

Electronic supplementary information for

**Intramolecular interaction of synthetic chlorophyll
heterodyads with different π -skeletons**

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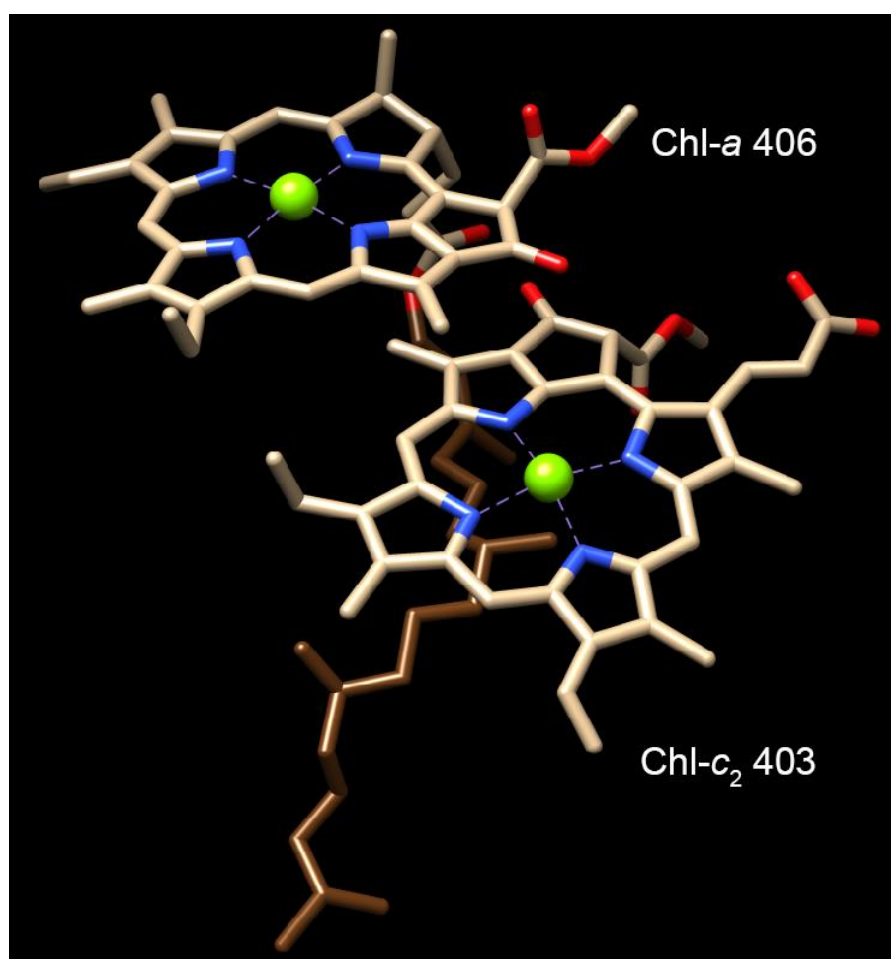
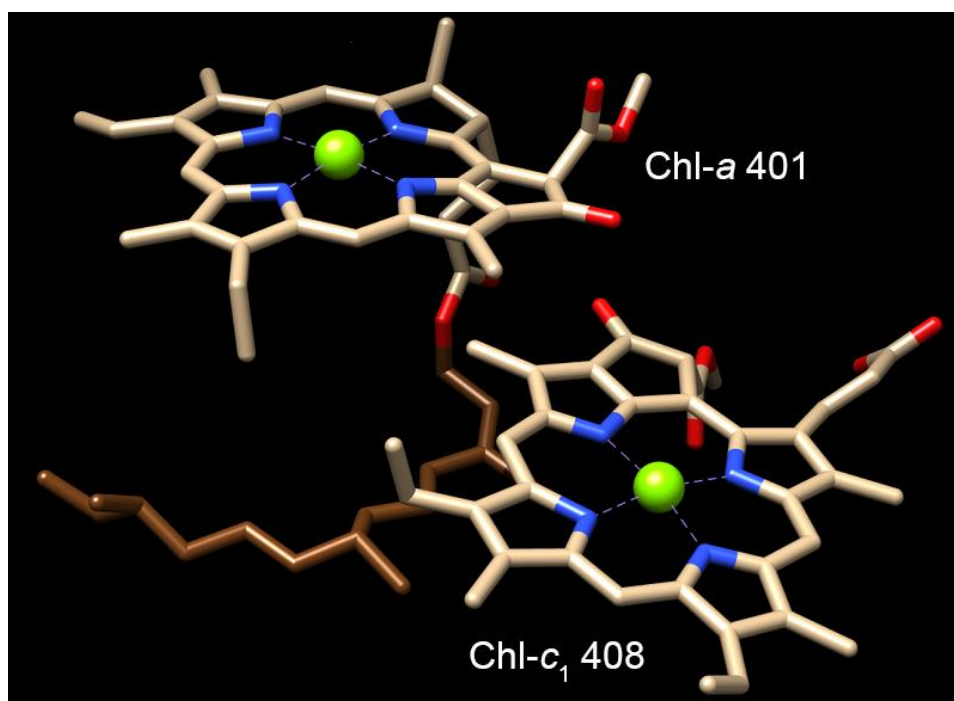


Fig. S1 Interaction of Chl-*a* 401 with Chl-*c*₁ 408 (upper) and Chl-*a* 406 with Chl-*c*₂ 403 (upper) in FCP based on PDB #6A2W.

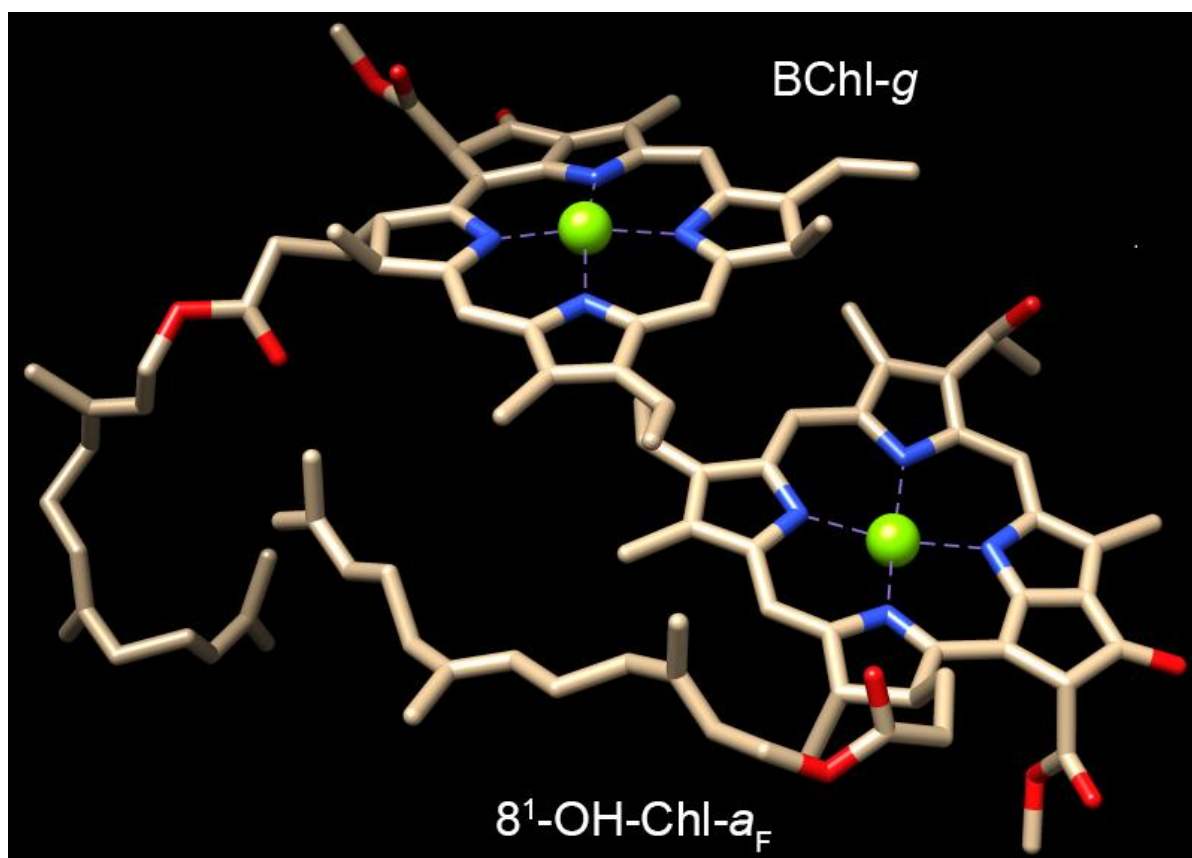


Fig. S2 Interaction of BChl-*g* with 8¹-OH-Chl-*a_F* in heliobacterial RC based on PDB #5V8K.

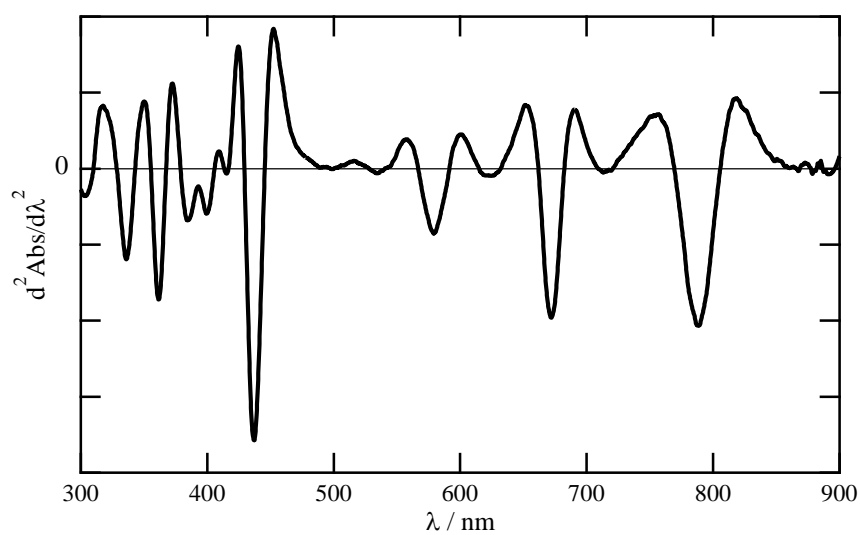


Fig. S3 Second derivative in electronic absorption spectrum of **ZnB-ZnC** (5 μM) in 1% (v/v) methanol and benzene.

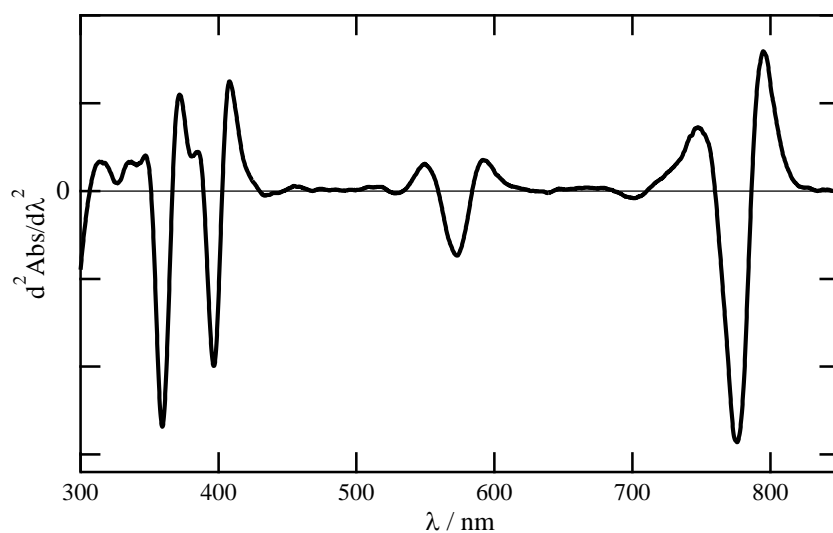


Fig. S4 Second derivative in electronic absorption spectrum of **ZnB** (5 μM) in 1% (v/v) methanol and benzene.

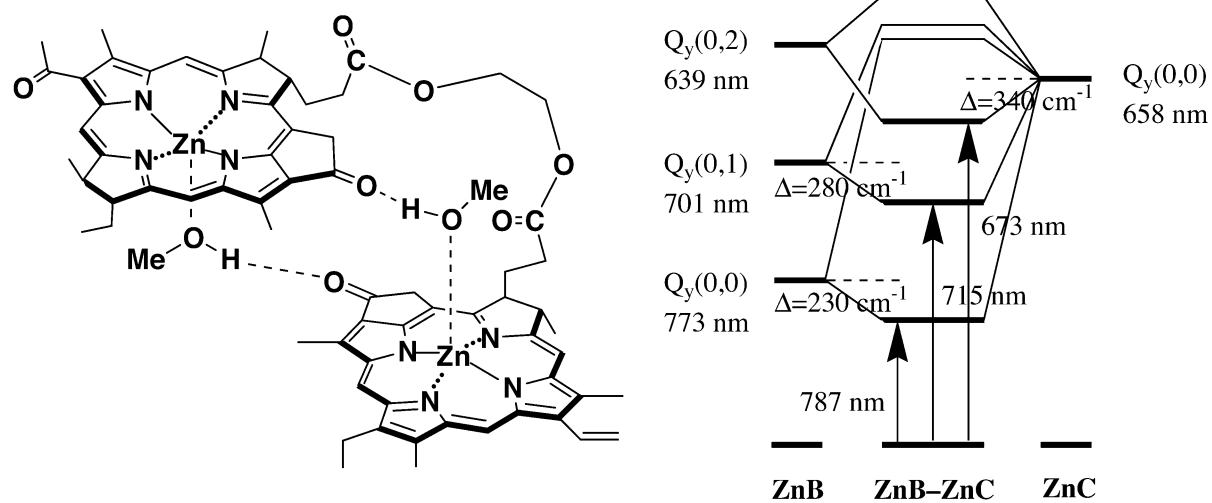
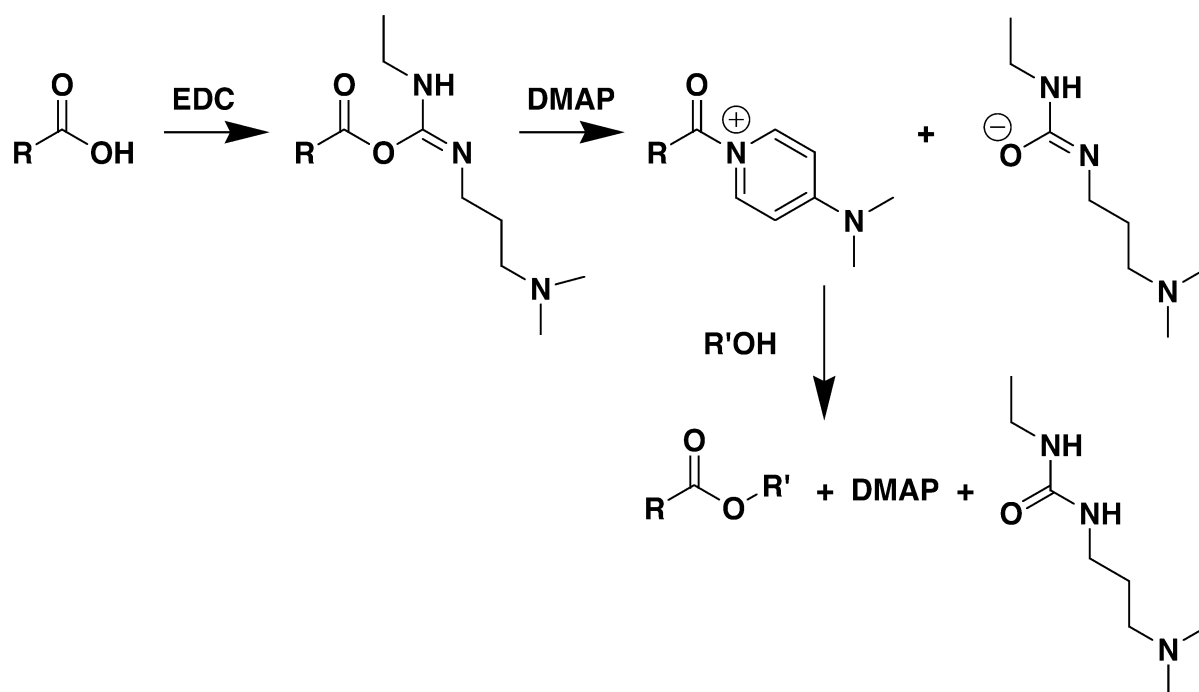


Fig. S5 Proposed conformers of methanol-locked heterodiyads (left) and the estimated energy levels of their excitonically coupled Q_y bands (right): **ZnC–ZnP**·2MeOH (upper) and **ZnB–ZnC**·2MeOH (lower).



Scheme S1 Steglich esterification of carboxylic acid ($RCOOH$) with alcohol ($R'OH$) using EDC and DMAP [step (vii) in Fig. 5].