

Figure S13. Relative energies of the conformers of (BMIM)(γ -CF₃-Pen) with respect to the most stable conformer

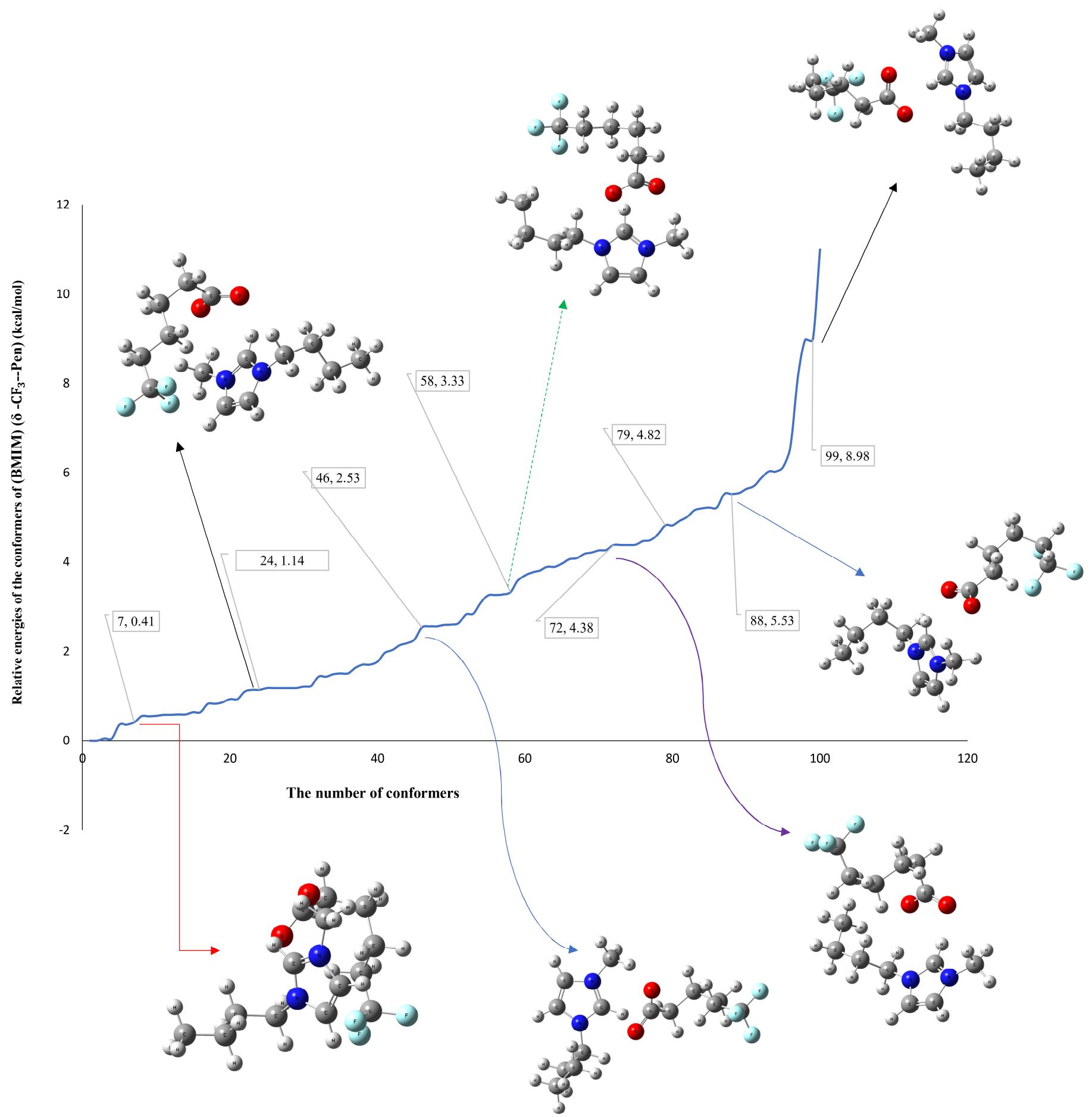


Figure S14. Relative energies of the conformers of (BMIM) (δ -CF₃-Pen) with respect to the most stable conformer

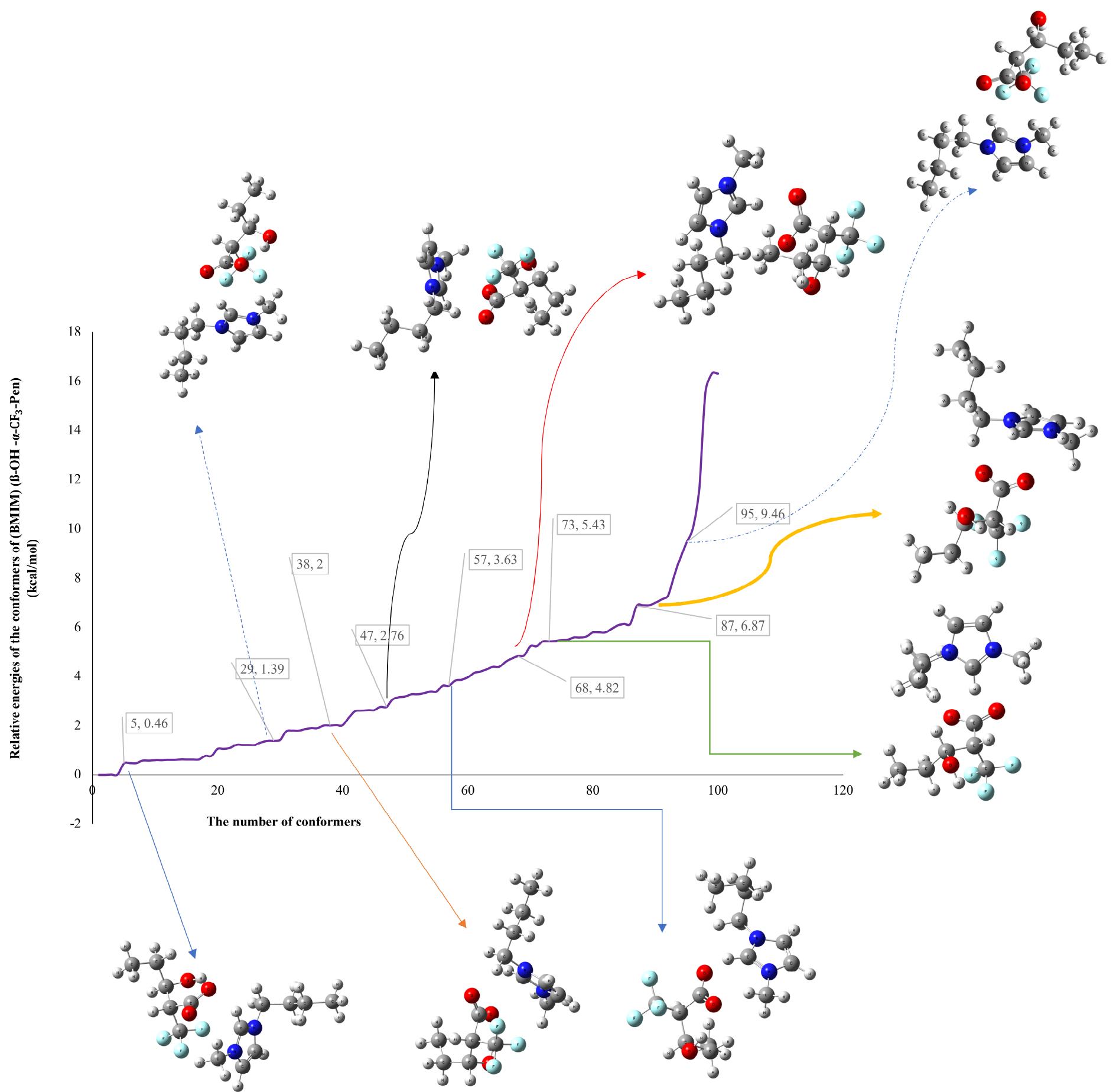


Figure S15. Relative energies of the conformers of (BMIM) (β -OH - α -CF₃-Pen) with respect to the most stable conformer

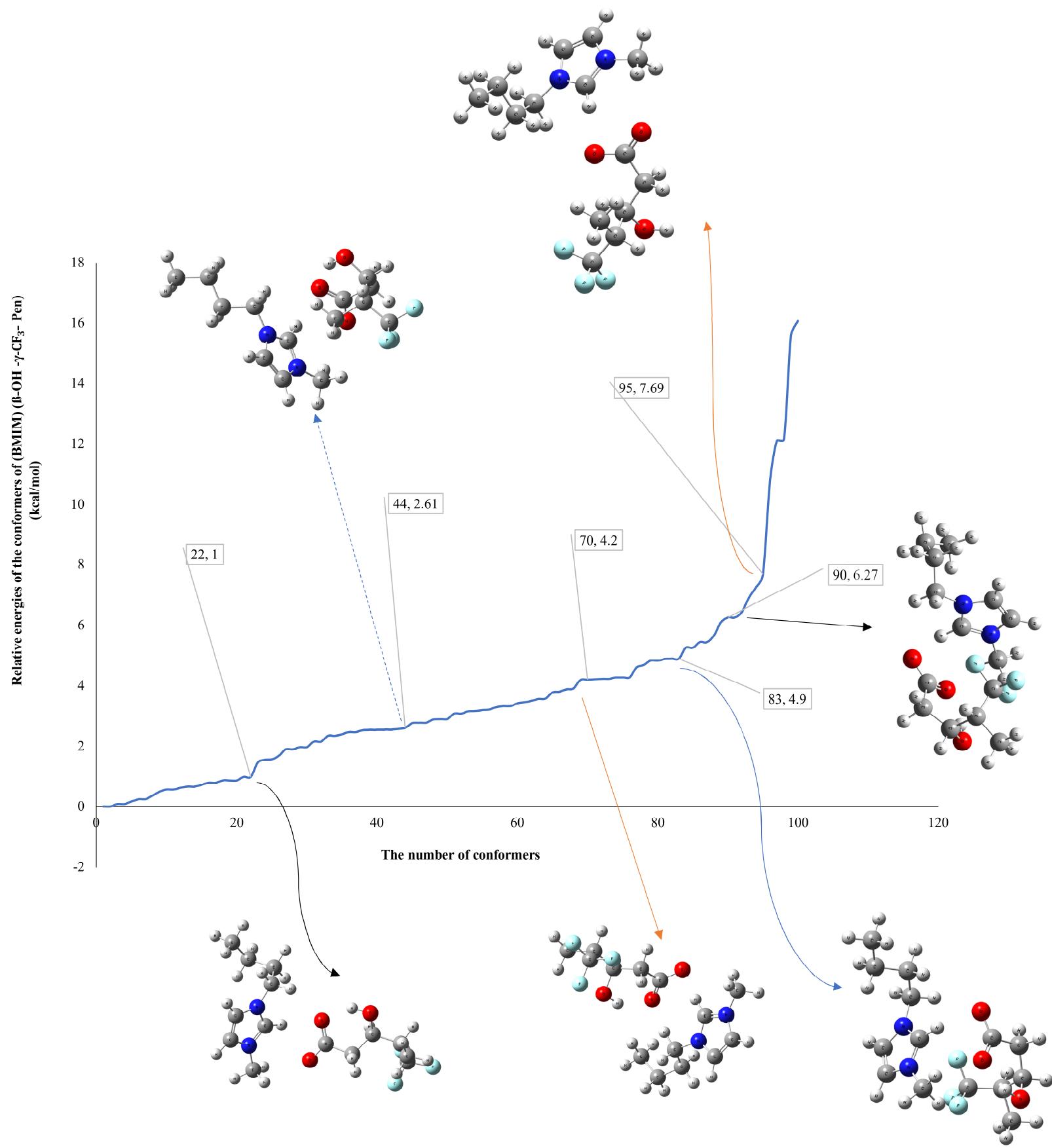


Figure S16. Relative energies of the conformers of (BMIM) (β -OH - γ -CF₃- Pen) with respect to the most stable conformer

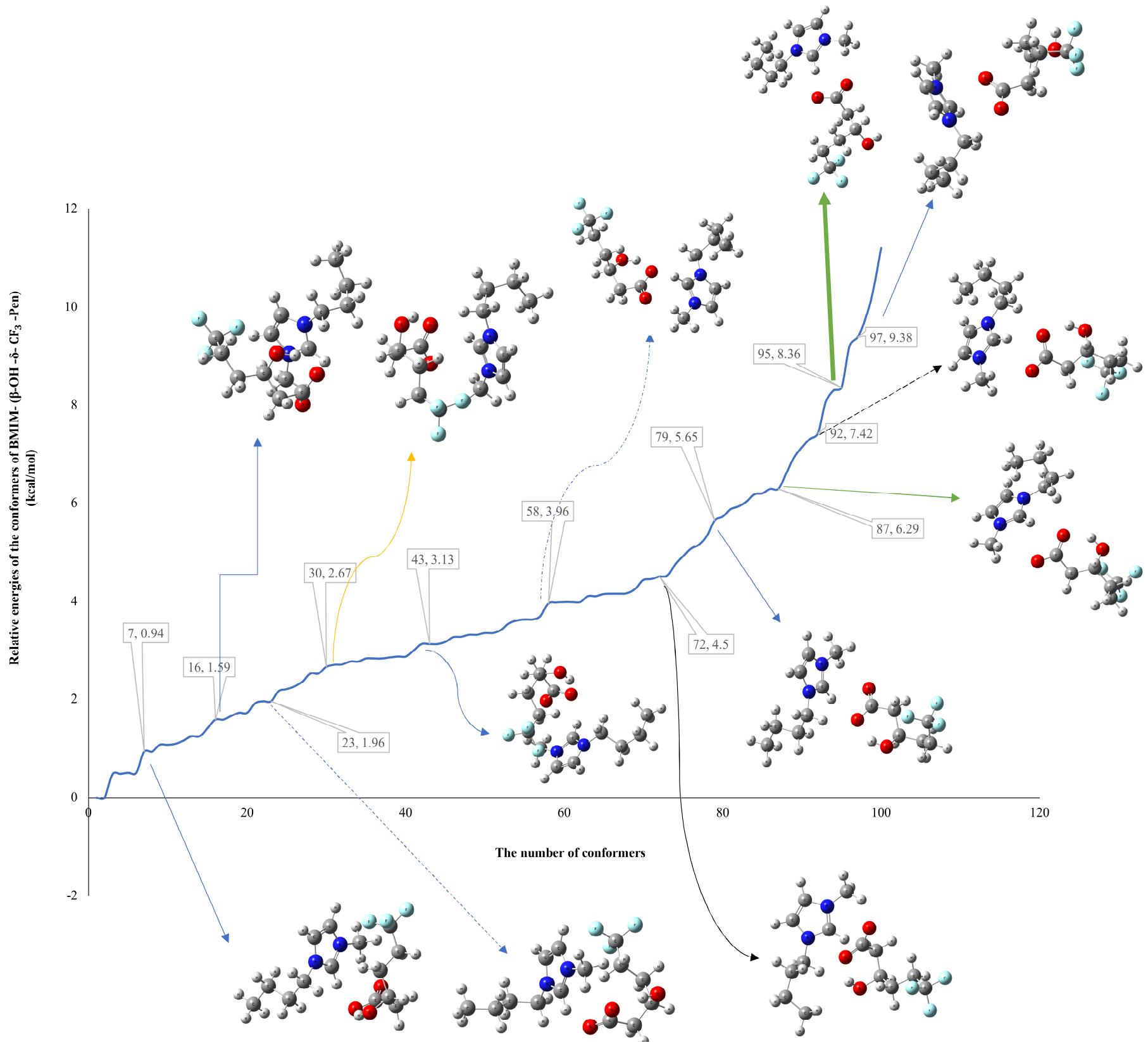


Figure S17. Relative energies of the conformers of (BMIM) (β -OH - δ -CF₃- Pen) with respect to the most stable conformer

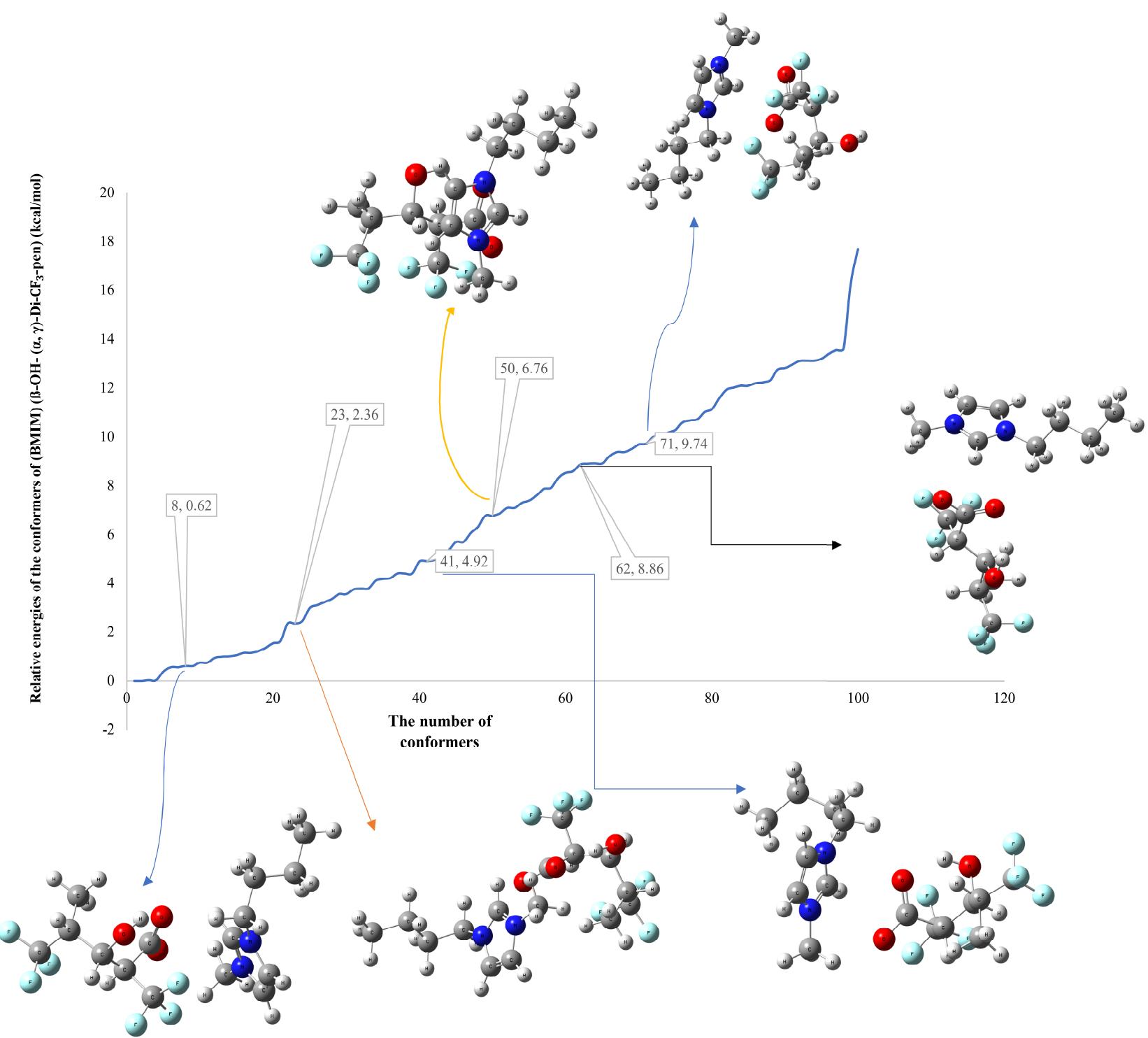


Figure S18. Relative energies of the conformers of (BMIM) (β -OH- (α, γ)-Di-CF₃-Pen) with respect to the most stable conformer

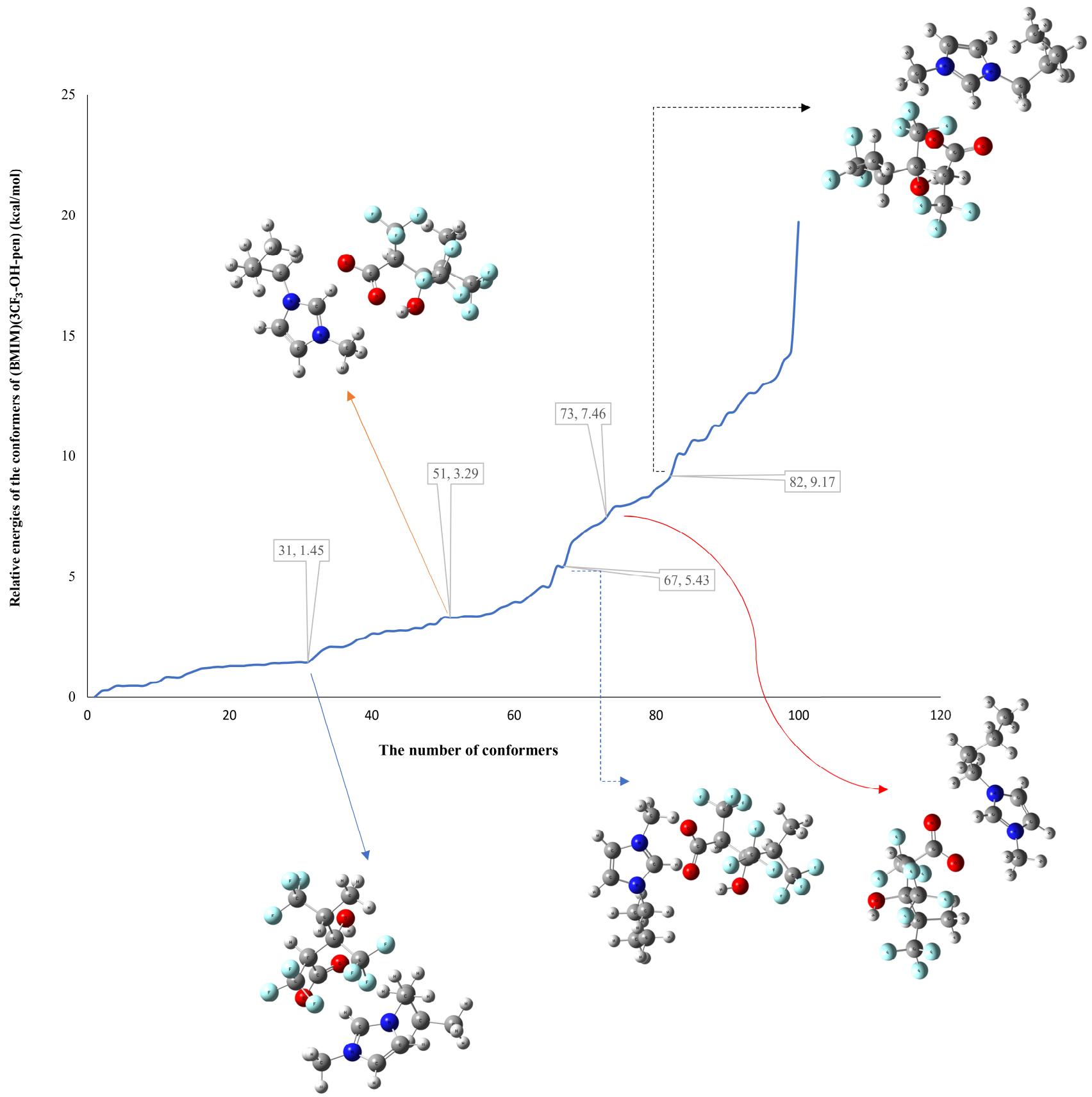


Figure S19. Relative energies of the conformers of (BMIM)(3CF₃-OH-pen) with respect to the most stable conformer

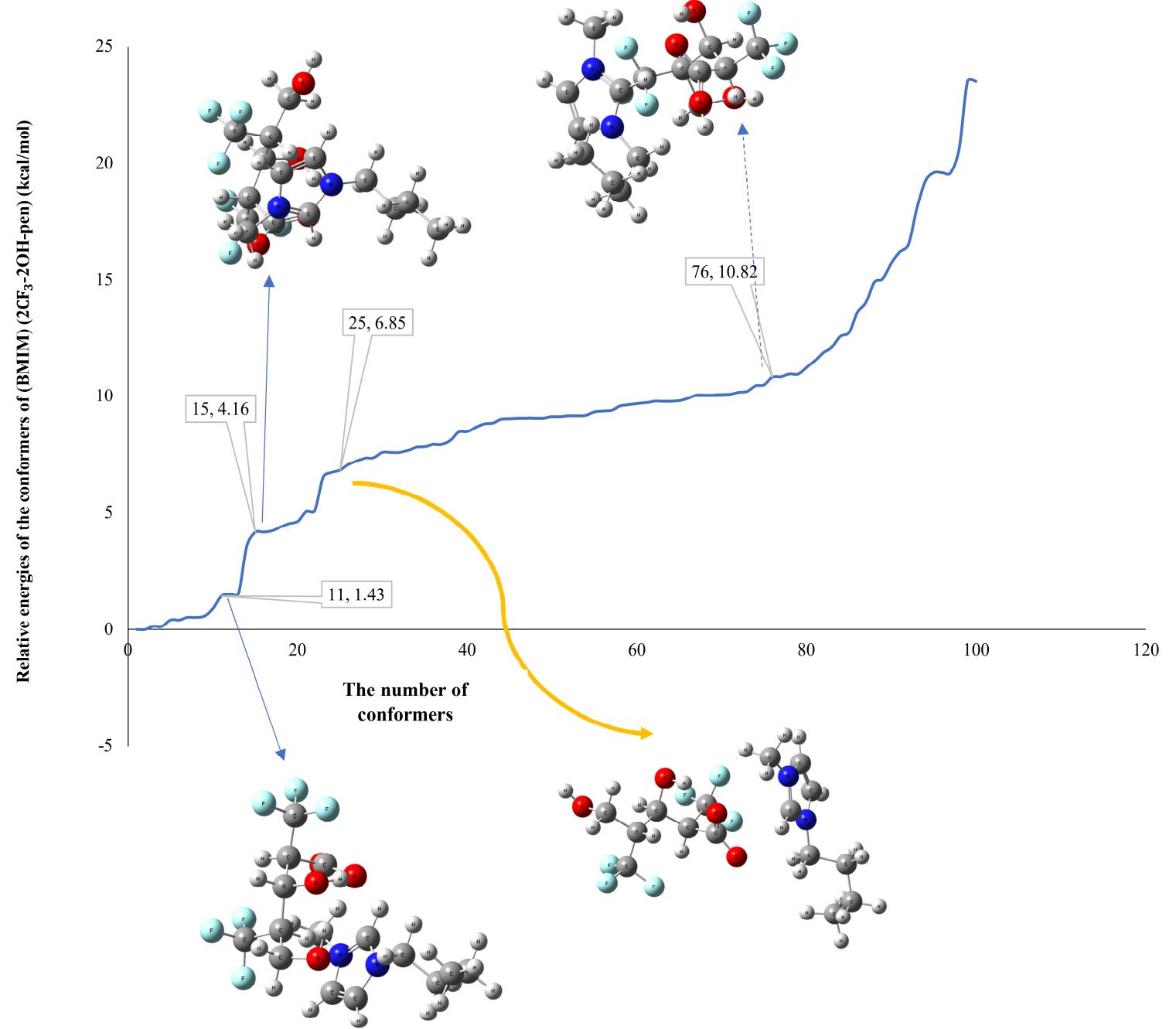


Figure S20. Relative energies of the conformers of (BMIM) ($2\text{CF}_3\text{-}2\text{OH}\text{-Pen}$) with respect to the most stable conformer