Enantioselective Synthesis of Dihydroquinazolinone derivatives Catalyzed by Chiral Organocatalyst

Ayyanar Siva*, Ponmuthu Kottala Vijaya, Madhappan Mariyappan, Veeramanoharan Ashokkumar, Velu Sadhasivam, Sankar Balakrishnan, Chithiraikumar Chinnadurai and Sepperumal Murugesan*

Supramolecular and Organometallic Chemistry Lab, Department of Inorganic Chemistry, School of Chemistry, Madurai Kamaraj University, Madurai-625 021, Tamilnadu, India.

Corresponding authors. Phone. +91451-2458471, E.mail.drasiva@gmail.com

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S 1: $^1$H NMR Spectrum of (S)-2-(p-tolyl)-2,3-dihydroquinazolin-4(1H)-one (5a).

S 2: $^{13}$C NMR Spectrum of (S)-2-(p-tolyl)-2,3-dihydroquinazolin-4(1H)-one (5a).
S 3: $^1$H NMR Spectrum of (S)-2-(o-tolyl)-2,3-dihydroquinazolin-4(1H)-one (5b).

S 4: $^{13}$C NMR Spectrum of (S)-2-(o-tolyl)-2,3-dihydroquinazolin-4(1H)-one (5b).
S 5: $^1$H NMR Spectrum of (S)-2-(4-methoxyphenyl)-2,3-dihydroquinazolin-4(1H)-one (5c).

S 6: $^{13}$C NMR Spectrum of (S)-2-(4-methoxyphenyl)-2,3-dihydroquinazolin-4(1H)-one (5c).
S 7: $^1$H NMR Spectrum of (S)-2-(3,4-dimethoxyphenyl)-2,3-dihydroquinazolin-4(1H)-one (5d).

S 8: $^{13}$C NMR Spectrum of (S)-2-(3,4-dimethoxyphenyl)-2,3-dihydroquinazolin-4(1H)-one (5d).
S 9: $^1$H NMR Spectrum of (S)-2-phenyl-2,3-dihydroquinazolin-4(1H)-one (5e).

S 10: $^{13}$C NMR Spectrum of (S)-2-phenyl-2,3-dihydroquinazolin-4(1H)-one (5e).
S 11: $^1$H NMR Spectrum of (S)-2-(2-hydroxyphenyl)-2,3-dihydroquinazolin-4(1H)-one (5f).

S 12: $^{13}$C NMR Spectrum of (S)-2-(2-hydroxyphenyl)-2,3-dihydroquinazolin-4(1H)-one (5f).
S 13: $^1$H NMR Spectrum of (S)-2-(4-chlorophenyl)-2,3-dihydroquinazolin-4(1H)-one (5g).

S 14: $^{13}$C NMR Spectrum of (S)-2-(4-chlorophenyl)-2,3-dihydroquinazolin-4(1H)-one (5g).
S 15: $^1$H NMR Spectrum of (S)-2-(2-chlorophenyl)-2,3-dihydroquinazolin-4(1H)-one (5h).

S 16: $^{13}$C NMR Spectrum of (S)-2-(2-chlorophenyl)-2,3-dihydroquinazolin-4(1H)-one (5h).
S 17: $^1$H NMR Spectrum of (S)-2-(2,4-dichlorophenyl)-2,3-dihydroquinazolin-4(1H)-one (5i).

S 18: $^{13}$C NMR Spectrum of (S)-2-(2,4-dichlorophenyl)-2,3-dihydroquinazolin-4(1H)-one (5i).
S 19: $^1$H NMR Spectrum of (S)-2-(4-fluorophenyl)-2,3-dihydroquinazolin-4(1H)-one (5j).

S 20: $^{13}$C NMR Spectrum of (S)-2-(4-fluorophenyl)-2,3-dihydroquinazolin-4(1H)-one (5j).
S 21: $^1$H NMR Spectrum of (S)-2-(2,4-difluorophenyl)-2,3-dihydroquinazolin-4(1H)-one (5k).

S 22: $^{13}$C NMR Spectrum of (S)-2-(2,4-difluorophenyl)-2,3-dihydroquinazolin-4(1H)-one (5k).
S 23: $^1$H NMR Spectrum of (S)-2-(4-bromophenyl)-2,3-dihydroquinazolin-4(1H)-one (5l).

S 24: $^{13}$C NMR Spectrum of (S)-2-(4-bromophenyl)-2,3-dihydroquinazolin-4(1H)-one (5l).
S 25: $^1$H NMR Spectrum of (S)-2-(4-nitrophenyl)-2,3-dihydroquinazolin-4(1H)-one (5m).

S 26: $^{13}$C NMR Spectrum of (S)-2-(4-nitrophenyl)-2,3-dihydroquinazolin-4(1H)-one (5m).
S 27: $^1$H NMR Spectrum of (S)-2-(2-nitrophenyl)-2,3-dihydroquinazolin-4(1H)-one (5n).

S 28: $^{13}$C NMR Spectrum of (S)-2-(2-nitrophenyl)-2,3-dihydroquinazolin-4(1H)-one (5n).
S 29: $^1$H NMR Spectrum of (S)-4-(4-oxo-1,2,3,4-tetrahydroquinazolin-2-yl)benzonitrile (5o).

S 30: $^{13}$C NMR Spectrum of (S)-4-(4-oxo-1,2,3,4-tetrahydroquinazolin-2-yl)benzonitrile (5o).
S 31: $^1$H NMR Spectrum of (S)-2-cyclohexyl-2,3-dihydroquinazolin-4(1H)-one (5p).

S 32: $^{13}$C NMR Spectrum of (S)-2-cyclohexyl-2,3-dihydroquinazolin-4(1H)-one (5p).
S 33: HPLC spectrum of Racemic Mixture (5a)

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S 34: HPLC spectrum of Compound (5a) in presence of catalyst (1a) and Methanol in RT condition (Entry 1, Table 1).
S 35: HPLC spectrum of Compound (5a) in presence of catalyst (1b) and Methanol in RT condition (Entry 2, Table 1).

S 36: HPLC spectrum of Compound (5a) in presence of catalyst (1c) and Methanol in RT condition (Entry 3, Table 1).
S 37: HPLC spectrum of Compound (5a) in presence of catalyst (1d) and Methanol in RT condition (Entry 4, Table 1).

S 38: HPLC spectrum of Compound (5a) in presence of catalyst (2) and Methanol in RT condition (Entry 5, Table 1).
S 39: HPLC spectrum of Compound (5a) in presence of catalyst (2) and Chloroform in RT condition (Entry 1, Table 2).

S 40: HPLC spectrum of Compound (5a) in presence of catalyst (2) and Acetone in RT condition (Entry 2, Table 2).
S 41: HPLC spectrum of Compound (5a) in presence of catalyst (2) and DCM in RT condition (Entry 3, Table 2).

S 42: HPLC spectrum of Compound (5a) in presence of catalyst (2) and Ethanol in RT condition (Entry 4, Table 2).
S 43: HPLC spectrum of Compound (5a) in presence of catalyst (2) and Methanol in RT condition (Entry 5, Table 2).

S 44: HPLC spectrum of Compound (5a) in presence of catalyst (2) and Methanol in Cold condition (0ºC) (Entry 6, Table 2).
S 45: HPLC spectrum of Compound (5a) in presence of catalyst (2) and DMF in RT condition (Entry 7, Table 2).

S 46: HPLC spectrum of Compound (5a) in presence of catalyst (2) and DMSO in RT condition (Entry 8, Table 2).
S 47: HPLC spectrum of Compound (5a) in presence of catalyst (2) and toluene in RT condition (Entry 9, Table 2).

S 48: HPLC spectrum of Compound (5a) in presence of catalyst (2) and cyclohexane in RT condition (Entry 10, Table 2).
S 49: HPLC spectrum of Compound (5a) in presence of catalyst (2) and Methanol in RT condition (Entry 1, Table 3).

S 50: HPLC spectrum of Racemic Mixture 5b.
S 51: HPLC spectrum of Compound (5b) in presence of catalyst (2) and Methanol in RT condition (Entry 2, Table 3).

S 52: HPLC spectrum of Racemic Mixture 5c.
S 53: HPLC spectrum of Compound (5c) in presence of catalyst (2) and Methanol in RT condition (Entry 3, Table 3).

S 54: HPLC spectrum of Racemic Mixture 5d.
S 55: HPLC spectrum of Compound (5d) in presence of catalyst (2) and Methanol in RT condition (Entry 4, Table 3).

S 56: HPLC spectrum of Racemic Mixture 5e.
S 57: HPLC spectrum of Compound (5e) in presence of catalyst (2) and Methanol in RT condition (Entry 5, Table 3).

S 58: HPLC spectrum of Racemic Mixture 5f.
S 59: HPLC spectrum of Compound (5f) in presence of catalyst (2) and Methanol in RT condition (Entry 6, Table 3).

S 60: HPLC spectrum of Racemic Mixture 5g.
S 61: HPLC spectrum of Compound (5g) in presence of catalyst(2) and Methanol in RT condition (Entry 7, Table 3).

S 62: HPLC spectrum of Racemic Mixture 5h.
S 63: HPLC spectrum of Compound (5h) in presence of catalyst (2) and Methanol in RT condition (Entry 8, Table 3).

S 64: HPLC spectrum of Racemic Mixture 5i.
S 65: HPLC spectrum of Compound (5i) in presence of catalyst (2) and Methanol in RT condition (Entry 9, Table 3).

S 66: HPLC spectrum of Racemic Mixture 5j.
S 67: HPLC spectrum of Compound (5j) in presence of catalyst (2) and Methanol in RT condition (Entry 10, Table 3).

S 68: HPLC spectrum of Racemic Mixture 5k.
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S 70: HPLC spectrum of Racemic Mixture 5l.
S 71: HPLC spectrum of Compound (5l) in presence of catalyst (2) and Methanol in RT condition (Entry 12, Table 3).

S 72: HPLC spectrum of Racemic Mixture 5m.
S 73: HPLC spectrum of Compound (5m) in presence of catalyst (2) and Methanol in RT condition (Entry 13, Table 3).

S 74: HPLC spectrum of Racemic Mixture 5n.
S 75: HPLC spectrum of Compound (5n) in presence of catalyst (2) and Methanol in RT condition (Entry 14, Table 3).

S 76: HPLC spectrum of Racemic Mixture 5o.
S 77: HPLC spectrum of Compound (5o) in presence of catalyst (2) and Methanol in RT condition (Entry 15, Table 3).

S 78: HPLC spectrum of Racemic Mixture 5p.
S 79: HPLC spectrum of Compound (5p) in presence of catalyst (2) and Methanol in RT condition (Entry 16, Table 3).