

## Metal-halide mediated radical generation and crystallization

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Tertiary amine dication and radical monocation were synthesized and crystallized in a one-pot, one-step redox reaction with high-valent metal halides. The substances form X-Ray quality crystals within 2-3 days under air-free conditions and are persistent radicals in both solution and crystalline state. EPR spectroscopy confirms the presence of radicals as well as reduced, paramagnetic metal ions. Structural comparisons between neutral tertiary amines and their corresponding radicals show increased coplanarity and changes in bond lengths in the vicinity of the oxidized N atom.

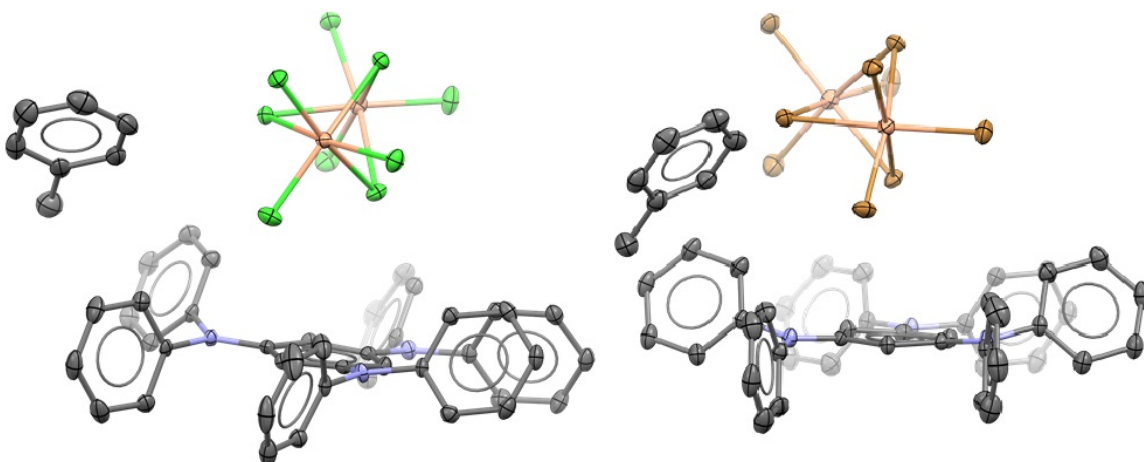


Figure 1