

Melting points were measured in open capillary tubes on a BÜCHI B-545 melting point apparatus and are uncorrected. The elemental analyses (C, H, N) were performed using the Perkin-Elmer 2400 CHN analyzer. Analysis results indicated by the symbols of the elements or functions were within  $\pm 0.4\%$  of the theoretical values. The  $^1\text{H}$ - (600 MHz) and  $^{13}\text{C}$ -NMR (150 MHz) spectra were recorded on Bruker DPX super-conducting spectrometer in  $\text{DMSO-}d_6$  using tetramethylsilane (TMS) as an internal standard. Chemical shifts are reported in ppm units with the use of  $\delta$  scale. Mass spectra were obtained using electrospray (ES) ionization techniques on an Agilent 1100 series LCMS instrument.

*5-(2-Hydroxyethyl)-2-[(pyridin-2-yl)amino]-1,3-thiazolidin-4-one (I)*. A mixture of 1.52 g (10 mmol) of 1-(pyridin-2-yl)thiourea, 1.82 g (11 mmol) of 3-bromotetrahydrofuran-2-one and 8.2 g (10 mmol) of fused sodium acetate in 100 mL of ethanol was heated under reflux for 5 h. Crystalline precipitate was filtered off, washed with ethanol and water and then recrystallized from ethanol. Yield 72%, mp. 186-188°C, [187-188°C (Váňa *et al.*, 2009)].  $^1\text{H}$  NMR (600 MHz,  $\text{DMSO-}d_6$ ): 1.89 (m, 1H,  $\text{CH}_2$ ), 2.29 (m, 1H,  $\text{CH}_2$ ), 3.64 (m, 2H,  $\text{CH}_2$ ), 4.17 (br.s, 1H, SCH), 4.82 (br.s, 1H, OH), 7.12 (br.s, 2H, arom.), 7.83 (br.s, 1H, arom.), 8.43 (d, 1H,  $J = 3.0$  Hz, arom.), 11.93 (br.s, 1H, NH).  $^{13}\text{C}$  NMR (150 MHz,  $\text{DMSO-}d_6$ ):  $\delta$  35.8 ( $\text{CH}_2$ ), 47.1 (SCH), 58.9 ( $\text{OCH}_2$ ), 118.0, 119.6, 138.5, 146.8, 156.1, 165.1 ( $\text{C}=\text{N}$ ), 180.6 ( $\text{C}=\text{O}$ ). EI-MS ( $m/z$ ): 238 ( $\text{M}^+ + 1$ ). Calcd. for  $\text{C}_{10}\text{H}_{11}\text{N}_3\text{O}_3\text{S}$ : C, 50.62; H, 4.67, N, 17.71; Found: C, 50.80; H, 4.50, N, 17.90.

*Ethyl 4-[(4-oxothiazolidin-2-yl)amino]benzoate (II)*. A solution of 2.41 g (10 mmol) of ethyl 4-(2-chloroacetyl amino)benzoate and 1.14 g (15 mmol) of ammonium thiocyanate in 30 mL of absolute ethanol was refluxed for 4 h and allowed to stand overnight. The formed precipitate was filtered off, washed with water and then recrystallized from a mixture DMF-ethanol (1:3) or ethanol. Yield 78%, mp 188-189°C, [186-187°C (Behbehani & Ibrahim, 2012)].  $^1\text{H}$  NMR (600 MHz,  $\text{DMSO-}d_6$ ): 1.32 (t, 3H,  $J = 7.2$  Hz,  $\text{CH}_3$ ), 4.04 (s, 2H,  $\text{CH}_2$ ), 4.34 (q, 2H,  $J = 7.2$  Hz,  $\text{OCH}_2$ ), 7.07, 7.86 (2\*d, 2H,  $J = 7.8$  Hz, arom.), 7.96 (d, 2H,  $J = 7.8$  Hz, arom.), 11.50 (br.s, 1H, NH).  $^{13}\text{C}$  NMR (150 MHz,  $\text{DMSO-}d_6$ ):  $\delta$  14.1 ( $\text{CH}_3$ ), 34.3 ( $\text{CH}_2$ ), 60.5 ( $\text{OCH}_2$ ), 119.6, 121.2, 125.5, 129.8, 130.4, 130.9, 142.7 ( $\text{C}=\text{N}$ ), 152.1 ( $\text{C}=\text{N}$ ), 157.7 ( $\text{C}=\text{N}$ ), 165.2 ( $\text{C}=\text{O}$ ), 174.2 ( $\text{C}=\text{O}$ ), 178.8 ( $\text{C}=\text{O}$ ), 188.1 ( $\text{C}=\text{O}$ ). EI-MS ( $m/z$ ): 265 ( $\text{M}^+ + 1$ ). Calcd. for  $\text{C}_{12}\text{H}_{12}\text{N}_2\text{O}_5\text{S}$ : C, 54.53; H, 4.58, N, 10.60; Found: C, 54.70; H, 4.50, N, 10.80.