

Supplementary material

Potential of Cellulose Functionalized with Carboxylic Acid as Biosorbent for the Removal of Cationic Dyes in Aqueous Solution

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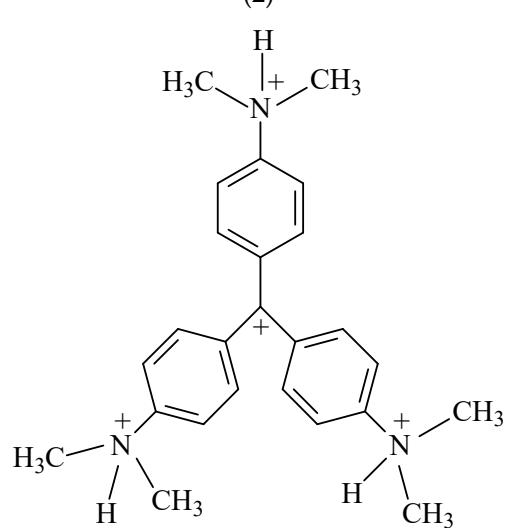
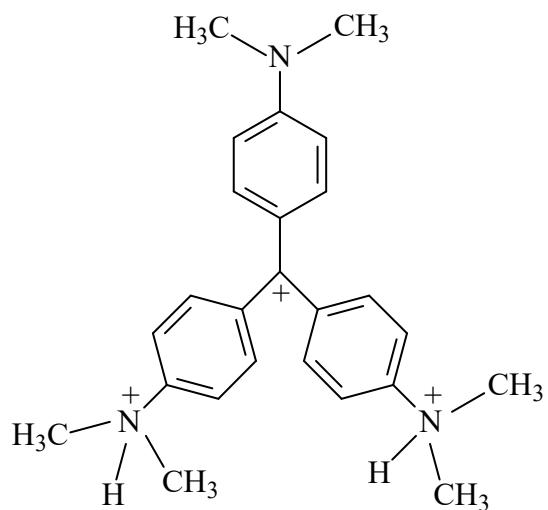
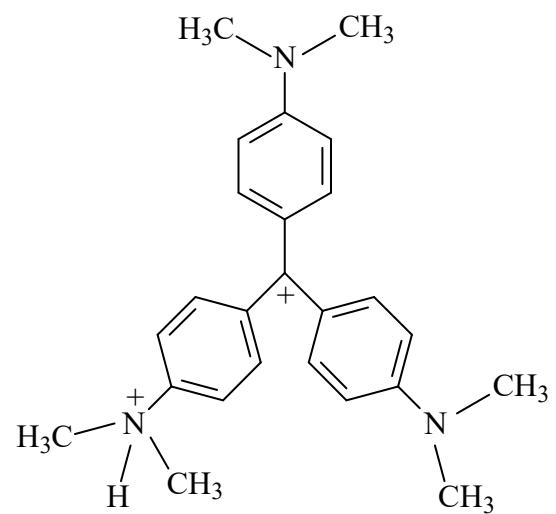
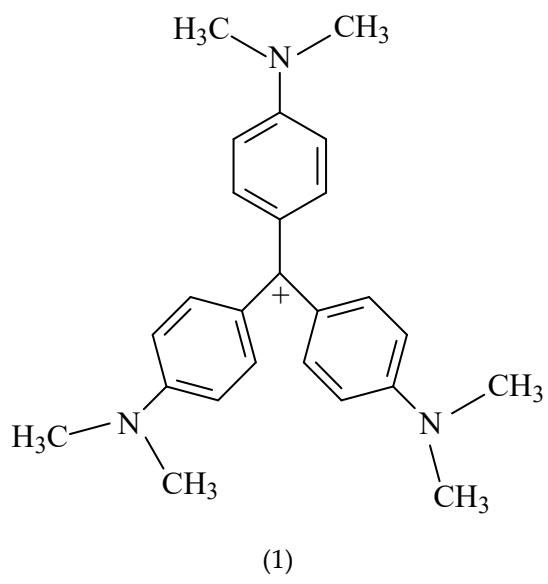
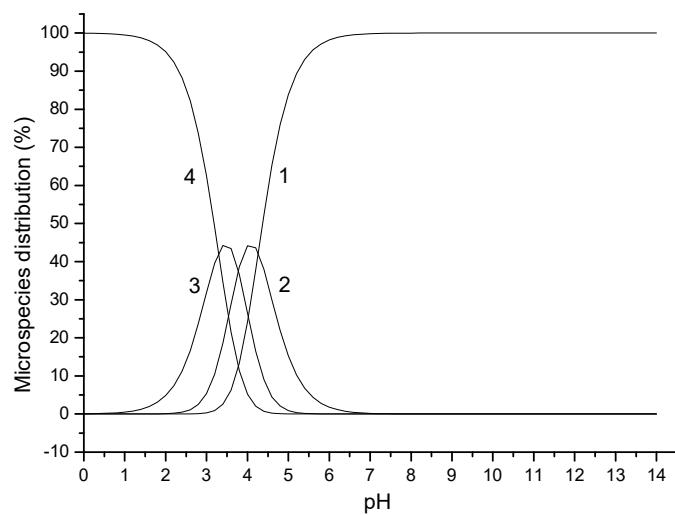
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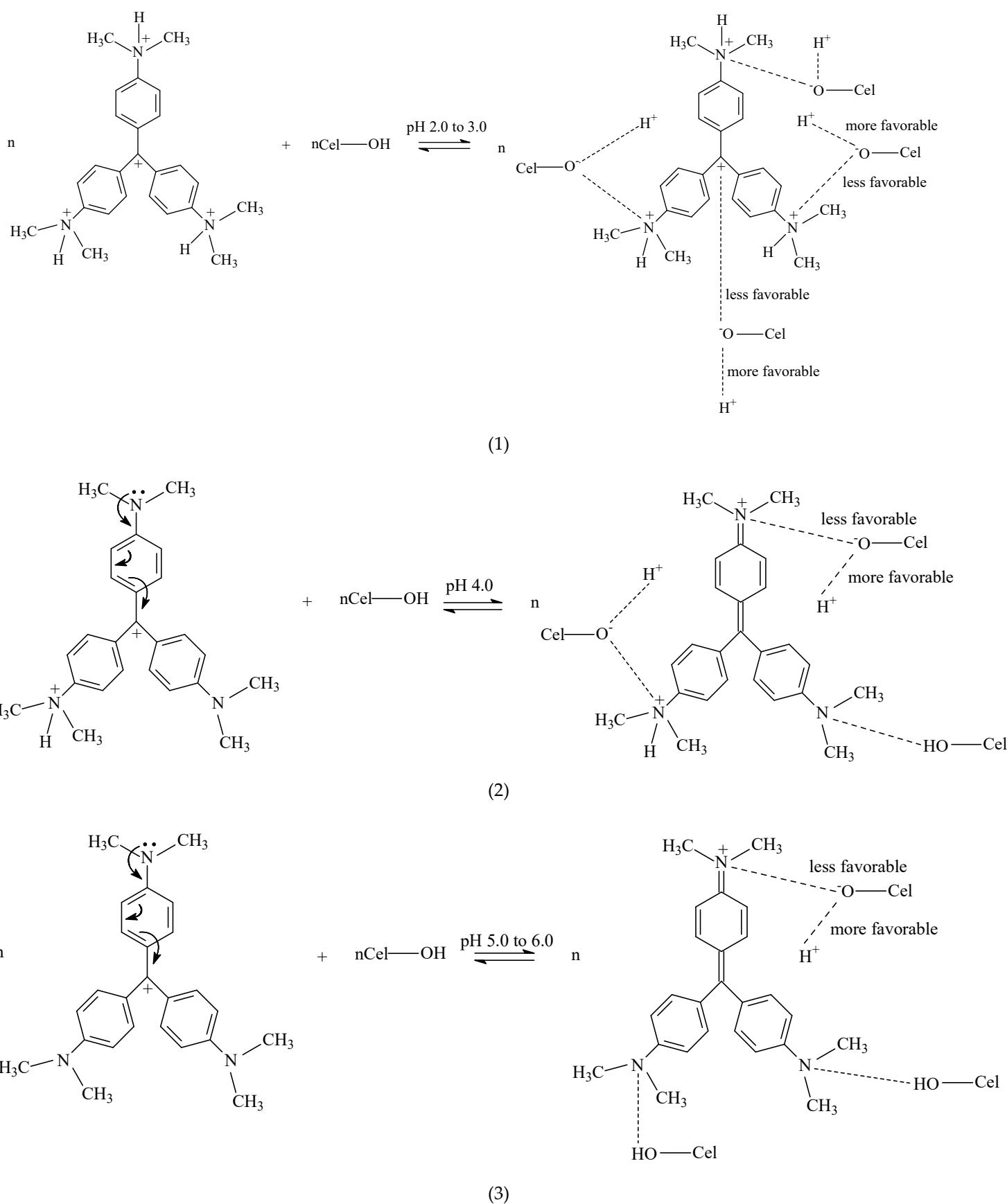
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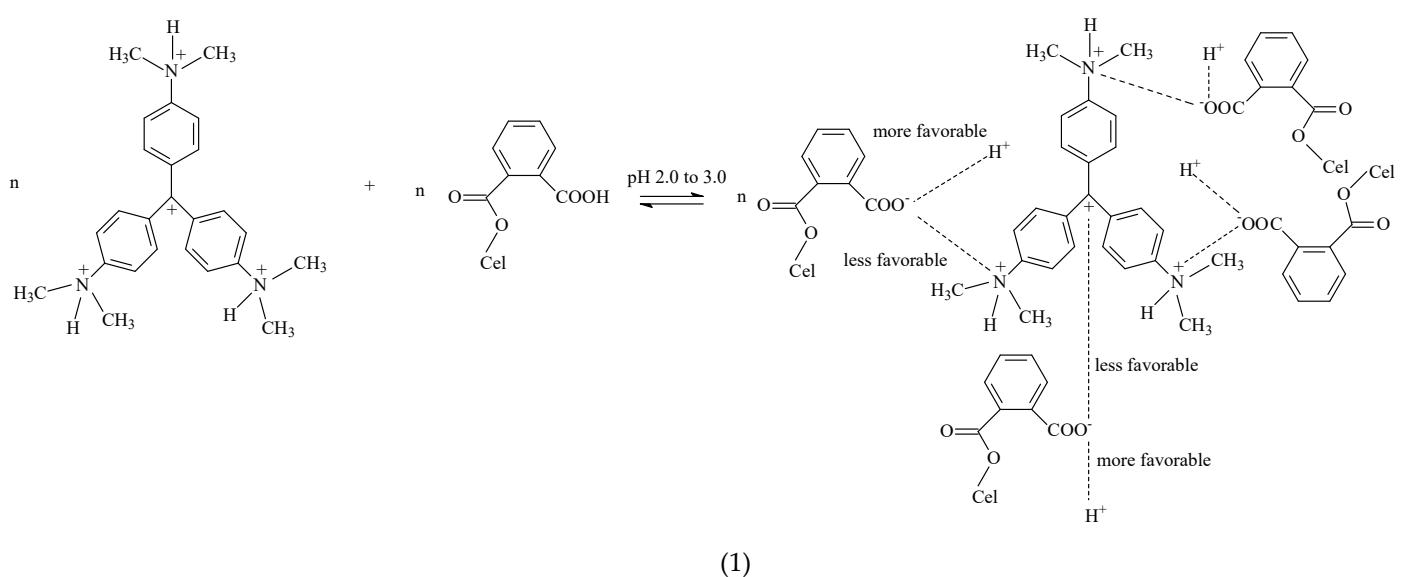
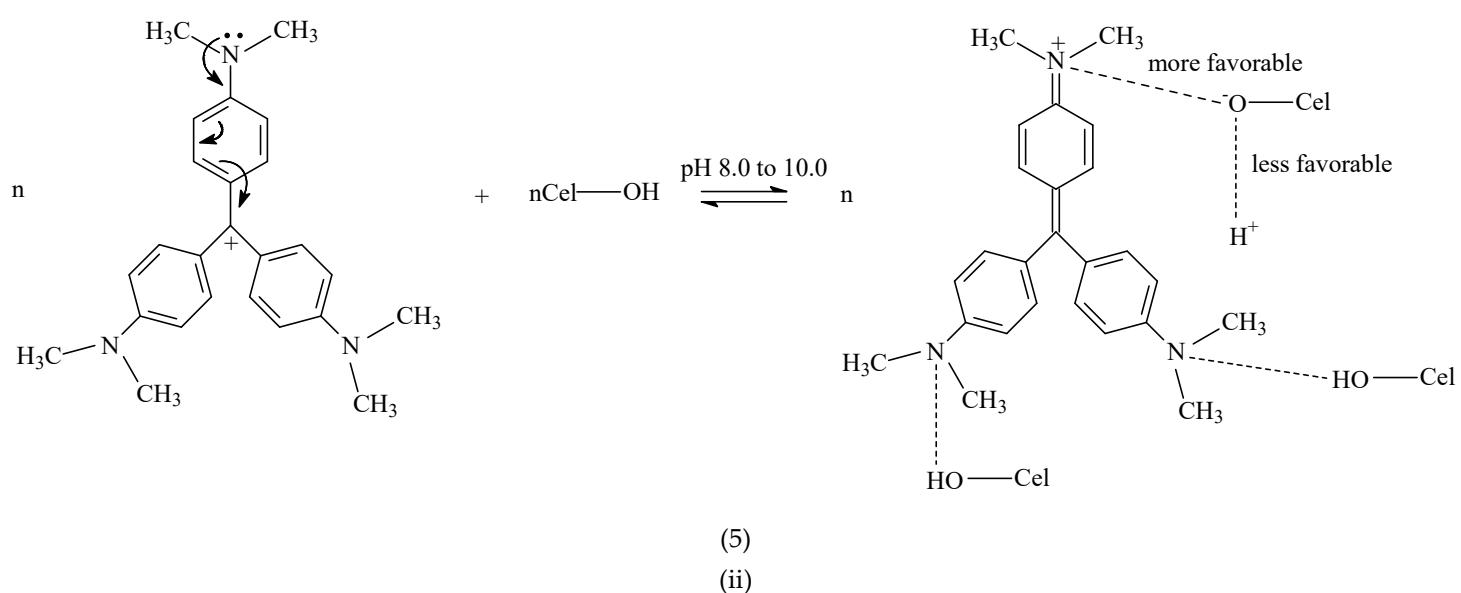
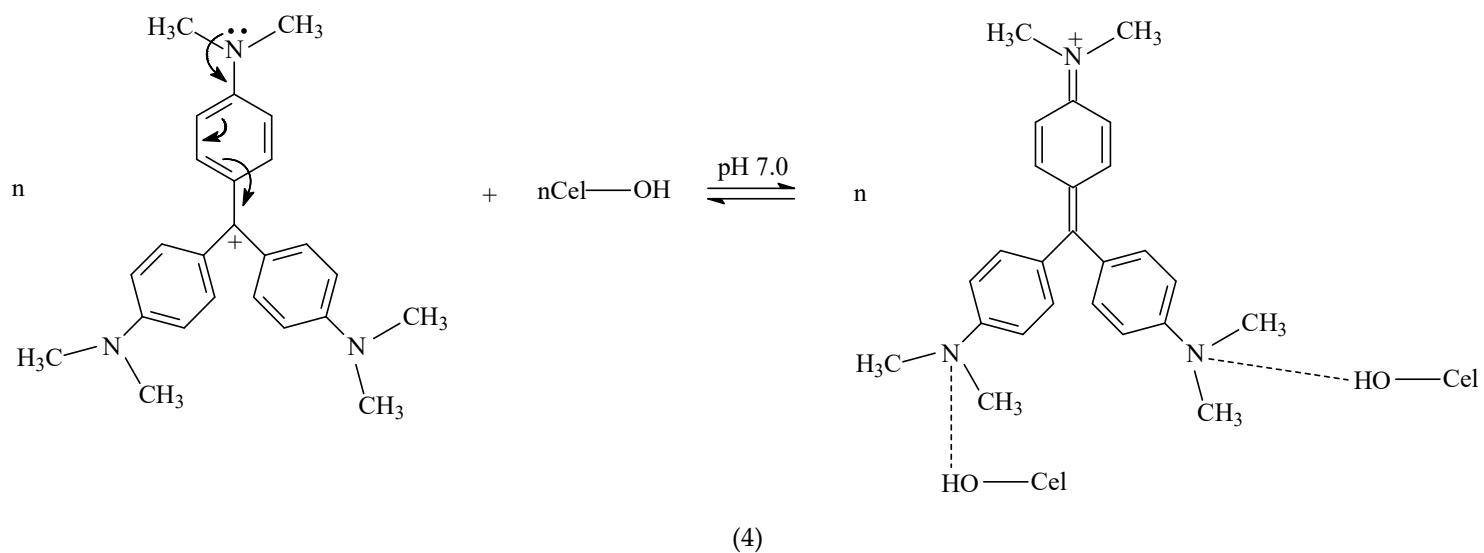
Contents of the supplementary material:

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| (i) Distribution of CV microspecies under different pHs. Scheme of adsorption process of CV in the (ii) Cel and (iii) PhCel under different pHs..... | Figure S1 |
| (i) Distribution of MB microspecies under different pHs. Scheme of adsorption process of MB in the (ii) Cel and (iii) PhCel under different pHs..... | Figure S2 |
| Effect of contact time on the adsorption of CV (a and b) and MB (c and d) onto Cel (- ■ -) or PhCel (- ● -) and the nonlinear adjustments of kinetic models..... | Figure S3 |
| Effect of CV concentration on the adsorption process in the Cel (a-c) or PhCel (d-f) in different temperatures and the nonlinear adjustments of Isotherm models..... | Figure S4 |
| Effect of MB concentration on the adsorption process in the Cel (a-c) or PhCel (d-f) in different temperatures and the nonlinear adjustments of Isotherm models..... | Figure S5 |



(i)





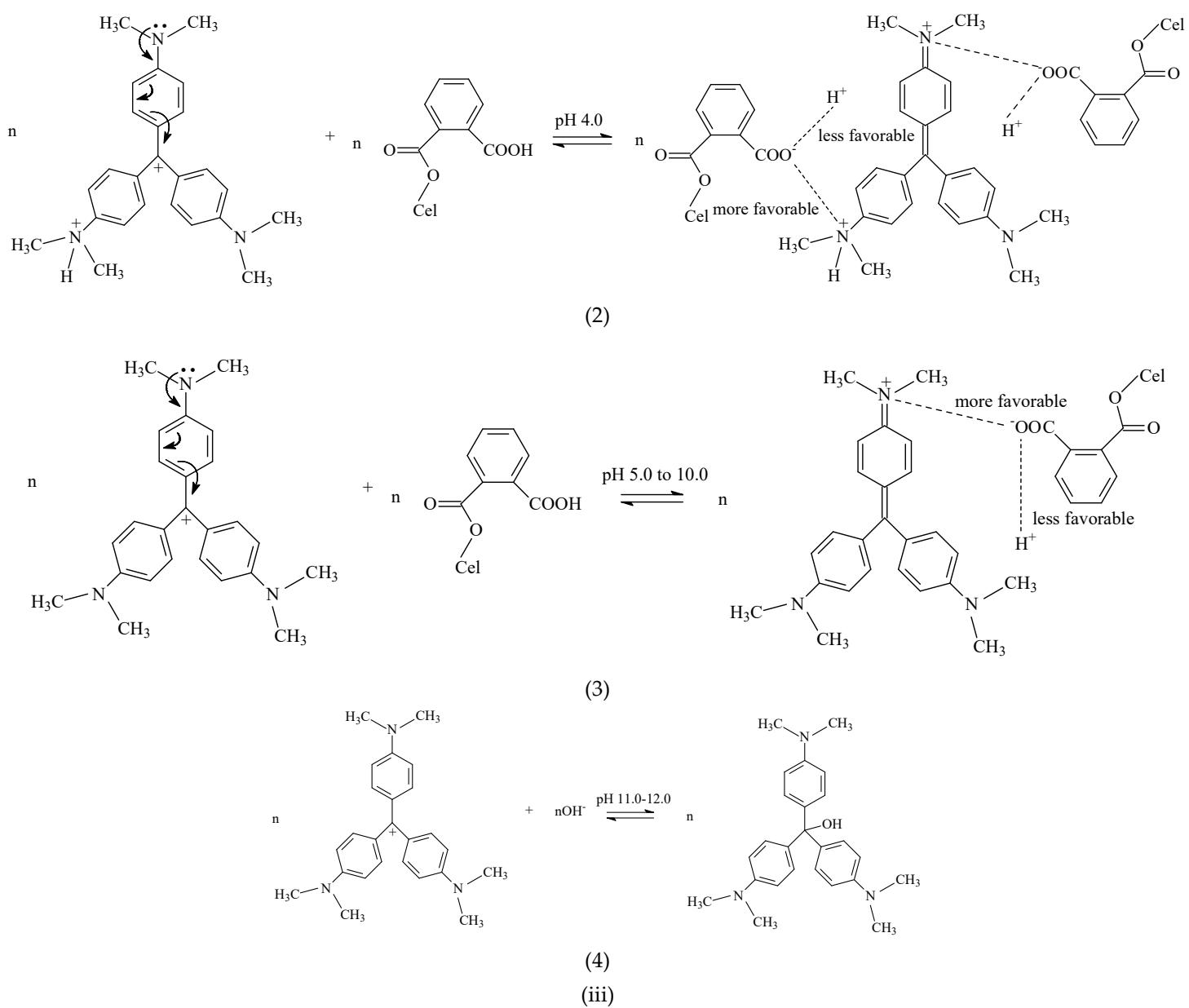
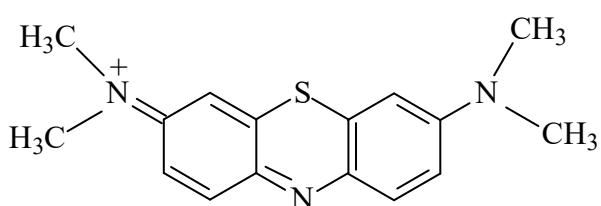
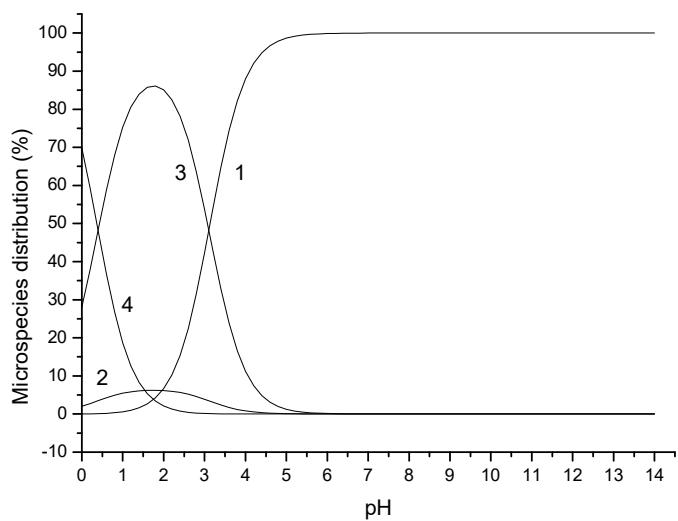
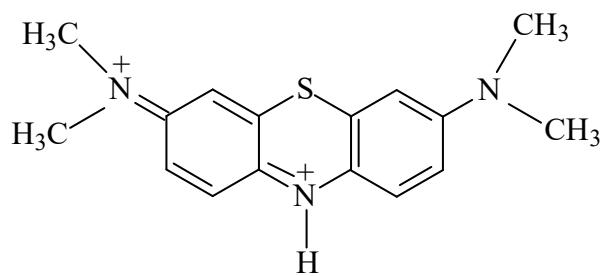


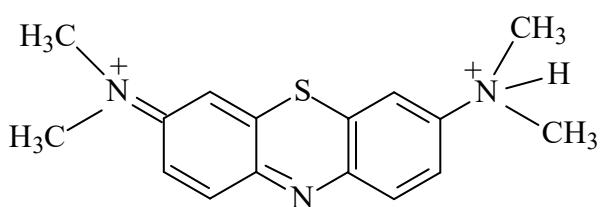
Figure S1. (i) Distribution of CV microspecies under different pHs. Scheme of adsorption process of CV in the (ii) Cel and (iii) PhCel under different pHs.



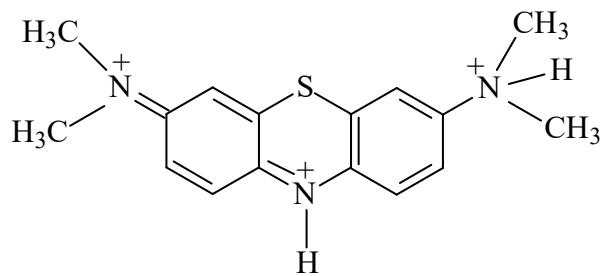
(1)



(2)

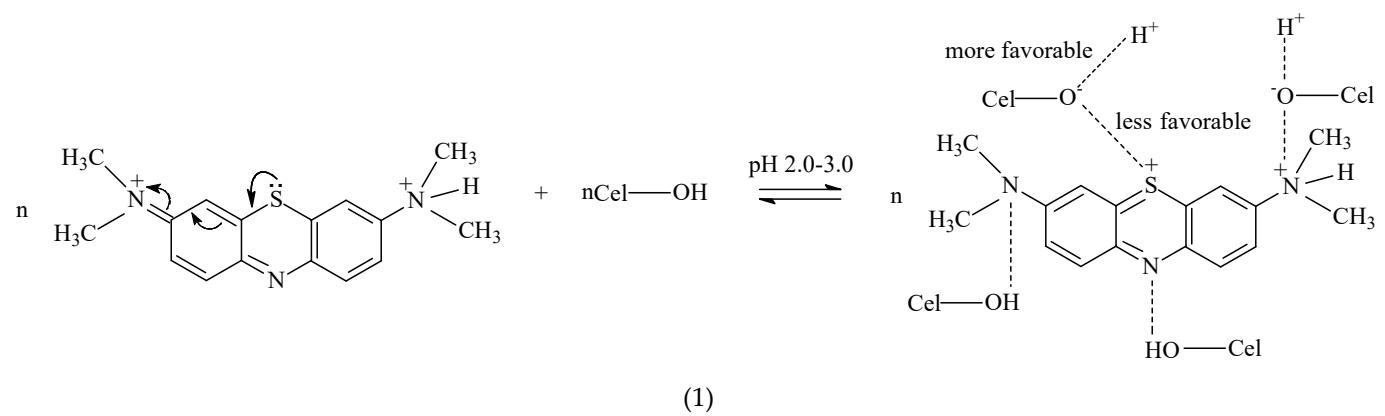


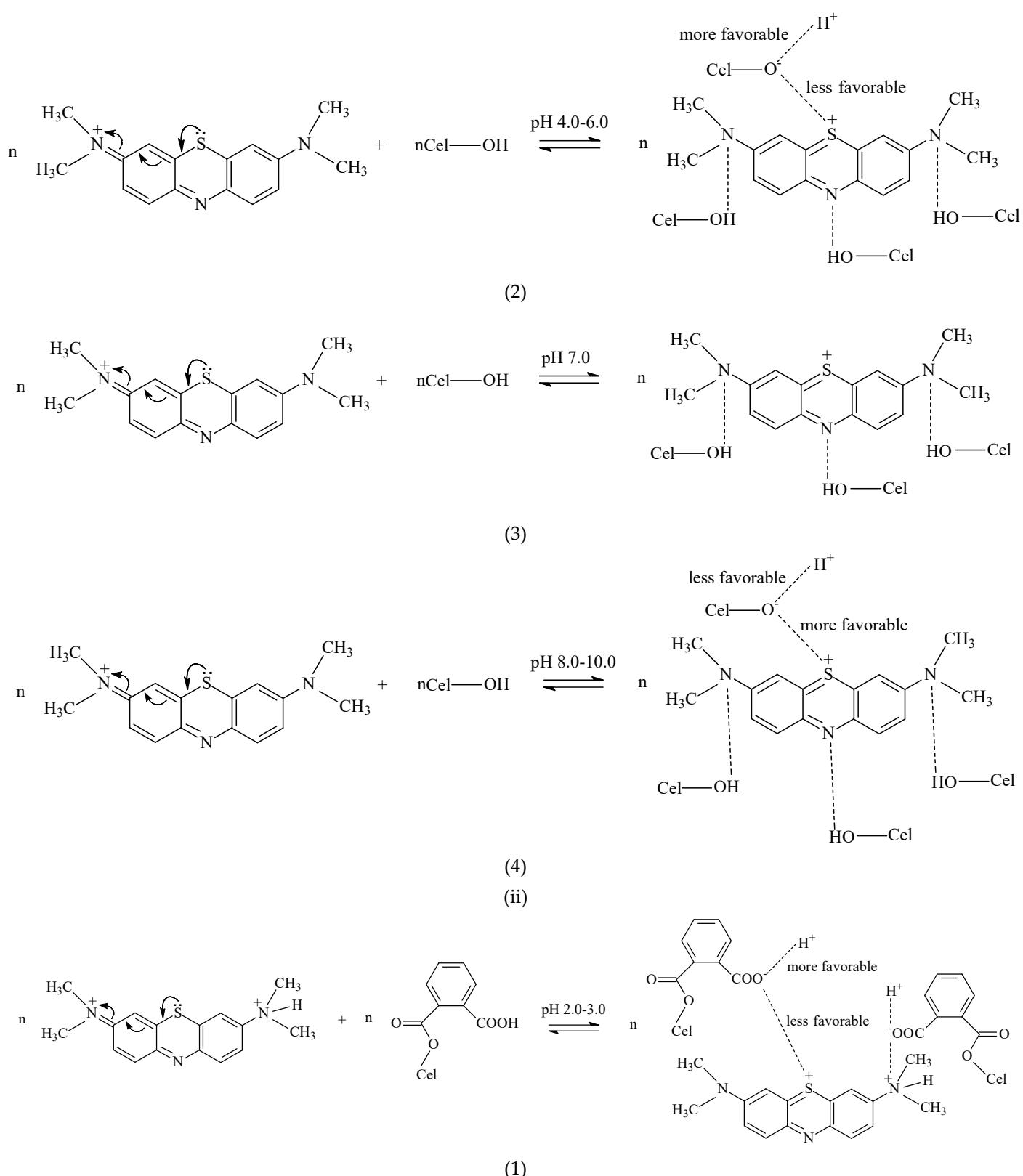
(3)



(4)

(i)





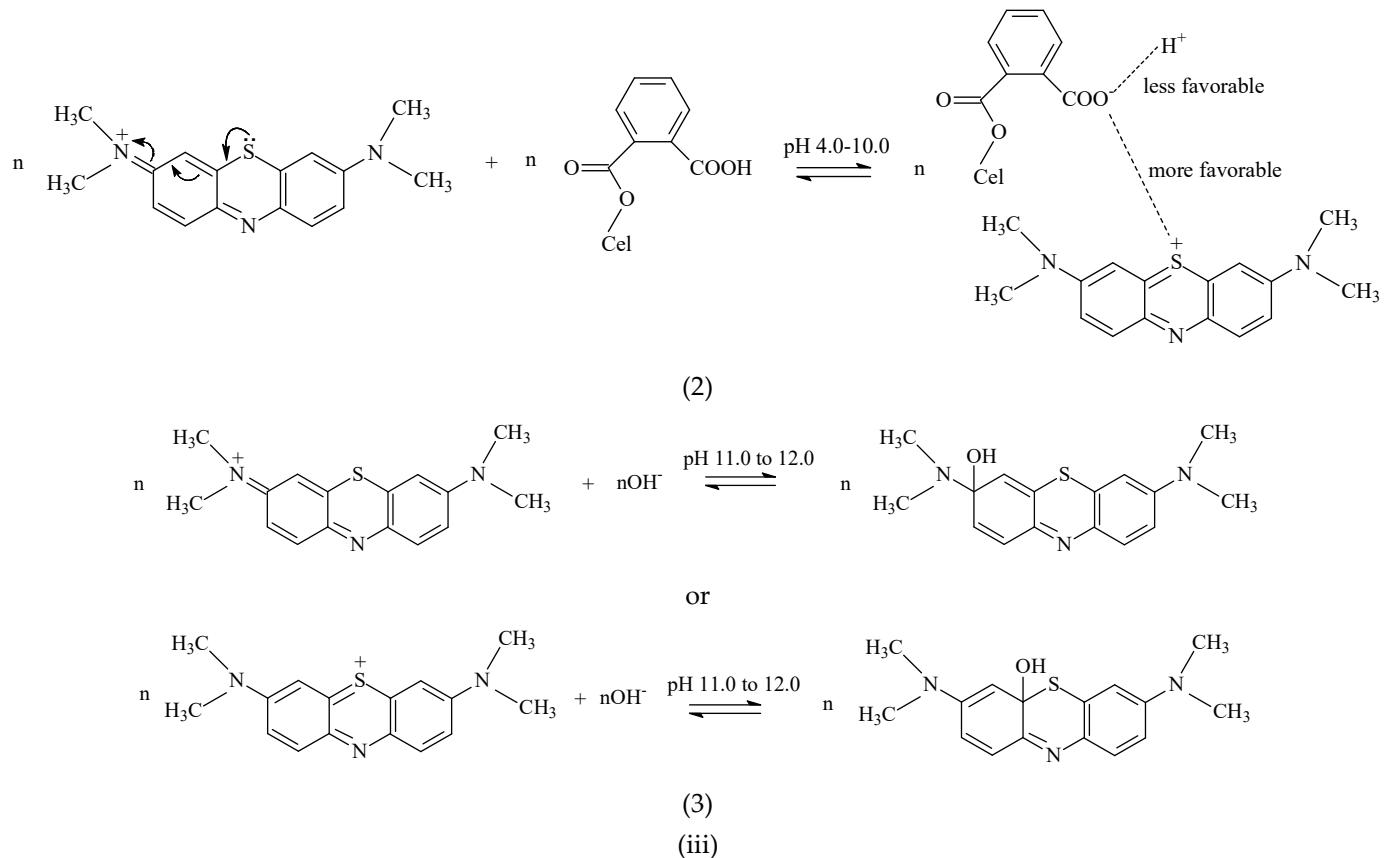


Figure S2. (i) Distribution of MB microspecies under different pHs. Scheme of adsorption process of MB in the (ii) Cel and (iii) PhCel under different pHs.

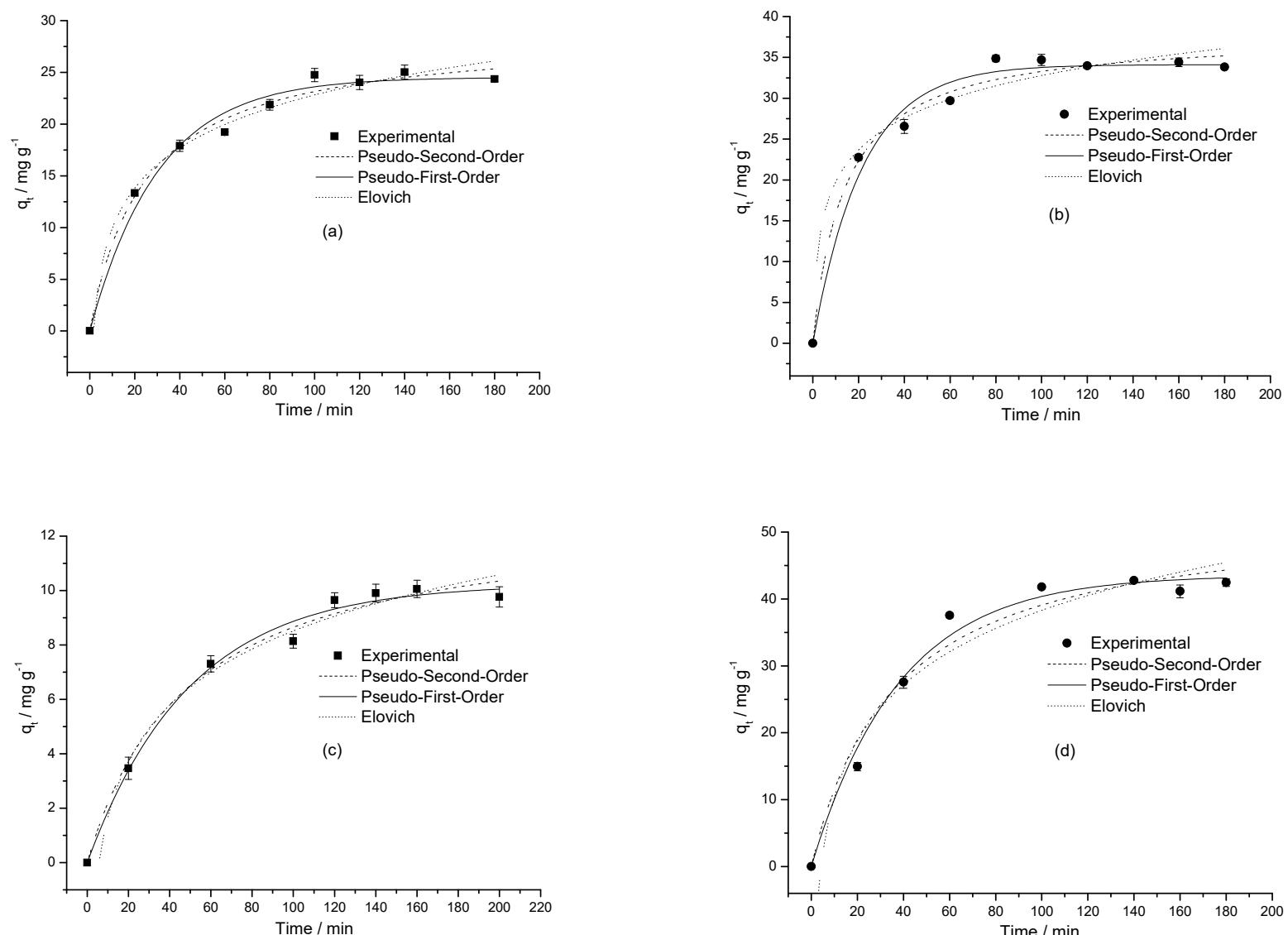


Figure S3. Effect of contact time on the adsorption of CV (a and b) and MB (c and d) onto Cel (- ■ -) or PhCel (- ● -) and the nonlinear adjustments of kinetic models.

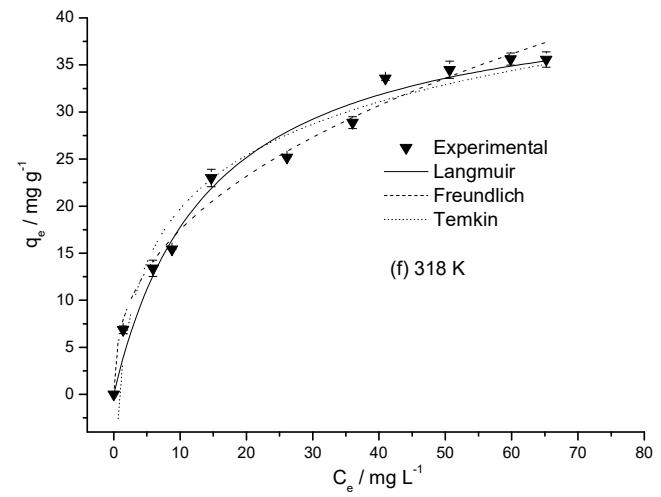
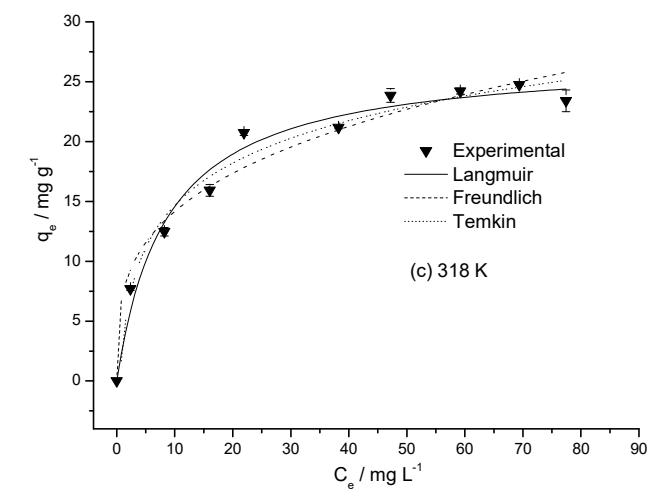
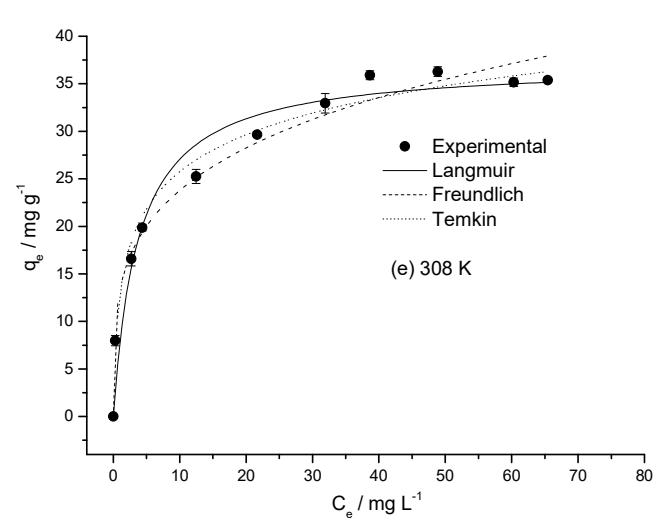
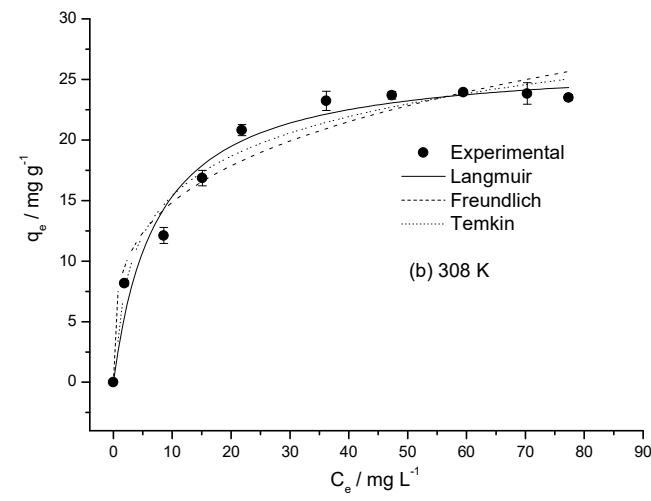
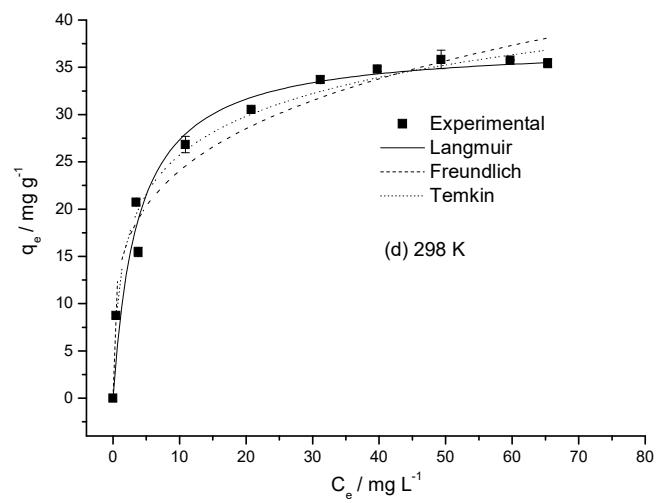
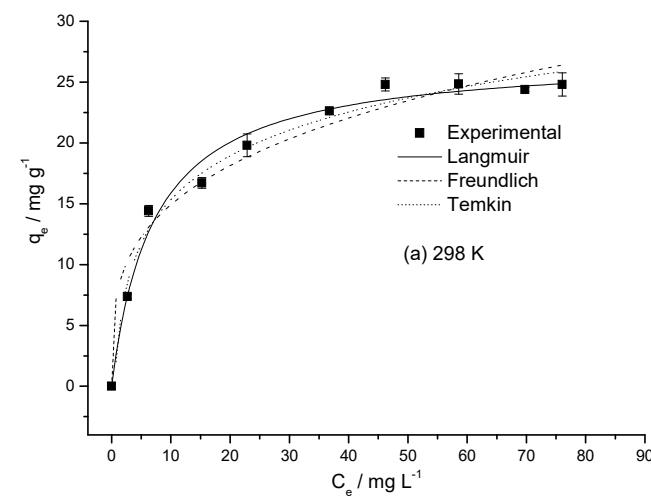


Figure S4. Effect of CV concentration on the adsorption process in the Cel (a–c) or PhCel (d–f) in different temperatures and the nonlinear adjustments of Isotherm models.

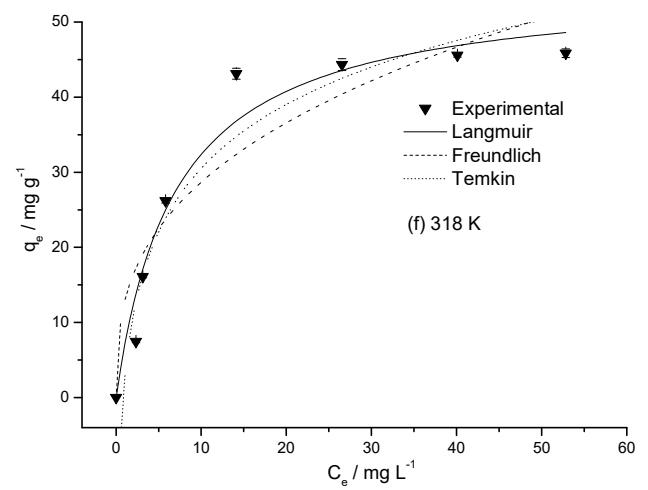
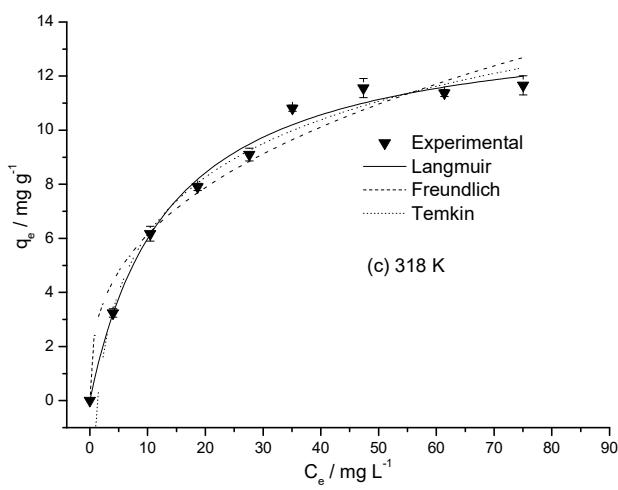
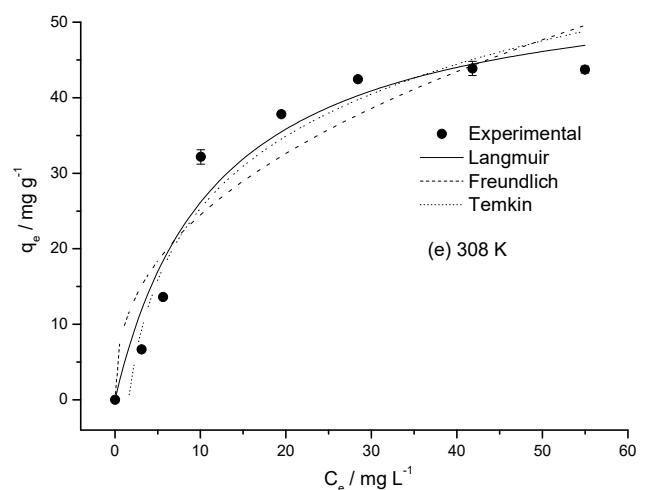
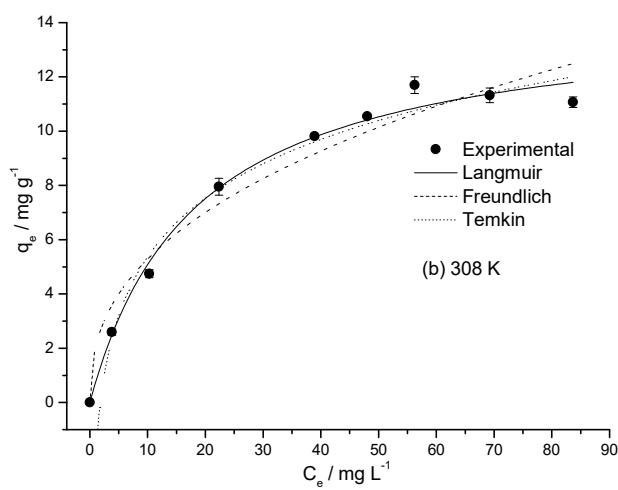
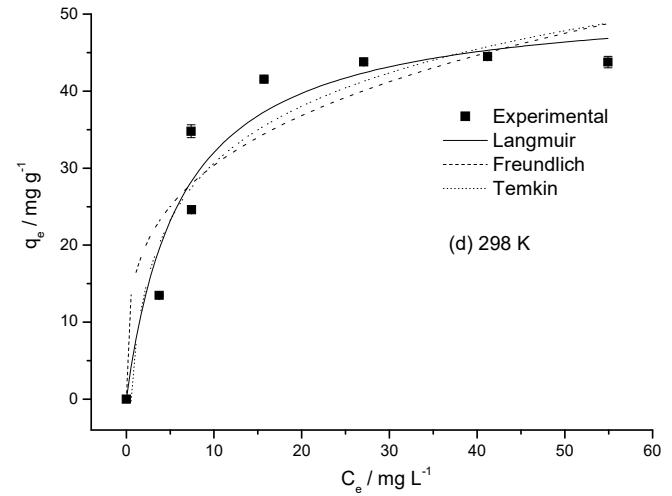
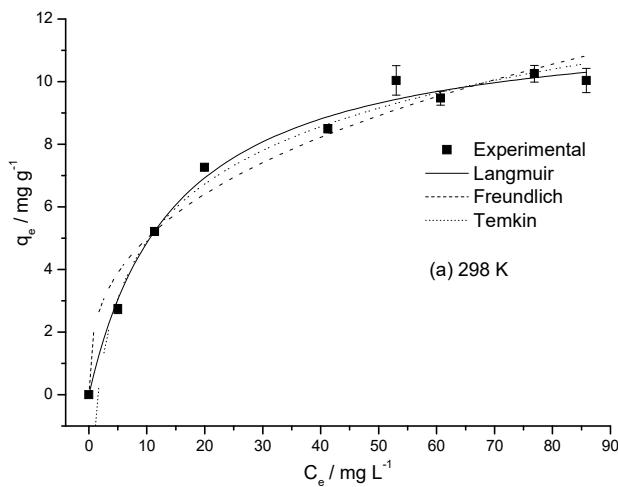


Figure S5. Effect of MB concentration on the adsorption process in the Cel (a–c) or PhCel (d–f) in different temperatures and the nonlinear adjustments of Isotherm models.