Electronic Supplementary Information

Thiophen- and bithiophene-based π-Conjugated Schiff base oligomers containing binaphthalene moieties in the backbone. Properties and computational simulations

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Table S1. Solubility results of o-AZdANThs at two temperatures.

	o-AZdAN1Th		o-AZdAN2Th	
	25 °C	**60 °C**	**25 °C**	**60 °C**
THF	*	*	*	*
DCM[1]	**	**	**	**
$CHCl_3$	**	**	**	**
Acetone[1]	*	*	*	*
DMSO	**	**	**	**
DMF	**	**	**	**
CB	*	*	*	*
DCM[1]	38%[2]	43%[2]	45%[2]	46%[2]

[1]: Test carried out at solvent boiling. [2]: Soluble fraction. *: Partially soluble, solvent coloration and undissolved material. **: Partially soluble, solution colored with opalescence, the solid material sediments after stopping stirring.

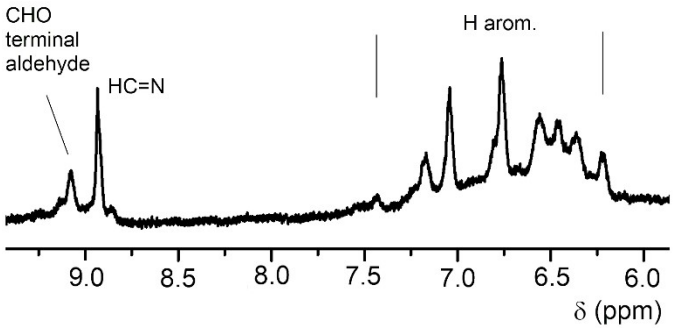

Figure S1. Selected section of the ^{1}H NMR spectrum ($CDCl_3$) of o-AZdN2Th.

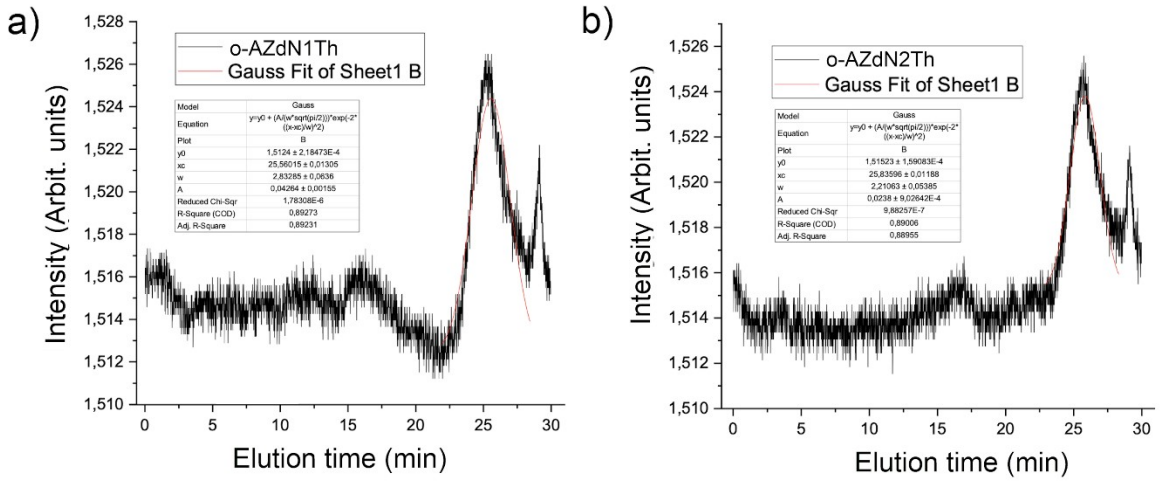

Figure S2. GPC traces for o-AZdAN1Th (a) and o-AZdAN2Th (b).

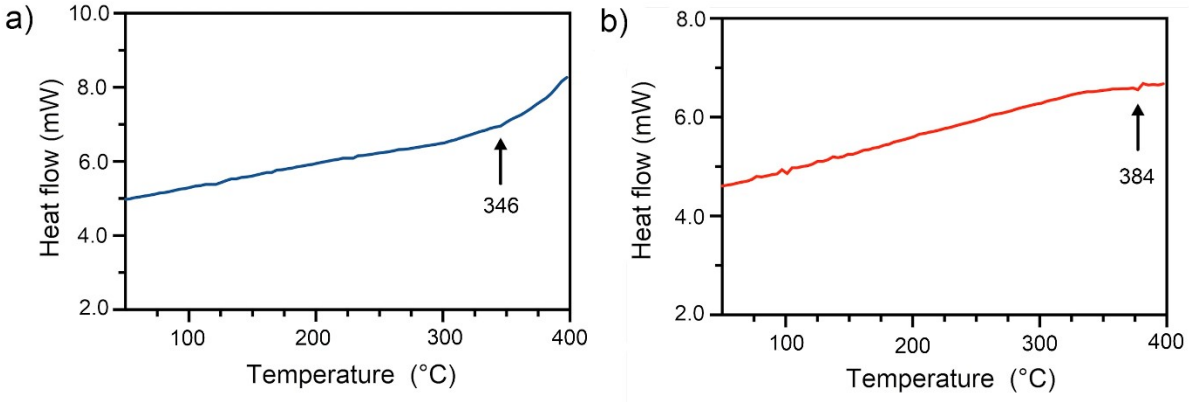

Figure S3. DSC spectra of o-AZdAN1Th (a) and o-AZdAN2Th (b) in nitrogen atmosphere.

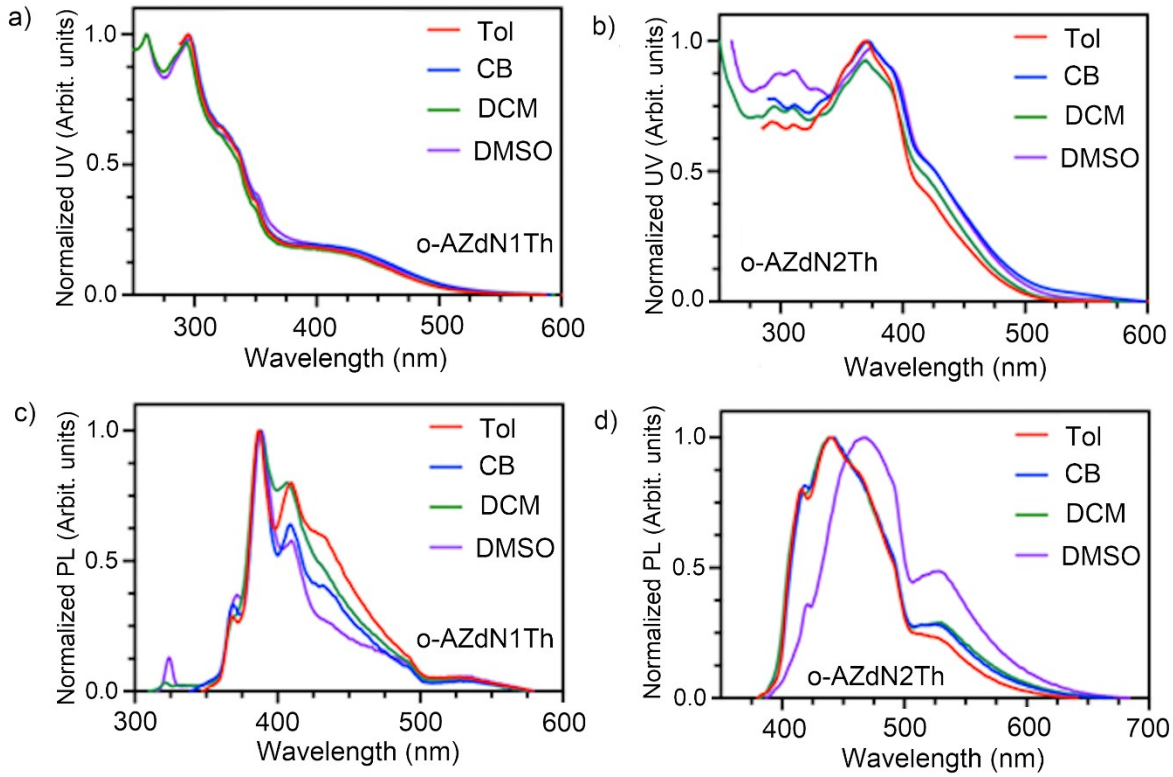

Figure S4. Normalized spectra for UV-vis (a, b) and PL (c, d) for o-AZdANThs in diluted solutions of several organic solvents.

Table S2. Torsion and dihedral angles of the studied oligomers.

	Angle C-C-C-C* (°)	**Torsion angle (°)**
o-ZdAN1Th	65.95	93
o-ZdAN2Th	66.82	164
o-ZdAN3Th	66.45	152
o-ZdAN4Th	66.57	135

* Average value.

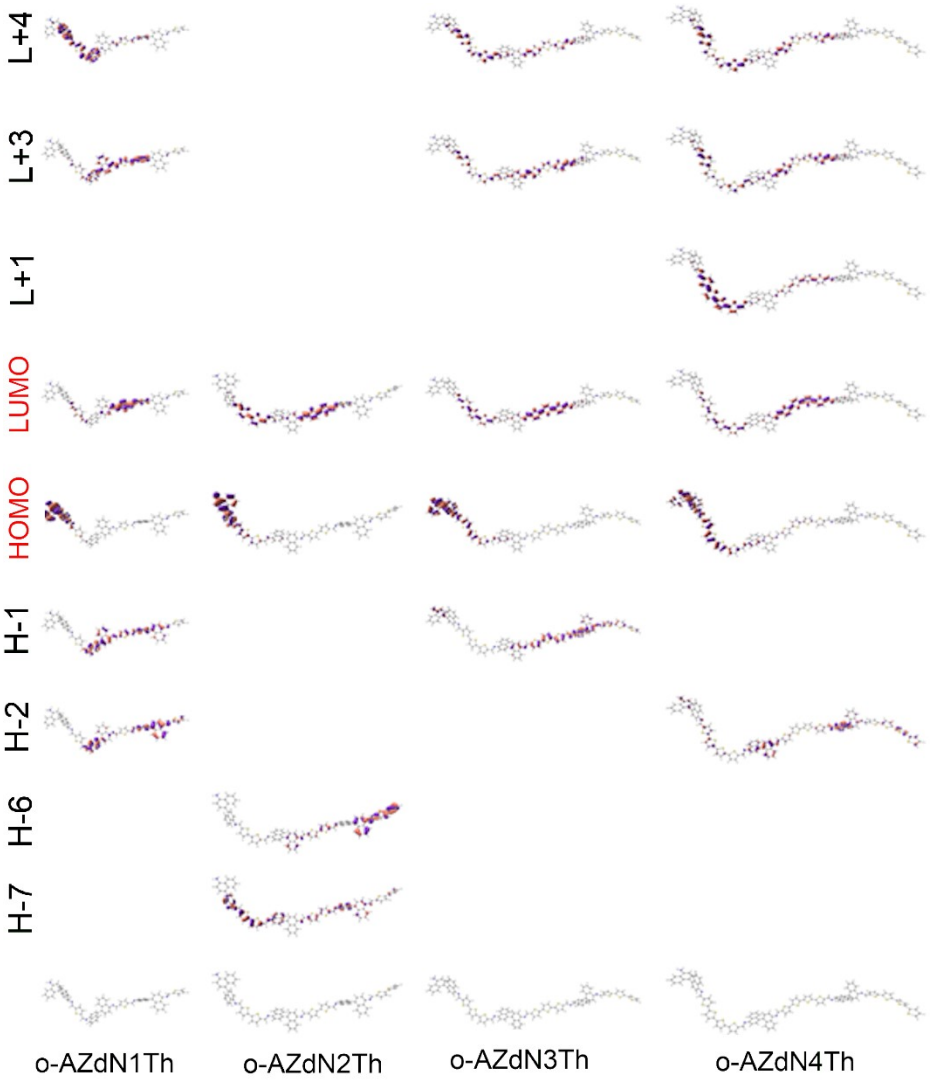

Figure S5 Molecular Orbitals involved in the calculated TD-DFT transitions for the four oligomers studied.