Supporting Information

Laterally Stretched Polycyclic Aromatic Hydrocarbons: Synthesis of Dibenzophenanthroheptaphene and Tetrabenzotriphenyleno-pyranthrene Derivatives.

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- II. UV-Emission spectra of 9.
- III. II. Computational Details (3D optimized structures and their HOMO-LUMO configurations).



I. Experimental details MALDI 1a-c, 2a-b, 4a-c, 9 and 10a,b.

Figure S1. HR-MALDI spectrum of 1a



Figure S2. HR-MALDI spectrum of 1b



Figure S3. HR-MALDI spectrum of 1c



Figure S4. HR-MALDI spectrum of 2a



Figure S5. HR-MALDI spectrum of 2b



Figure S6. HR-MALDI spectrum of 4a



Figure S7. HR-MALDI spectrum of 4b



Figure S8. HR-MALDI spectrum of 4c



Figure S9. HR-MALDI spectrum of 9



Figure S10 HR-MALDI spectrum of 10a







Figure S12. ¹H NMR spectrum of 1c



Figure S13. ¹H NMR spectrum of 2b



Figure S14. ¹H NMR spectrum of 4a



Figure S15. ¹H NMR spectrum of 4b



Figure S16. ¹H NMR spectrum of 4c



Figure S17. ¹H NMR spectrum of 9



Figure S18. ¹H NMR spectrum of 10a



Figure S19. ¹H NMR spectrum of 10b



Figure S20. ¹H NMR spectrum of 13a



Figure S21. ¹H NMR spectrum of 13b



Figure S22. Normalized absorption and emission spectra for the pentaphene derivatives 9 in THF. The solid lines represent absorption spectra and the dotted lines correspond to emission spectra.

II. Computational details

basis set with R = H (1a and 2-H) or Me (1-Me and 2-Me) instead of the alkyl groups for simplicity. **Optimized structure** НОМО LUMO No 1a 1Me $\mathbf{2}_{\mathrm{H}}$ 2Me

Table S1. Optimized structures and HOMO-LUMO frontier orbitals of DBPH and TBTP at the level of the B3LYP/6-31 G*