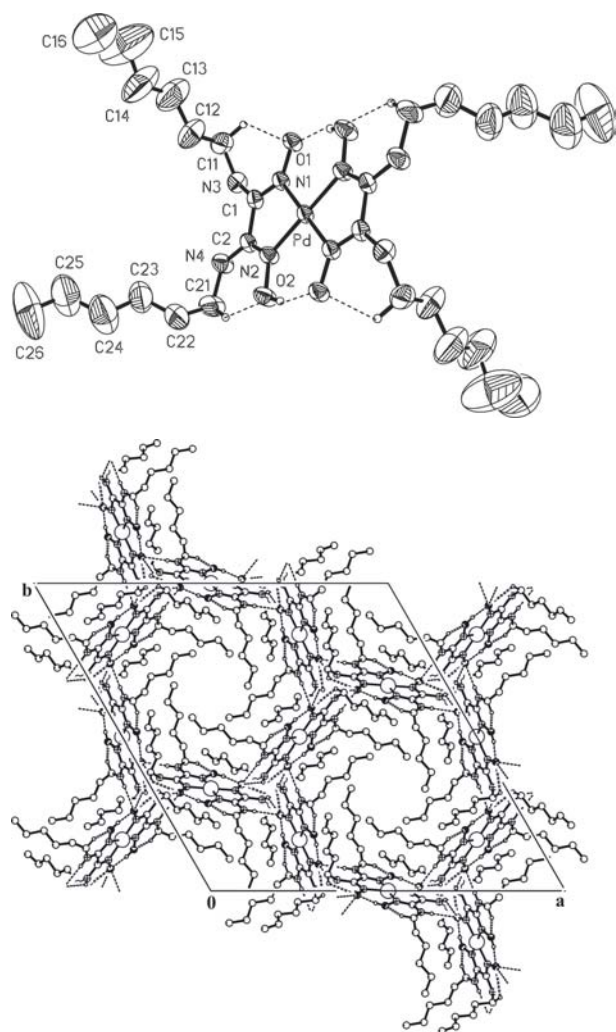


**Table S1** Selected bond lengths (Å) and angles (°) for nickel(II) complexes.

	<b>1aA</b>	<b>1aB</b>	<b>2a</b>	<b>3a</b>	<b>5a</b>
O1-N1	1.390(5)	1.387(5)	1.354(3)	1.358 (3)	1.364(6)
O2-N2	1.361(4)	1.378(4)	1.386(3)	1.389 (3)	1.386(6)
C1-N1	1.291(5)	1.292(6)	1.293(2)	1.298 (3)	1.304(7)
C2-N2	1.305(5)	1.305(5)	1.304(3)	1.294 (3)	1.280(7)
C1-N3	1.351(5)	1.357(5)	1.363(3)	1.361 (3)	1.346(7)
C2-N4	1.341(6)	1.346(5)	1.341(3)	1.346 (3)	1.348(7)
N3-C11	1.472(5)	1.480(7)	1.464(3)	1.436 (3)	1.460(7)
N4-C21	1.476(6)	1.464(6)	1.463(3)	1.473 (4)	1.473(7)
C1-C2	1.495(5)	1.501(5)	1.494(3)	1.487 (4)	1.494(8)
Ni -N1	1.857(4)	1.865(3)	1.877(2)	1.880 (2)	1.867(5)
Ni -N2	1.874(3)	1.866(4)	1.862(2)	1.862 (2)	1.871(5)
N1-Ni -N2	82.18(15)	81.59(15)	82.12(8)	81.66 (2)	81.9(2)
N1-Ni-N2#	97.82(15)	98.41(15)	97.88(8)	98.34 (9)	98.1(2)

**Table S2** Selected bond lengths (Å) and angles (°) for palladium(II) complexes.

	<b>1bA</b>	<b>1bB</b>	<b>1bC</b>	<b>2bA</b>	<b>2bB</b>	<b>2bC</b>	<b>3b</b>	<b>4b</b>	<b>5b</b>
O1-N1	1.394(5)	1.387(6)	1.373(5)	1.358(4)	1.397(4)	1.360(4)	1.392(8)	1.392(4)	1.396(6)
O2-N2	1.366(4)	1.352(5)	1.350(6)	1.397(4)	1.342(4)	1.392(4)	1.342(6)	1.326(4)	1.326(5)
C1-N1	1.284(6)	1.296(5)	1.291(7)	1.307(5)	1.303(4)	1.315(4)	1.296(9)	1.305(5)	1.300(7)
C2-N2	1.295(5)	1.309(6)	1.314(7)	1.304(6)	1.310(5)	1.299(5)	1.309(8)	1.303(5)	1.296(6)
C1-N3	1.334(7)	1.335(6)	1.333(7)	1.356(6)	1.335(5)	1.344(5)	1.341(8)	1.341(5)	1.340(7)
C2-N4	1.350(7)	1.351(6)	1.354(7)	1.337(6)	1.380(4)	1.299(5)	1.361(9)	1.388(5)	1.400(7)
N3-C11	1.438(9)	1.462(9)	1.464(7)	1.461(5)	1.469(5)	1.465(5)	1.448(12)	1.471(5)	1.452(9)
N4-C21	1.429(8)	1.417(10)	1.477(8)	1.460(5)	1.467(6)	1.472(6)	1.437(11)	1.483(5)	1.472(7)
C1-C2	1.494(7)	1.493(6)	1.497(6)	1.514(5)	1.503(5)	1.515(5)	1.489(9)	1.495(5)	1.493(8)
Pd -N1	1.964(3)	1.958(4)	1.972(4)	1.970(3)	1.977(3)	1.977(3)	1.967(5)	1.980(3)	1.972(4)
Pd-N2	1.972(3)	1.969(3)	1.970(4)	1.971(3)	1.972(3)	1.973(3)	1.974(5)	1.963(3)	1.974(4)
N1-Pd-N2	78.65(14)	79.22(14)	79.16(17)	79.09(13)	79.64(13)	79.43(13)	79.2(2)	79.95(13)	79.81(17)
N1-Pd-N2#	101.35(14)	100.78(14)	100.84(17)	100.91(13)	100.36(13)	100.58(13)	100.8(2)	100.05(13)	100.19(17)



**Fig.S1** A). ORTEP drawing for **3b** with the atomic labeling and hydrogen bonds represented by dashed lines. Thermal ellipsoids are shown with the 30% probability level. B) View of the channels formation: translation related along *c* axis conformers of Pd(II) complexes are joined by N3...O2 (35) and N4...O2 (36) HB and due to the center of symmetry and translations they form the tubular channels along *c* direction filled by the alkyl chains.