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Synthesis of Butyl 4-[4-Hydroxy(alkanoyloxy, aroyloxy)-benzylideneamino]benzoates

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Abstract—Previously unknown Schiff bases containing ether and ester groups were synthesized by reactions of 4-hydroxy-3-methoxy- and 3-ethoxy-4-hydroxybezladehydes and esters derived therefrom with butyl 4-aminobenzoate.

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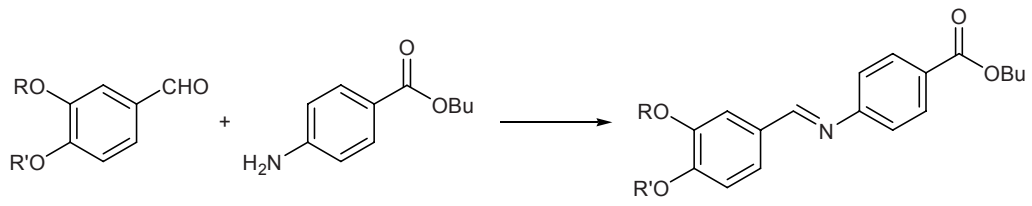
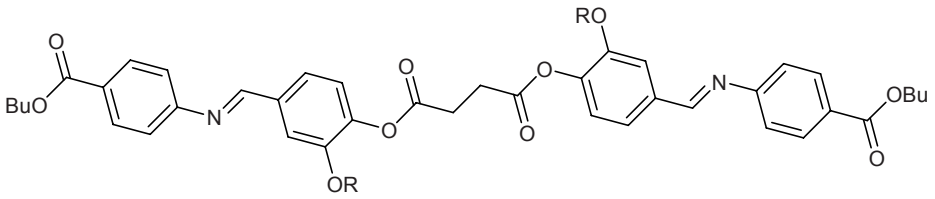
Natural hydroxybenzaldehydes, 3-methoxy-4-hydroxybenzalehyde (vanillin) and 3-ethoxy-4-hydroxybenzaldehyde (vanillal), as well as esters derived therefrom, are accessible sources of aromatic structural fragments containing methoxy, ethoxy, and ester groups for target-oriented synthesis of various biologically active compounds [1–5], thermo- and photochromic substances, and nanomaterials [6, 7].

The goal of the present work was to develop a preparative procedure for the synthesis of previously unknown Schiff bases containing ether and ester moieties by condensation of 3-methoxy-4-hydroxybenzalehyde, 3-ethoxy-4-hydroxybenzaldehyde, and the corresponding esters with butyl 4-aminobenzoate. The reactions in boiling anhydrous methanol in 1.5–2 h gave compounds **I**–**XXXIV** in 90–94% yield (Scheme 1). Mild conditions and the absence of catalysts ensured conservation of labile ester groups. According to the ^{1}H NMR spectra, compounds **I**–**XXXIV** were isolated as pure *E* isomers. They characteristical-

Scheme 1.



I–**XXIII**, **XV**–**XXXIII**



XXIV, **XXXIV**

I–**XXIV**, R = Me; **XXV**–**XXXIV**, R = Et; **I**, **XXV**, R′ = H; **II**, **XXVI**, R′ = MeCO; **III**, **XXVII**, R′ = EtCO; **IV**, **XXVIII**, R′ = PrCO; **V**, **XXIX**, R′ = *i*-PrCO; **VI**, R′ = $Me(CH_2)_6CO$; **VII**, R′ = $Me(CH_2)_8CO$; **VIII**, R′ = $Me(CH_2)_{11}CO$; **IX**, R′ = $Me(CH_2)_{16}CO$; **X**, R′ = CH_2=C(Me)C(O); **XI**, R′ = (*Z*)-$Me(CH_2)_7CH$=$CH(CH_2)_7CO$; **XII**, R′ = $PhCH_2CO$; **XIII**, R′ = $PhCH(Me)CH_2CO$; **XIV**, R′ = 4-$MeC_6H_4O(CH_2)_2CO$; **XV**, **XXXI**, R′ = PhCO; **XVI**, **XXXII**, R′ = 4-MeC_6H_4CO; **XVII**, R′ = 4-ClC_6H_4CO; **XVIII**, R′ = 2,4-$Cl_2C_6H_3CO$; **XIX**, R′ = 2,4-$Cl_2C_6H_3OCH_2CO$; **XX**, R′ = $BrCH_2CO$; **XXI**, R′ = PhCHBrCHBrCO; **XXII**, R′ = 4-BrC_6H_4CO; **XXIII**, R′ = 3-$O_2NC_6H_4CO$; **XXX**, R′ = Me_2CHCH_2CO; **XXXIII**, R′ = 2-ClC_6H_4CO.

ly displayed a singlet at δ 8.3–8.4 ppm from the CH=N proton; the corresponding signal of *Z* isomers is usually located about 0.5 ppm downfield due to deshielding effect of the aromatic aminobenzoate fragment [8, 9]. The purity of the products was 98±1%.

3-Methoxy-4-hydroxybenzalehyde, 3-ethoxy-4-hydroxybenzaldehyde, and their liquid esters readily reacted with butyl 4-aminobenzoate even under solvent-free conditions. By mixing equimolar amounts of the reactants and heating the resulting mixture at 80–90°C we isolated Schiff bases **I**–**XVI** and **XXV**–**XXXII** in quantitative yield (99±1%) with a purity of 92±2%; i.e., the products were sufficiently pure to obtain nanofilms by vacuum thermal evaporation–deposition technique [6]. This process was accompanied by their purification to a level of no less than 99%. The reactions in methanol ensured slightly lower yields but higher purity. The solvent-free procedure improves the yield and simplifies isolation of the products.

The structure of Schiff bases **I**–**XXXIV** was confirmed by their elemental analyses, determination of molecular weights by cryoscopy, and ^{1}H NMR, IR, and UV spectra.

EXPERIMENTAL

The IR spectra were recorded in KBr on a Nicolet Protege-460 spectrometer with Fourier transform. The UV spectra were measured on a Specord UV-Vis spectrophotometer from 1×10^{-4} M solutions in methanol. The ^{1}H NMR spectra were obtained on a Tesla BS-587A instrument (100 MHz) from 5% solutions in $CDCl_3$; the chemical shifts were measured relative to octamethylcyclotetrasiloxane as internal reference. The molecular weights were determined by cryoscopy in benzene. Initial 3-methoxy-4-hydroxybenzalehyde and 3-ethoxy-4-hydroxybenzaldehyde esters were synthesized according to the procedures described in [10, 11].

Butyl 4-[4-hydroxy(acyloxy)-3-methoxy(ethoxy)-benzylideneamino]benzoates I–XXXIV (*general procedure*). 3-Methoxy-4-hydroxybenzalehyde, 3-ethoxy-4-hydroxybenzaldehyde, or the corresponding ester, 0.01 mol, was dissolved in 50 ml of anhydrous methanol, 0.01 mol (or 0.005 mol in the synthesis of compounds **XXIV** and **XXXIV**) of butyl 4-aminobenzoate was added, and the mixture was heated for 1.5 h under reflux and left to stand for 20–30 h at 20–23°C. The precipitate was filtered off through a glass filter, washed with a small amount of methanol, and dried under reduced pressure. Compounds **I**–**XXXIV** were sufficiently pure, and no additional recrystallization was necessary.

Butyl 4-(4-hydroxy-3-methoxybenzylideneamino)benzoate (I). Yield 91%, mp 122–123°C. UV spectrum, λ_{max}, nm ($\varepsilon\times10^{-3}$): 206 (16), 234 (10), 295 (12), 334 (15). IR spectrum, ν, cm^{-1}: 3374 (OH); 3084, 3052, 3011 (=C–H, C–H_{arom}); 2957, 2933, 2895, 2872, 2830 (C–H_{aliph}); 1711 (C=O); 1626 (C=N); 1589, 1518, 1465, 1454, 1429, 1394, 1370, 1315 (C–C_{arom}); 1279, 1265, 1214, 1190, 1172, 1157, 1130, 1115, 1098, 1065, 1029, 1016, 980 (C–O); 873, 861, 825, 805, 775, 742, 730, 701, 660, 630, 610 (δC–H_{arom}). ^{1}H NMR spectrum, δ, ppm: 0.99 t (3H, Me), 1.15–2.05 m (4H, CH_2), 3.94 s (3H, MeO), 4.33 t (2H, CH_2O), 5.85 br.s (1H, OH), 6.92–8.15 m (7H, C_6H_3, C_6H_4), 8.32 d (1H, HC=N). Found, %: C 69.95; H 6.58; N 4.05. *M* 318.3. $C_{19}H_{21}NO_4$. Calculated, %: C 69.71; H 6.47; N 4.28. *M* 327.4.

Butyl 4-(4-acetoxy-3-methoxybenzylideneamino)benzoate (II). Yield 92%, mp 43–44°C. UV spectrum, λ_{max}, nm ($\varepsilon\times10^{-3}$): 205 (23), 220 (18), 280 (21), 294 (21), 315 (13). IR spectrum, ν, cm^{-1}: 3080, 3040, 3007 (=C–H, C–H_{arom}); 2960, 2934, 2897, 2873, 2845 (C–H_{aliph}); 1767, 1704 (C=O); 1630 (C=N); 1603, 1507, 1465, 1419, 1388, 1317, 1309 (C–C_{arom}); 1275, 1214, 1196, 1174, 1152, 1113, 1102, 1070, 1033, 1013, 970 (C–O); 870, 842, 795, 773, 747, 734, 702, 680, 635, 612, 600 (δC–H_{arom}). ^{1}H NMR spectrum, δ, ppm: 0.99 t (3H, Me), 1.16–2.08 m (4H, CH_2), 2.34 s (3H, MeCO), 3.95 s (3H, MeO), 4.34 t (2H, CH_2O), 6.98–8.16 m (7H, C_6H_3, C_6H_4), 8.37 s (1H, HC=N). Found, %: C 68.62; H 6.53; N 3.62. *M* 361.4. $C_{21}H_{23}NO_5$. Calculated, %: C 68.28; H 6.28; N 3.79. *M* 369.4.

Butyl 4-(3-methoxy-4-propionyloxybenzylideneamino)benzoate (III). Yield 92%, mp 48–49°C. UV spectrum, λ_{max}, nm ($\varepsilon\times10^{-3}$): 205 (22), 220 (19), 280 (21), 295 (21), 314 (14). IR spectrum, ν, cm^{-1}: 3071, 3045, 3005 (=C–H, C–H_{arom}); 2960, 2941, 2874, 2845 (C–H_{aliph}); 1765, 1705 (C=O); 1630 (C=N); 1603, 1507, 1465, 1419, 1384, 1355, 1310 (C–C_{arom}); 1275, 1219, 1172, 1150, 1118, 1076, 1033, 1014, 978 (C–O); 886, 872, 845, 835, 805, 773, 747, 735, 702, 670, 640, 615 (δC–H_{arom}). ^{1}H NMR spectrum, δ, ppm: 0.99 t (3H, Me), 1.27 t (3H, Me), 1.16–2.10 m (4H, CH_2), 2.55 q (2H, CH_2CO), 3.95 s (3H, MeO), 4.34 t (2H, CH_2O), 6.96–8.15 m (7H, C_6H_3, C_6H_4), 8.37 s (1H, HC=N). Found, %: C 69.17; H 6.70; N 3.44. *M* 376.1. $C_{22}H_{25}NO_5$. Calculated, %: C 68.91; H 6.57; N 3.65. *M* 383.4.

Butyl 4-(4-butanoyloxy-3-methoxybenzylideneamino)benzoate (IV). Yield 92%, mp 44–45°C. UV spectrum, λ_{max}, nm ($\varepsilon\times10^{-3}$): 205 (22), 220 (19), 280 (21), 295 (21), 314 (14). IR spectrum, ν, cm^{-1}: 3070, 3040, 3005 (=C–H, C–H_{arom}); 2962, 2935, 2874, 2845 (C–H_{aliph}); 1764, 1707 (C=O); 1630 (C=N); 1603, 1507, 1465, 1418, 1383, 1309 (C–C_{arom}); 1275, 1220, 1200, 1172, 1150, 1114, 1102, 1077, 1033, 970 (C–O); 875, 840, 773, 745, 730, 702, 660, 635, 616 (δC–H_{arom}). ^{1}H NMR spectrum, δ, ppm: 0.85–1.15 m (6H, CH_3), 1.14–2.10 m (6H, CH_2), 3.94 s (3H, MeO), 4.10–4.60 m (4H, CH_2), 6.98–8.14 m (7H, C_6H_3, C_6H_4), 8.37 s (1H, HC=N). Found, %: C 69.74; H 6.91; N 3.31. *M* 388.6. $C_{23}H_{27}NO_5$. Calculated, %: C 69.50; H 6.85; N 3.52. *M* 397.5.

Butyl 4-[3-methoxy-4-(2-methylpropanoyloxy)-benzylideneamino]benzoate (V). Yield 92%, mp 43–44°C. UV spectrum, λ_{max}, nm ($\varepsilon\times10^{-3}$): 205 (23), 220 (18), 280 (21), 294 (21), 315 (13). IR spectrum, ν, cm^{-1}: 3071, 3045, 3007 (=C–H, C–H_{arom}); 2961, 2936, 2874, 2840 (C–H_{aliph}); 1762, 1708 (C=O); 1630 (C=N); 1603, 1507, 1467, 1418, 1386, 1360, 1310 (C–C_{arom}); 1275, 1220, 1200, 1173, 1152, 1116, 1100, 1034, 1015, 966 (C–O); 967, 845, 810, 773, 746, 735, 702, 670, 635, 615 (δC–H_{arom}). ^{1}H NMR spectrum, δ, ppm: 1.00 t (3H, Me), 1.16–2.06 m (4H, CH_2), 1.38 d (6H, Me_2C), 2.94 quint (1H, CH), 3.95 s (3H, MeO), 4.35 t (2H, CH_2O), 6.96–8.12 m (7H, C_6H_3, C_6H_4), 8.37 s (1H, HC=N). Found, %: C 69.70; H 6.87; N 3.22. *M* 384.4. $C_{23}H_{27}NO_5$. Calculated, %: C 69.50; H 6.85; N 3.52. *M* 397.5.

Butyl 4-(3-methoxy-4-octanoyloxybenzylideneamino)benzoate (VI). Yield 92%, mp 45–46°C. UV spectrum, λ_{max}, nm ($\varepsilon\times10^{-3}$): 204 (22), 220 (19), 280 (20), 295 (21), 315 (14). IR spectrum, ν, cm^{-1}: 3072, 3045, 3004 (=C–H, C–H_{arom}); 2958, 2931, 2871, 2858 (C–H_{aliph}); 1764, 1708 (C=O); 1630 (C=N); 1603, 1508, 1465, 1418, 1381, 1356, 1310 (C–C_{arom}); 1275, 1220, 1198, 1172, 1151, 1112, 1034, 970 (C–O); 872, 844, 773, 755, 740, 702, 665, 635, 617 (δC–H_{arom}). ^{1}H NMR spectrum, δ, ppm: 0.84–1.16 m (6H, Me), 1.16–2.10 m (14H, CH_2), 3.94 s (3H, MeO), 4.08–4.62 m (4H, CH_2), 6.96–8.14 m (7H, C_6H_3, C_6H_4), 8.37 s (1H, HC=N). Found, %: C 71.82; H 7.92; N 2.80. *M* 448.5. $C_{27}H_{35}NO_5$. Calculated, %: C 71.50; H 7.78; N 3.09. *M* 453.6.

Butyl 4-(4-decanoyloxy-3-methoxybenzylideneamino)benzoate (VII). Yield 92%, mp 50–51°C. UV spectrum, λ_{max}, nm ($\varepsilon\times10^{-3}$): 205 (23), 220 (18), 280 (21), 294 (21), 315 (13). IR spectrum, ν, cm^{-1}: 3080, 3045, 3004 (=C–H, C–H_{arom}); 2957, 2927, 2865, 2855 (C–H_{aliph}); 1764, 1708 (C=O); 1630 (C=N); 1603, 1507, 1465, 1418, 1380, 1309 (C–C_{arom}); 1275, 1220, 1198, 1171, 1151, 1111, 1070, 1034, 1014, 965 (C–O); 871, 843, 800, 773, 745, 730, 702, 670, 635, 617 (δC–H_{arom}). ^{1}H NMR spectrum, δ, ppm: 0.80–1.15 m (6H, Me), 1.15–2.12 m (18H, CH_2), 3.94 s (3H, MeO), 4.08–4.64 m (4H, CH_2), 6.98–8.14 m (7H, C_6H_3, C_6H_4), 8.37 s (1H, HC=N). Found, %: C 72.58; H 8.33; N 2.72. *M* 467.5. $C_{29}H_{39}NO_5$. Calculated, %: C 72.32; H 8.16; N 2.91. *M* 481.6.

Butyl 4-(3-methoxy-4-tridecanoyloxybenzylideneamino)benzoate (VIII). Yield 93%, mp 41–42°C. UV spectrum, λ_{max}, nm ($\varepsilon\times10^{-3}$): 205 (22), 220 (20), 287 (22), 315 (13). IR spectrum, ν, cm^{-1}: 3077, 3043, 3005 (=C–H, C–H_{arom}); 2956, 2924, 2880, 2853 (C–H_{aliph}); 1762, 1707 (C=O); 1629 (C=N); 1604, 1517, 1466, 1417, 1380, 1360, 1310 (C–C_{arom}); 1275, 1219, 1201, 1172, 1153, 1144, 1110, 1065, 1035, 1020, 1065 (C–O); 880, 843, 772, 750, 720, 700, 660, 635, 614 (δC–H_{arom}). ^{1}H NMR spectrum, δ, ppm: 0.82–1.14 m (6H, Me), 1.15–2.14 m (24H, CH_2), 3.94 s (3H, MeO), 4.08–4.66 m (4H, CH_2), 6.98–8.16 m (7H, C_6H_3, C_6H_4), 8.37 s (1H, HC=N). Found, %: C 73.54; H 8.83; N 2.46. *M* 506.8. $C_{32}H_{45}NO_5$. Calculated, %: C 73.39; H 8.66; N 2.67. *M* 523.7.

Butyl 4-(3-methoxy-4-octadecanoyloxybenzylideneamino)benzoate (IX). Yield 91%, mp 44–45°C. UV spectrum, λ_{max}, nm ($\varepsilon\times10^{-3}$): 205 (22), 220 (21), 288 (22), 315 (12). IR spectrum, ν, cm^{-1}: 3080, 3065, 3034, 3006 (=C–H, C–H_{arom}); 2954, 2917, 2870, 2849 (C–H_{aliph}); 1763, 1704 (C=O); 1628 (C=N); 1604, 1509, 1465, 1414, 1379, 1354, 1310 (C–C_{arom}); 1280, 1220, 1196, 1171, 1152, 1123, 1103, 1077, 1057, 1036, 985, 945 (C–O); 870, 840, 771, 723, 700, 675, 655, 645, 620 (C–H_{arom}). ^{1}H NMR spectrum, δ, ppm: 0.80–1.15 m (6H, Me), 1.15–2.16 m (34H, CH_2), 3.94 s (3H, MeO), 4.04–4.68 m (4H, CH_2), 6.96–8.18 m (7H, C_6H_3, C_6H_4), 8.37 s (1H, HC=N). Found, %: C 75.03; H 9.45; N 2.02. *M* 570.3. $C_{37}H_{55}NO_5$. Calculated, %: C 74.84; H 9.33; N 2.36. *M* 593.8.

Butyl 4-(4-methacryloyloxy-3-methoxybenzylideneamino)benzoate (X). Yield 90%, mp 70–71°C. UV spectrum, λ_{max}, nm ($\varepsilon\times10^{-3}$): 206 (28), 221 (23), 277 (22), 294 (22), 315 (15). IR spectrum, ν, cm^{-1}: 3090, 3080, 3045, 3010 (=C–H, C–H_{arom}); 2960, 2934, 2873, 2845 (C–H_{aliph}); 1740, 1706 (C=O); 1678 (C=C); 1632 (C=N); 1602, 1507, 1465, 1418, 1381, 1316 (C–C_{arom}); 1275, 1219, 1202, 1172, 1152, 1121, 1065, 1033, 1015, 945 (C–O); 885, 850, 810, 773, 740, 730,

702, 680, 655, 635, 625, 606 (=C–H, C–H_{arom}). ^{1}H NMR spectrum, δ, ppm: 1.02 t (3H, Me), 1.16–2.10 m (4H, CH_2), 2.12 s (3H, Me), 3.96 s (3H, MeO), 4.36 t (2H, CH_2), 5.82 s (1H, =CH_2), 6.41 s (1H, =CH_2), 6.98–8.16 m (7H, C_6H_3, C_6H_4), 8.38 s (1H, HC=N). Found, %: C 70.03; H 6.40; N 3.32. *M* 382.7. $C_{23}H_{25}NO_5$. Calculated, %: C 69.86; H 6.37; N 3.54. *M* 395.5.

Butyl 4-{3-methoxy-4-[(9*Z*)-octadec-9-enoyloxy]-benzylideneamino}benzoate (XI). Yield 90%, mp 35–36°C. UV spectrum, λ_{max}, nm (ε×10^{-3}): 204 (24), 220 (23), 278 (23), 295 (21), 314 (12). IR spectrum, ν, cm^{-1}: 3080, 3040, 3004 (=C–H, C–H_{arom}); 2956, 2926, 2870, 2854 (C–H_{aliph}); 1764, 1708 (C=O); 1670 (C=C); 1629 (C=N); 1604, 1508, 1465, 1417, 1381, 1355, 1310 (C–C_{arom}); 1275, 1220, 1198, 1172, 1152, 1113, 1035, 1016, 970 (C–O); 880, 843, 772, 755, 740, 730, 720, 701, 670, 640, 620 (=C–H, C–H_{arom}). ^{1}H NMR spectrum, δ, ppm: 0.82–1.14 m (6H, Me), 1.20–2.20 m (30H, CH_2), 2.59 t (2H, CH_2), 3.95 s (3H, MeO), 4.35 t (2H, CH_2), 5.38 t (2H, =CH), 7.00–8.18 m (7H, C_6H_3, C_6H_4), 8.37 s (1H, HC=N). Found, %: C 75.34; H 8.43; N 1.89. *M* 574.4. $C_{37}H_{53}NO_5$. Calculated, %: C 75.09; H 8.28; N 2.17. *M* 591.8.

Butyl 4-[3-methoxy-4-(phenylacetyloxy)benzylideneamino]benzoate (XII). Yield 94%, mp 62–63°C. UV spectrum, λ_{max}, nm (ε×10^{-3}): 206 (30), 220 (23), 280 (21), 295 (22), 315 (13). IR spectrum, ν, cm^{-1}: 3090, 3077, 3040, 3006 (=C–H, C–H_{arom}); 2959, 2935, 2913, 2873, 2845 (C–H_{aliph}); 1764, 1704 (C=O); 1629 (C=N); 1603, 1507, 1465, 1455, 1418, 1385, 1340, 1310 (C–C_{arom}); 1276, 1220, 1200, 1172, 1153, 1116, 1075, 1032, 1015, 965 (C–O); 871, 844, 796, 773, 760, 730, 701, 677, 642, 615 (C–H_{arom}). ^{1}H NMR spectrum, δ, ppm: 1.00 t (3H, Me), 1.18–2.10 m (4H, CH_2), 3.88 s (2H, CH_2), 3.96 s (3H, MeO), 4.36 t (2H, CH_2O), 6.94–8.20 m (12H, C_6H_3, C_6H_4, C_6H_5), 8.38 s (1H, HC=N). Found, %: C 73.11; H 6.23; N 2.90. *M* 434.9. $C_{27}H_{27}NO_5$. Calculated, %: C 72.79; H 6.11; N 3.14. *M* 445.5.

Butyl 4-[3-methoxy-4-(3-phenylbutanoyloxy)-benzylideneamino]benzoate (XIII). Yield 90%, mp 49–50°C. UV spectrum, λ_{max}, nm (ε×10^{-3}): 205 (31), 220 (22), 280 (20), 295 (22), 314 (12). IR spectrum, ν, cm^{-1}: 3090, 3070, 3025, 3000 (=C–H, C–H_{arom}); 2960, 2934, 2800, 2873, 2830 (C–H_{aliph}); 1761, 1704 (C=O); 1631 (C=N); 1603, 1507, 1464, 1454, 1418, 1382, 1310 (C–C_{arom}); 1276, 1220, 1198, 1172, 1152, 1116, 1082, 1060, 1033, 1020, 940 (C–O); 878, 845, 772, 750, 735, 701, 670, 635, 620 (C–H_{arom}). ^{1}H NMR spectrum, δ, ppm: 1.00 t (3H, Me), 1.18–2.12 m (4H, CH_2), 1.44 d (3H, Me), 2.90 d (2H, CH_2), 3.42 q (1H, CH), 3.92 s (3H, MeO), 4.35 t (2H, CH_2), 6.90–8.16 m (12H, C_6H_3, C_6H_4, C_6H_5), 8.38 s (1H, HC=N). Found, %: C 73.84; H 6.68; N 2.83. *M* 458.6. $C_{29}H_{31}NO_5$. Calculated, %: C 73.55; H 6.60; N 2.96. *M* 473.6.

Butyl 4-{3-methoxy-4-[3-(4-methylphenoxy)-propanoyloxy]benzylideneamino}benzoate (XIV). Yield 93%, mp 102–103°C. UV spectrum, λ_{max}, nm (ε×10^{-3}): 206 (29), 220 (24), 280 (23), 295 (20), 315 (12). IR spectrum, ν, cm^{-1}: 3085, 3070, 3040, 3030, 3005 (=C–H, C–H_{arom}); 2978, 2955, 2928, 2890, 2871, 2835 (C–H_{aliph}); 1752, 1722 (C=O); 1631 (C=N); 1601, 1591, 1512, 1485, 1462, 1416, 1400, 1393, 1365, 1307 (C–C_{arom}); 1275, 1245, 1221, 1198, 1188, 1165, 1155, 1114, 1096, 1045, 1032, 1015, 968 (C–O); 875, 868, 855, 823, 802, 773, 746, 740, 700, 678, 633, 618 (C–H_{arom}). ^{1}H NMR spectrum, δ, ppm: 1.01 t (3H, Me), 1.16–2.12 m (4H, CH_2), 2.32 s (3H, Me), 3.12 t (2H, CH_2), 3.92 s (3H, MeO), 3.88–4.60 m (4H, CH_2O), 6.88–8.15 m (11H, H_{arom}), 8.38 s (1H, HC=N). Found, %: C 71.39; H 6.51; N 2.80. *M* 470.1. $C_{29}H_{31}NO_6$. Calculated, %: C 71.15; H 6.38; N 2.86. *M* 489.6.

Butyl 4-(4-benzoyloxy-3-methoxybenzylideneamino)benzoate (XV). Yield 90%, mp 97–98°C. UV spectrum, λ_{max}, nm (ε×10^{-3}): 208 (21), 243 (24), 280 (15), 317 (13). IR spectrum, ν, cm^{-1}: 3090, 3070, 3060, 3040, 3005 (=C–H, C–H_{arom}); 2960, 2930, 2895, 2880, 2850, 2825 (C–H_{aliph}); 1729, 1720 (C=O); 1632 (C=N); 1593, 1510, 1480, 1465, 1452, 1415, 1380, 1360, 1309 (C–C_{arom}); 1280, 1260, 1219, 1200, 1171, 1154, 1130, 1120, 1103, 1085, 1066, 1036, 1027, 1014, 990, 980 (C–O); 875, 860, 840, 825, 807, 775, 750, 740, 725, 699, 685, 655, 635, 620 (C–H_{arom}). ^{1}H NMR spectrum, δ, ppm: 1.02 t (3H, Me), 1.10–2.00 m (4H, CH_2), 3.94 s (3H, MeO), 4.36 t (2H, CH_2), 7.15–8.35 m (12H, H_{arom}), 8.43 s (1H, HC=N). Found, %: C 72.58; H 6.13; N 3.04. *M* 422.6. $C_{26}H_{25}NO_5$. Calculated, %: C 72.37; H 5.84; N 3.25. *M* 431.5.

Butyl 4-[3-methoxy-4-(4-methylbenzoyloxy)-benzylideneamino]benzoate (XVI). Yield 90%, mp 110–111°C. UV spectrum, λ_{max}, nm (ε×10^{-3}): 210 (23), 220 (24), 254 (29), 280 (18), 320 (13). IR spectrum, ν, cm^{-1}: 3088, 3077, 3045, 3005 (=C–H, C–H_{arom}); 2954, 2927, 2900, 2868, 2850, 2830 (C–H_{aliph}); 1727, 1721 (C=O); 1631 (C=N); 1608, 1592, 1511, 1480, 1459, 1417, 1380, 1365, 1307 (C–C_{arom}); 1279, 1260, 1220, 1200, 1175, 1152, 1120,

1113, 1103, 1080, 1035, 1020, 1012, 985 (C–O); 878, 870, 840, 820, 805, 785, 778, 742, 700, 690, 675, 635, 620, 613 (δC–H_{arom}). ^{1}H NMR spectrum, δ, ppm: 1.02 t (3H, Me), 1.12–2.02 m (4H, CH_2), 2.44 s (3H, Me), 3.94 s (3H, MeO), 4.36 t (2H, CH_2), 7.12–8.21 m (11H, H_{arom}), 8.43 s (1H, HC=N). Found, %: C 73.15; H 6.20; N 2.92. *M* 431.2. $C_{27}H_{27}NO_5$. Calculated, %: C 72.79; H 6.11; N 3.14. *M* 445.5.

Butyl 4-[4-(4-chlorobenzoyloxy)-3-methoxybenzylideneamino]benzoate (XVII). Yield 90%, mp 108–109°C. UV spectrum, λ_{max}, nm ($\varepsilon\times10^{-3}$): 205 (40), 220 (26), 255 (16), 280 (23), 294 (20), 314 (12). IR spectrum, ν, cm^{-1}: 3090, 3076, 3040, 3002 (=C–H, C–H_{arom}); 2958, 2934, 2897, 2880, 2855, 2835 (C–H_{aliph}); 1729, 1716 (C=O); 1632 (C=N); 1592, 1510, 1490, 1460, 1450, 1420, 1402, 1377, 1310 (C–C_{arom}); 1279, 1265, 1115, 1199, 1171, 1152, 1122, 1112, 1103, 1092, 1078, 1035, 1014, 985, 970 (C–O); 878, 865, 847, 830, 812, 775, 750, 740, 730, 707, 700, 685, 670, 640, 617 (δC–H_{arom}); 530 (C–Cl). ^{1}H NMR spectrum, δ, ppm: 1.03 t (3H, Me), 1.12–2.04 m (4H, CH_2), 3.96 s (3H, MeO), 4.37 t (2H, CH_2), 7.06–8.24 m (11H, H_{arom}), 8.44 s (1H, HC=N). Found, %: C 67.32; H 5.35; Cl 7.44; N 2.87. *M* 447.8. $C_{26}H_{24}ClNO_5$. Calculated, %: C 67.02; H 5.19; Cl 7.61; N 3.01. *M* 465.9.

Butyl 4-[4-(2,4-dichlorobenzoyloxy)-3-methoxybenzylideneamino]benzoate (XVIII). Yield 92%, mp 76–77°C. UV spectrum, λ_{max}, nm ($\varepsilon\times10^{-3}$): 210 (45), 220 (31), 257 (22), 280 (20), 295 (22), 307 (12). IR spectrum, ν, cm^{-1}: 3090, 3070, 3060, 3035 (=C–H, C–H_{arom}); 2960, 2935, 2900, 2880, 2845, 2830 (C–H_{aliph}); 1716 (C=O); 1632 (C=N); 1590, 1550, 1509, 1468, 1453, 1415, 1377, 1308 (C–C_{arom}); 1282, 1242, 1219, 1198, 1171, 1155, 1150, 1130, 1120, 1102, 1034, 1020, 985, 980 (C–O); 869, 857, 830, 803, 790, 775, 761, 745, 710, 700, 677, 670, 630, 617 (δC–H_{arom}); 560, 540 (C–Cl). ^{1}H NMR spectrum, δ, ppm: 1.03 t (3H, Me), 1.10–2.06 m (4H, CH_2), 3.96 s (3H, MeO), 4.37 t (2H, CH_2), 7.02–8.40 m (10H, H_{arom}), 8.45 s (1H, HC=N). Found, %: C 62.73; H 4.82; Cl 13.85; N 2.62. *M* 481.7. $C_{26}H_{23}Cl_2NO_5$. Calculated, %: C 62.41; H 4.63; Cl 14.17; N 2.80. *M* 500.4.

Butyl 4-[4-(2,4-dichlorophenoxyacetyloxy)-3-methoxybenzylideneamino]benzoate (XIX). Yield 90%, mp 83–84°C. UV spectrum, λ_{max}, nm ($\varepsilon\times10^{-3}$): 205 (40), 221 (24), 280 (24), 294 (19), 314 (12). IR spectrum, ν, cm^{-1}: 3100, 3085, 3075, 3060, 3045, 3015 (=C–H, C–H_{arom}); 2960, 2940, 2920, 2895, 2880, 2845, 2830 (C–H_{aliph}); 1790, 1712 (C=O); 1630 (C=N); 1602, 1592, 1508, 1482, 1460, 1450, 1430, 1416, 1392, 1370, 1310 (C–C_{arom}); 1280, 1220, 1173, 1149, 1120, 1101, 1082, 1040, 1031, 1010, 970, 955 (C–O); 870, 860, 840, 830, 807, 776, 740, 730, 702, 690, 660, 640, 630, 620, 608 (δC–H_{arom}); 560, 530 (C–Cl). ^{1}H NMR spectrum, δ, ppm: 1.02 t (3H, Me), 1.08–2.04 m (4H, CH_2), 3.95 s (3H, MeO), 4.36 t (2H, CH_2), 4.96 s (2H, CH_2), 7.00–8.08 m (10H, H_{arom}), 8.42 s (1H, HC=N). Found, %: C 61.44; H 4.93; Cl 13.06; N 2.50. *M* 509.3. $C_{27}H_{25}Cl_2NO_6$. Calculated, %: C 61.14; H 4.75; Cl 13.37; N 2.64. *M* 530.4.

Butyl 4-[4-(bromoacetyloxy)-3-methoxybenzylideneamino]benzoate (XX). Yield 90%, mp 47–48°C. UV spectrum, λ_{max}, nm ($\varepsilon\times10^{-3}$): 206 (24), 220 (20), 280 (23), 295 (24), 315 (14). IR spectrum, ν, cm^{-1}: 3080, 3060, 3006 (=C–H, C–H_{arom}); 2960, 2940, 2880, 2860, 2830 (C–H_{aliph}); 1707, 1693 (C=O); 1630 (C=N); 1601, 1586, 1514, 1464, 1433, 1410, 1385, 1310 (C–C_{arom}); 1278, 1213, 1176, 1154, 1114, 1080, 1030 (C–O); 880, 870, 830, 771, 735, 720, 700, 660, 630, 620 (δC–H_{arom}); 565 (C–Br). ^{1}H NMR spectrum, δ, ppm: 1.00 t (3H, Me), 1.12–2.08 m (4H, CH_2), 3.95 s (3H, MeO), 4.35 t (2H, CH_2), 4.40 s (2H, CH_2), 7.06–8.12 m (7H, C_6H_3, C_6H_4), 8.37 s (1H, HC=N). Found, %: C 58.34; H 5.32; Br 18.05; N 2.97. *M* 419.0. $C_{21}H_{22}BrNO_5$. Calculated, %: C 58.08; H 5.11; Br 18.40; N 3.23. *M* 434.3.

Butyl 4-[4-(2,3-dibromo-3-phenylpropanoyloxy)-3-methoxybenzylideneamino]benzoate (XXI). Yield 91%, mp 82–83°C. UV spectrum, λ_{max}, nm ($\varepsilon\times10^{-3}$): 206 (30), 220 (22), 280 (20), 295 (22), 314 (12). IR spectrum, ν, cm^{-1}: 3078, 3037, 3004 (=C–H, C–H_{arom}); 2961, 2934, 2897, 2873, 2840 (C–H_{aliph}); 1739, 1705 (C=O); 1632 (C=N); 1604, 1507, 1464, 1449, 1418, 1385, 1310 (C–C_{arom}); 1277, 1240, 1220, 1200, 1176, 1152, 1118, 1080, 1040, 1032, 969 (C–O); 880, 865, 844, 803, 765, 750, 740, 697, 640, 620, 607 (δC–H_{arom}); 512 (C–Br). ^{1}H NMR spectrum, δ, ppm: 1.02 t (3H, Me), 1.12–2.10 m (4H, CH_2), 2.23 d (1H, CH), 3.95 s (3H, MeO), 4.36 t (2H, CH_2), 4.88–5.68 m (1H, CH), 6.98–8.10 m (12H, H_{arom}), 8.38 s (1H, HC=N). Found, %: C 54.73; H 4.56; Br 25.57; N 1.95. *M* 603.5. $C_{28}H_{27}Br_2NO_5$. Calculated, %: C 54.48; H 4.41; Br 25.89; N 2.27. *M* 617.3.

Butyl 4-[4-(4-bromobenzoyloxy)-3-methoxybenzylideneamino]benzoate (XXII). Yield 92%, mp 120–121°C. UV spectrum, λ_{max}, nm ($\varepsilon\times10^{-3}$): 208 (41), 220 (30), 258 (27), 280 (24), 294 (21), 315 (12). IR spectrum, ν, cm^{-1}: 3090, 3070, 3060, 3040, 3000 (=C–H,

C–H_{arom}); 2957, 2930, 2873, 2856, 2830 (C–H_{aliph}); 1727, 1716 (C=O); 1630 (C=N); 1590, 1510, 1485, 1460, 1420, 1400, 1377, 1310 (C–C_{arom}); 1283, 1269, 1215, 1198, 1160, 1152, 1125, 1113, 1102, 1077, 1035, 1012, 980 (C–O); 880, 845, 805, 775, 747, 702, 680, 665, 630, 614 (δC–H_{arom}); 540 (C–Br). ^{1}H NMR spectrum, δ, ppm: 1.04 t (3H, Me), 1.12–2.06 m (4H, CH_2), 3.96 s (3H, MeO), 4.38 t (2H, CH_2), 7.06–8.22 m (11H, H_{arom}), 8.45 s (1H, HC=N). Found, %: C 61.37; H 4.98; Br 15.25; N 2.56. *M* 492.2. $C_{26}H_{24}BrNO_5$. Calculated, %: C 61.19; H 4.74; Br 15.66; N 2.74. *M* 510.4.

Butyl 4-[3-methoxy-4-(3-nitrobenzoyloxy)benzylideneamino]benzoate (XXIII). Yield 92%, mp 55–56°C. UV spectrum, λ_{max}, nm (ε×10^{-3}): 201 (38), 220 (50), 263 (24), 300 (28). IR spectrum, ν, cm^{-1}: 3088, 3040, 3010 (=C–H, C–H_{arom}); 2960, 2936, 2920, 2874, 2830 (C–H_{aliph}); 1748, 1704 (C=O); 1604, 1520, 1505, 1480, 1466, 1441, 1417, 1384, 1311 (C–C_{arom}); 1533, 1351 (NO_2); 1278, 1245, 1220, 1198, 1174, 1155, 1113, 1080, 1058, 1033 (C–O); 859, 846, 813, 772, 717, 702, 670, 645, 620 (δC–H_{arom}). ^{1}H NMR spectrum, δ, ppm: 1.04 t (3H, Me), 1.12–2.06 m (4H, CH_2), 3.97 s (3H, MeO), 4.38 t (2H, CH_2), 7.05–9.10 m (11H, H_{arom}), 8.47 s (1H, HC=N). Found, %: C 65.84; H 5.25; N 5.60. *M* 458.1. $C_{26}H_{24}N_2O_7$. Calculated, %: C 65.54; H 5.08; N 5.88. *M* 476.5.

Bis(4-{[4-(butoxycarbonyl)phenyl]iminomethyl}-3-methoxyphenyl) succinate (XXIV). Yield 92%, mp 72–73°C. UV spectrum, λ_{max}, nm (ε×10^{-3}): 204 (43), 220 (34), 280 (43), 295 (42), 315 (25). IR spectrum, ν, cm^{-1}: 3080, 3050, 3010 (=C–H, C–H_{arom}); 2959, 2936, 2873, 2845, 2830 (C–H_{aliph}); 1764, 1705 (C=O); 1630 (C=N); 1604, 1507, 1465, 1519, 1384, 1365, 1350, 1310 (C–C_{arom}); 1280, 1230, 1200, 1173, 1160, 1130, 1080, 1032, 965 (C–O); 876, 845, 805, 773, 747, 730, 702, 680, 630, 614 (δC–H_{arom}). ^{1}H NMR spectrum, δ, ppm: 0.99 t (6H, Me), 1.14–2.10 m (8H, CH_2), 3.08 s (4H, CH_2), 3.94 s (6H, MeO), 4.35 t (4H, CH_2O), 7.00–8.15 m (14H, H_{arom}), 8.37 s (2H, HC=N). Found, %: C 68.75; H 6.21; N 3.59. *M* 715.4. $C_{42}H_{44}N_2O_{10}$. Calculated, %: C 68.47; H 6.02; N 3.80. *M* 736.8.

Butyl 4-(3-ethoxy-4-hydroxybenzylideneamino)benzoate (XXV). Yield 92%, mp 57–58°C. UV spectrum, λ_{max}, nm (ε×10^{-3}): 205 (16), 234 (10), 294 (10), 335 (13). IR spectrum, ν, cm^{-1}: 3373 (OH); 3090, 3070, 3040, 3008 (=C–H, C–H_{arom}); 2960, 2934, 2897, 2873, 2840 (C–H_{aliph}); 1697 (C=O); 1627 (C=N); 1603, 1587, 1514, 1442, 1389, 1310 (C–C_{arom}); 1279, 1200, 1171, 1119, 1040, 1012, 980 (C–O); 878, 850, 830, 773, 760, 740, 702, 665, 635, 616 (δC–H_{arom}). ^{1}H NMR spectrum, δ, ppm: 0.98 t (3H, Me), 1.10–2.00 m (4H, CH_2), 1.46 t (3H, Me), 4.05–4.45 m (4H, CH_2), 6.00 br.s (1H, OH), 6.75–8.15 m (7H, C_6H_3, C_6H_4), 8.31 s (1H, HC=N). Found, %: C 70.52; H 6.93; N 3.88. *M* 325.7. $C_{20}H_{23}NO_4$. Calculated, %: C 70.36; H 6.79; N 4.10. *M* 341.4.

Butyl 4-(4-acetoxy-3-ethoxybenzylideneamino)benzoate (XXVI). Yield 94%, mp 46–47°C. UV spectrum, λ_{max}, nm (ε×10^{-3}): 205 (23), 220 (19), 288 (22), 314 (13). IR spectrum, ν, cm^{-1}: 3080, 3040, 3008 (=C–H, C–H_{arom}); 2980, 2960, 2934, 2900, 2874, 2840 (C–H_{aliph}); 1769, 1704 (C=O); 1629 (C=N); 1602, 1590, 1511, 1477, 1441, 1391, 1370, 1309 (C–C_{arom}); 1276, 1212, 1194, 1172, 1159, 1118, 1041, 1013, 975 (C–O); 870, 835, 772, 760, 745, 730, 702, 680, 665, 640, 615 (δC–H_{arom}). ^{1}H NMR spectrum, δ, ppm: 0.99 t (3H, Me), 1.20–1.95 m (4H, CH_2), 1.46 t (3H, Me), 2.33 s (3H, MeCO), 3.95–4.45 m (4H, CH_2), 6.90–8.15 m (7H, C_6H_3, C_6H_4), 8.36 s (1H, HC=N). Found, %: C 69.20; H 6.74; N 3.27. *M* 370.4. $C_{22}H_{25}NO_5$. Calculated, %: C 68.91; H 6.57; N 3.65. *M* 383.4.

Butyl 4-(3-ethoxy-4-propanoyloxybenzylideneamino)benzoate (XXVII). Yield 93%, mp 76–77°C. UV spectrum, λ_{max}, nm (ε×10^{-3}): 204 (22), 220 (19), 287 (22), 315 (13). IR spectrum, ν, cm^{-1}: 3080, 3040, 3009 (=C–H, C–H_{arom}); 2978, 2960, 2937, 2900, 2874, 2820 (C–H_{aliph}); 1765, 1704 (C=O); 1630 (C=N); 1603, 1508, 1477, 1463, 1433, 1391, 1355, 1310 (C–C_{arom}); 1275, 1219, 1172, 1157, 1118, 1076, 1042, 1016, 978 (C–O); 886, 872, 844, 835, 810, 772, 760, 745, 702, 665, 640, 630 (δC–H_{arom}). ^{1}H NMR spectrum, δ, ppm: 0.86–1.15 m (6H, Me), 1.15–2.14 m (6H, CH_2), 1.46 t (3H, Me), 3.92–4.50 m (4H, CH_2), 6.90–8.15 m (7H, C_6H_3, C_6H_4), 8.36 s (1H, HC=N). Found, %: C 69.70; H 6.86; N 3.35. *M* 386.9. $C_{23}H_{27}NO_5$. Calculated, %: C 69.50; H 6.85; N 3.52. *M* 397.5.

Butyl 4-(4-butanoyloxy-3-ethoxybenzylideneamino)benzoate (XXVIII). Yield 92%, mp 38–39°C. UV spectrum, λ_{max}, nm (ε×10^{-3}): 204 (21), 220 (19), 287 (20), 315 (14). IR spectrum, ν, cm^{-1}: 3070, 3050, 3010 (=C–H, C–H_{arom}); 2962, 2935, 2875, 2820 (C–H_{aliph}); 1764, 1705 (C=O); 1630 (C=N); 1603, 1507, 1480, 1466, 1432, 1412, 1391, 1309 (C–C_{arom}); 1275, 1219, 1172, 1160, 1118, 1077, 1042, 1014, 970, 940 (C–O); 971, 842, 800, 772, 760, 745, 702, 670, 640, 620 (δC–H_{arom}). ^{1}H NMR spectrum, δ, ppm: 0.84–1.16 m (6H, Me), 1.16–2.16 m (8H, CH_2), 1.46 t (3H, Me), 3.90–4.50 m (4H, CH_2), 6.90–8.14 m (7H,

C_6H_3, C_6H_4), 8.36 s (1H, HC=N). Found, %: C 70.34; H 7.22; N 3.07. *M* 389.2. $C_{24}H_{29}NO_5$. Calculated, %: C 70.05; H 7.10; N 3.40. *M* 411.5.

Butyl 4-[3-ethoxy-4-(2-methylpropanoyloxy)benzylideneamino]benzoate (XXIX). Yield 91%, mp 48–49°C. UV spectrum, λ_{max}, nm ($\varepsilon\times10^{-3}$): 205 (22), 220 (20), 287 (22), 315 (15). IR spectrum, ν, cm^{-1}: 3080, 3040, 3010 (=C–H, C–H_{arom}); 2980, 2961, 2935, 2900, 2875, 2830 (C–H_{aliph}); 1762, 1704 (C=O); 1630 (C=N); 1604, 1509, 1469, 1433, 1388, 1360, 1310 (C–C_{arom}); 1275, 1219, 1200, 1172, 1159, 1119, 1100, 1043, 1011, 980 (C–O); 866, 840, 810, 772, 750, 735, 702, 680, 640, 615 (C–H_{arom}). ^{1}H NMR spectrum, δ, ppm: 0.99 t (3H, Me), 1.20–1.95 m (4H, CH_2), 1.34 d (6H, Me_2C), 1.46 t (3H, Me), 2.93 quint (1H, CH), 3.90–4.40 m (4H, CH_2), 7.02–8.15 m (7H, C_6H_3, C_6H_4), 8.37 s (1H, HC=N). Found, %: C 70.21; H 7.25; N 3.14. *M* 394.6. $C_{24}H_{29}NO_5$. Calculated, %: C 70.05; H 7.10; N 3.40. *M* 411.5.

Butyl 4-[3-ethoxy-4-(3-methylbutanoyloxy)benzylideneamino]benzoate (XXX). Yield 93%, mp 52–53°C. UV spectrum, λ_{max}, nm ($\varepsilon\times10^{-3}$): 205 (23), 220 (20), 288 (23), 315 (14). IR spectrum, ν, cm^{-1}: 3070, 3040, 3010 (=C–H, C–H_{arom}); 2960, 2934, 2900, 2873, 2827 (C–H_{aliph}); 1762, 1708 (C=O); 1630 (C=N); 1603, 1507, 1480, 1467, 1432, 1413, 1390, 1370, 1309 (C–C_{arom}); 1275, 1219, 1172, 1155, 1118, 1101, 1042, 1011, 978 (C–O); 880, 843, 772, 760, 745, 702, 677, 640, 614 (δC–H_{arom}). ^{1}H NMR spectrum, δ, ppm: 0.98 t (3H, Me), 1.12 d (6H, Me_2C), 1.16–1.95 m (7H, CH, CH_2), 1.44 t (3H, Me), 3.88–4.40 m (4H, CH_2), 6.96–8.14 m (7H, C_6H_3, C_6H_4), 8.37 s (1H, HC=N). Found, %: C 70.80; H 7.44; N 2.95. *M* 412.7. $C_{25}H_{31}NO_5$. Calculated, %: C 70.57; H 7.34; N 3.29. *M* 425.5.

Butyl 4-(4-benzoyloxy-3-ethoxybenzylideneamino)benzoate (XXXI). Yield 90%, mp 58–59°C. UV spectrum, λ_{max}, nm ($\varepsilon\times10^{-3}$): 208 (23), 243 (25), 280 (16), 317 (15). IR spectrum, ν, cm^{-1}: 3090, 3080, 3040, 3012 (=C–H, C–H_{arom}); 2980, 2959, 2934, 2900, 2874, 2830 (C–H_{aliph}); 1744, 1703 (C=O); 1629 (C=N); 1604, 1508, 1477, 1452, 1432, 1392, 1354, 1310 (C–C_{arom}); 1275, 1215, 1198, 1172, 1160, 1119, 1079, 1060, 1024, 980 (C–O); 870, 845, 804, 798, 772, 708, 690, 660, 640, 617 (δC–H_{arom}). ^{1}H NMR spectrum, δ, ppm: 0.99 t (3H, Me), 1.47 t (3H, Me), 1.50–1.95 m (4H, CH_2), 3.95–4.45 m (4H, CH_2), 7.05–8.30 m (12H, H_{arom}), 8.47 s (1H, HC=N). Found, %: C 73.06; H 6.21; N 2.96. *M* 433.4. $C_{27}H_{27}NO_5$. Calculated, %: C 72.79; H 6.11; N 3.14. *M* 445.5.

Butyl 4-[3-ethoxy-4-(4-methylbenzoyloxy)benzylideneamino]benzoate (XXXII). Yield 94%, mp 104–105°C. UV spectrum, λ_{max}, nm ($\varepsilon\times10^{-3}$): 206 (21), 221 (24), 255 (27), 280 (19), 320 (13). IR spectrum, ν, cm^{-1}: 3090, 3082, 3065, 3050, 3009 (=C–H, C–H_{arom}); 2959, 2931, 2878, 2860 (C–H_{aliph}); 1740, 1712 (C=O); 1631 (C=N); 1609, 1593, 1504, 1477, 1428, 1394, 1376, 1310 (C–C_{arom}); 1273, 1255, 1216, 1200, 1176, 1156, 1121, 1099, 1061, 1045, 1013, 984 (C–O); 872, 835, 780, 747, 701, 690, 660, 635, 620, 610 (δC–H_{arom}). ^{1}H NMR spectrum, δ, ppm: 0.98 t (3H, Me), 1.47 t (3H, Me), 1.52–1.95 m (4H, CH_2), 2.44 s (3H, Me), 3.94–4.44 m (4H, CH_2), 7.04–8.22 m (11H, H_{arom}), 8.47 s (1H, HC=N). Found, %: C 73.34; H 6.47; N 2.86. *M* 442.8. $C_{28}H_{29}NO_5$. Calculated, %: C 73.18; H 6.36; N 3.05. *M* 459.5.

Butyl 4-[4-(2-chlorobenzoyloxy)-3-ethoxybenzylideneamino)benzoate (XXXIII). Yield 93%, mp 84–85°C. UV spectrum, λ_{max}, nm ($\varepsilon\times10^{-3}$): 208 (41), 220 (25), 260 (20), 280 (22), 294 (21), 314 (14). IR spectrum, ν, cm^{-1}: 3097, 3080, 3065, 3045, 3030, 3005 (=C–H, C–H_{arom}); 2995, 2985, 2970, 2940, 2900, 2885, 2875, 2840, 2814 (C–H_{aliph}); 1746, 1696 (C=O); 1631 (C=N); 1505, 1591, 1505, 1470, 1436, 1392, 1375, 1317 (C–C_{arom}); 1276, 1243, 1203, 1155, 1140, 1127, 1096, 1034, 970 (C–O); 875, 862, 820, 810, 785, 739, 710, 685, 650, 640, 615 (δC–H_{arom}); 545 (C–Cl). ^{1}H NMR spectrum, δ, ppm: 1.00 t (3H, Me), 1.47 t (3H, Me), 1.54–1.98 m (4H, CH_2), 3.95–4.45 m (4H, CH_2), 6.60–8.20 m (11H, H_{arom}), 8.48 s (1H, HC=N). Found, %: C 67.65; H 5.58; Cl 7.11; N 2.70. *M* 463.5. $C_{27}H_{26}ClNO_5$. Calculated, %: C 67.56; H 5.46; Cl 7.39; N 2.92. *M* 480.0.

Bis(4-{[4-(butoxycarbonyl)phenyl]iminomethyl}-3-ethoxyphenyl) succinate (XXXIV). Yield 93%, mp 65–66°C. UV spectrum, λ_{max}, nm ($\varepsilon\times10^{-3}$): 203 (38), 221 (51), 263 (24), 300 (26). IR spectrum, ν, cm^{-1}: 3080, 3040, 3010 (=C–H, C–H_{arom}); 2985, 2959, 2934, 2900, 2874, 2831 (C–H_{aliph}); 1764, 1704 (C=O); 1629 (C=N); 1604, 1508, 1477, 1432, 1392, 1357, 1310 (C–C_{arom}); 1276, 1219, 1172, 1119, 1043, 1020, 970 (C–O); 877, 840, 800, 772, 701, 678, 635, 620 (C–H_{arom}). ^{1}H NMR spectrum, δ, ppm: 0.99 t (6H, Me), 1.20–1.92 m (8H, CH_2), 1.44 t (6H, Me), 3.08 s (4H, CH_2), 3.95–4.45 m (8H, CH_2), 6.90–8.12 m (14H, H_{arom}), 8.36 s (2H, HC=N). Found, %: C 69.28; H 6.49; N 3.40. *M* 741.1. $C_{44}H_{48}N_2O_{10}$. Calculated, %: C 69.09; H 6.33; N 3.66. *M* 764.9.

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