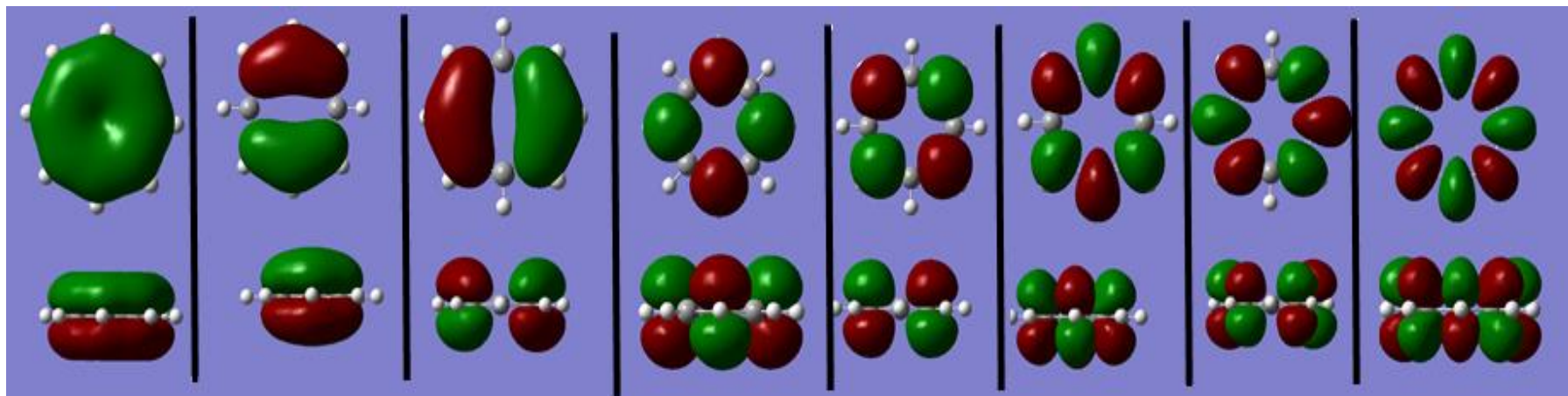
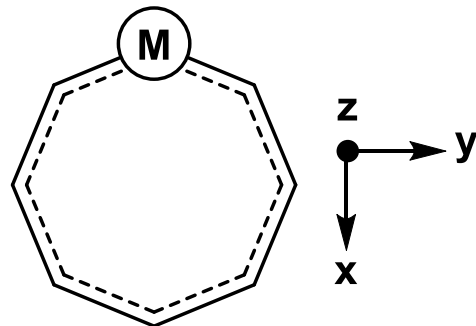


Axial symmetry along the principal rotation axis

σ	π	π	δ	δ	ϕ	ϕ	
Metal orbitals of correct symmetry to interact							
s, p_z d_{z^2}, f_{z^3}	p_x, d_{xz} f_{xz^2}	p_y, d_{yz} f_{yz^2}	$d_{x^2-y^2}$ $f_{z(x^2-y^2)}$	d_{xy} f_{xyz}	$f_{x(x^2-3y^2)}$	$f_{y(y^2-3x^2)}$	



Axial symmetry along an axis directly above one of the carbon atoms

σ	σ	π	σ	π	σ	π	σ
Metal orbitals of correct symmetry to interact							
s, p_z d_{z^2}, f_{z^3}	s, p_z d_{z^2}, f_{z^3}	p_y, d_{yz} f_{yz^2} (d_{xz}, f_{xyz} not as good)	s, p_z d_{z^2}, f_{z^3}	p_y, d_{yz} f_{yz^2} (d_{xz}, f_{xyz} not as good)	s, p_z d_{z^2}, f_{z^3}	p_y, d_{yz} f_{yz^2}	s, p_z d_{z^2}, f_{z^3}