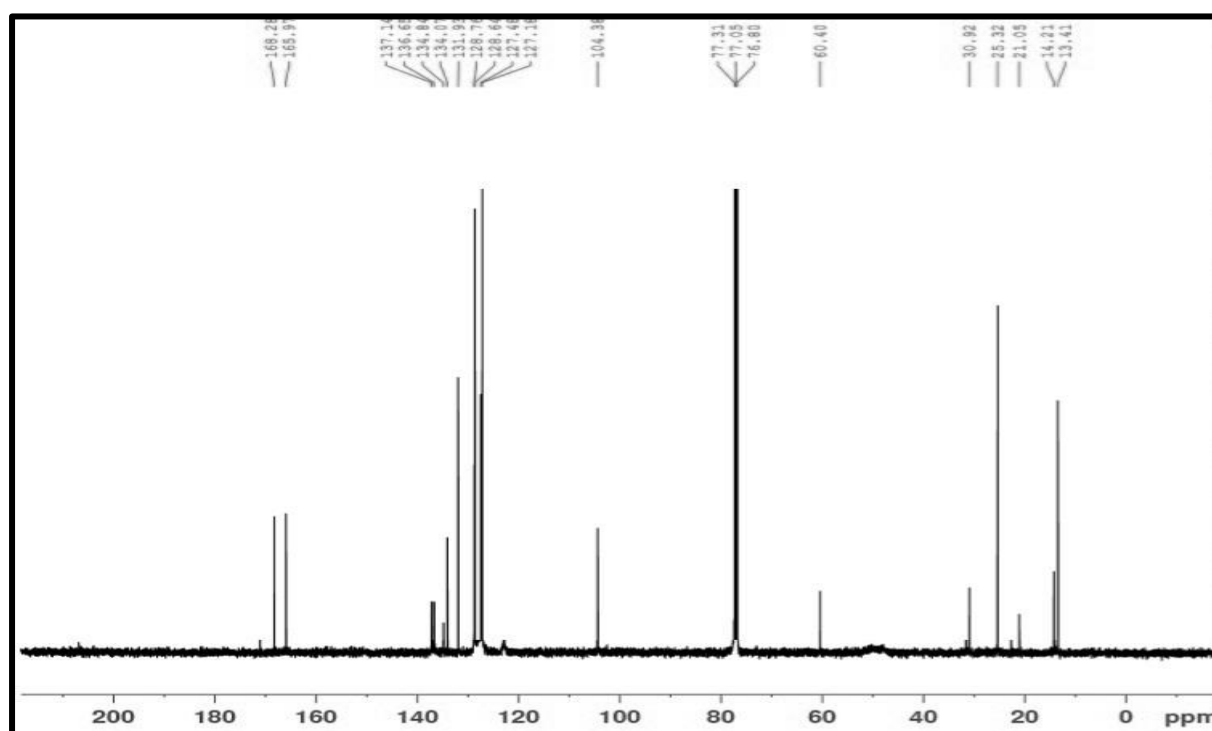


(*E*)-*N*-benzyl-4-(but-2-en-1-yl)-2-phenyl-4,5-dihydrooxazole-4-carboxamide (**3l**)

$^{13}\text{H-NMR}$

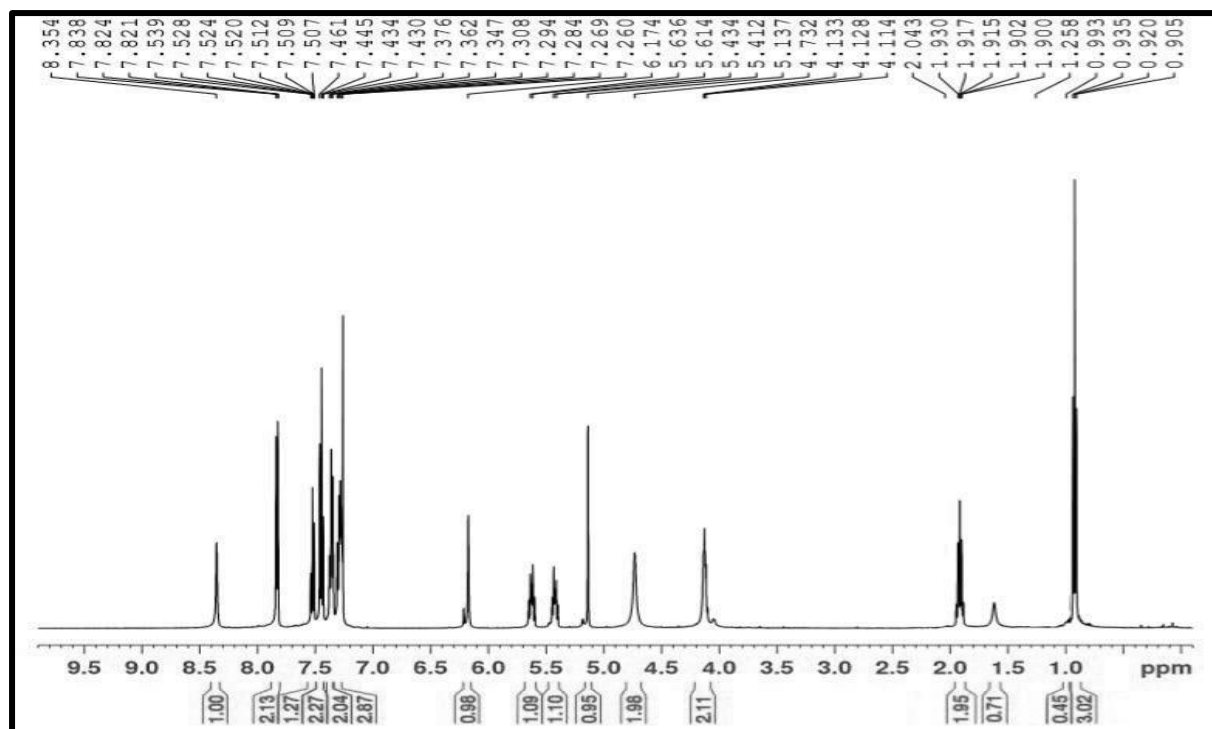


$^{13}\text{C-NMR}$

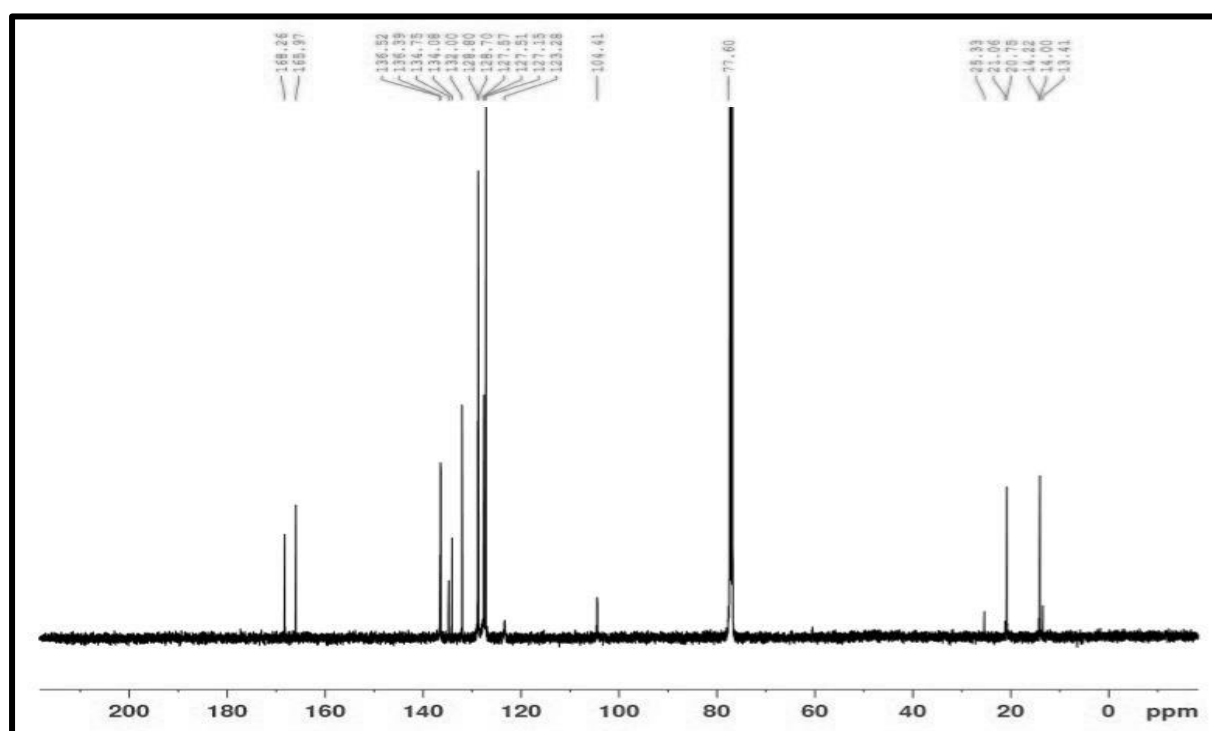


(E)-N-benzyl-4-(pent-2-en-1-yl)-2-phenyl-4,5-dihydrooxazole-4-carboxamide (**3m**)

<sup>1</sup>H-NMR

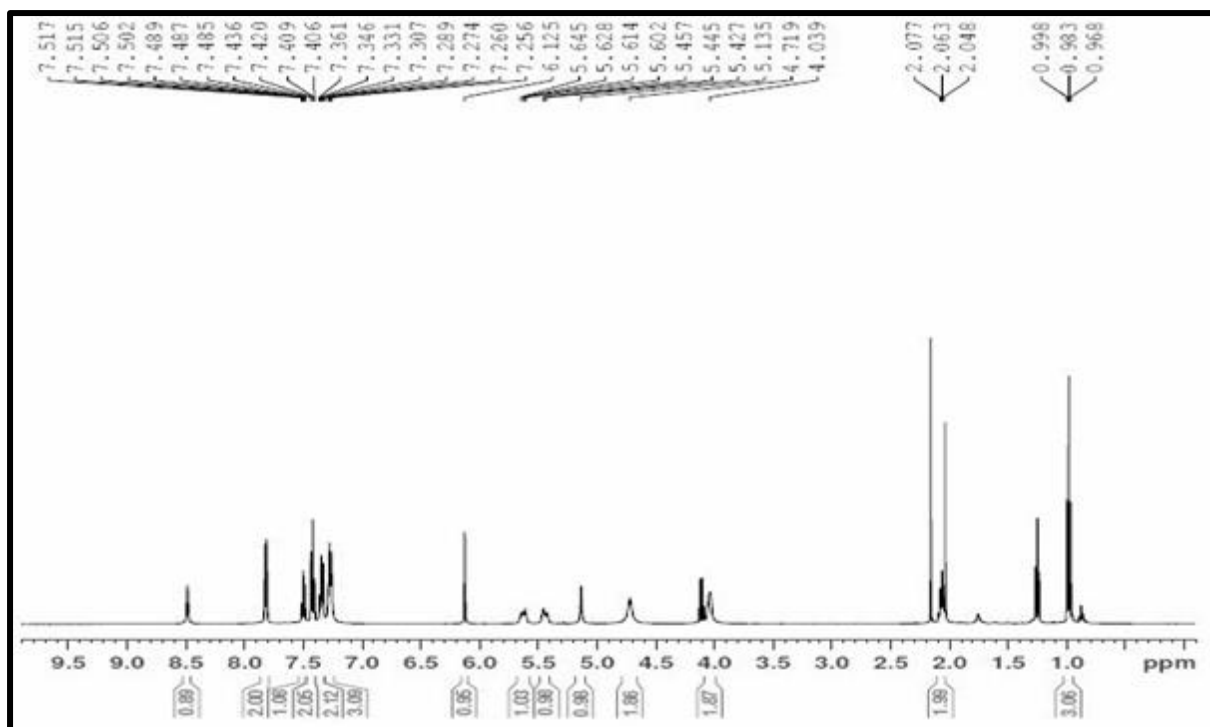


<sup>13</sup>C-NMR



(Z)-N-benzyl-4-(pent-2-en-1-yl)-2-phenyl-4,5-dihydrooxazole-4-carboxamide (**3n**)

<sup>1</sup>H-NMR



<sup>13</sup>C-NMR

