

When Martin's Spirosilane Meets N-Heterocyclic Carbene (NHC)



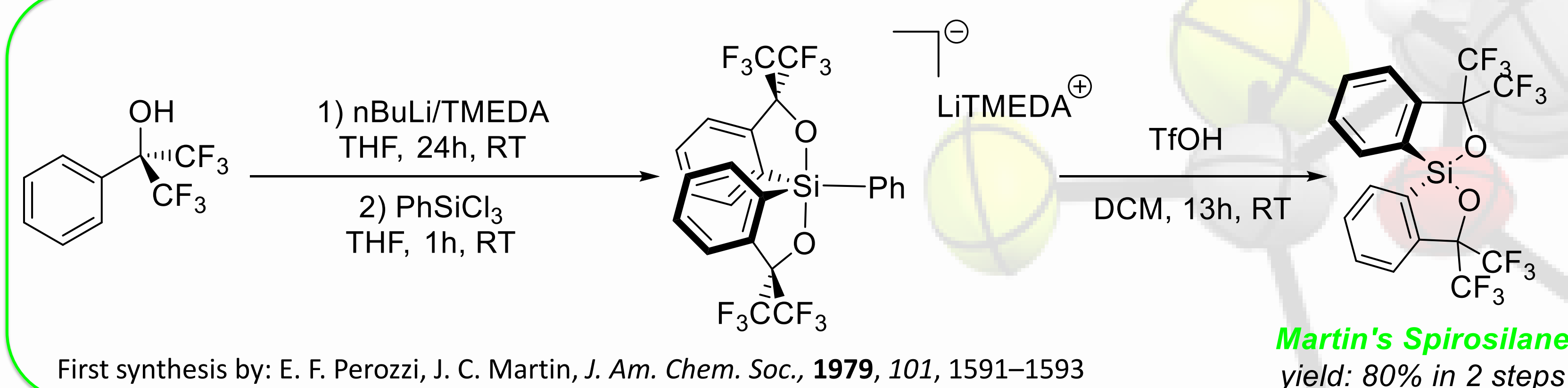
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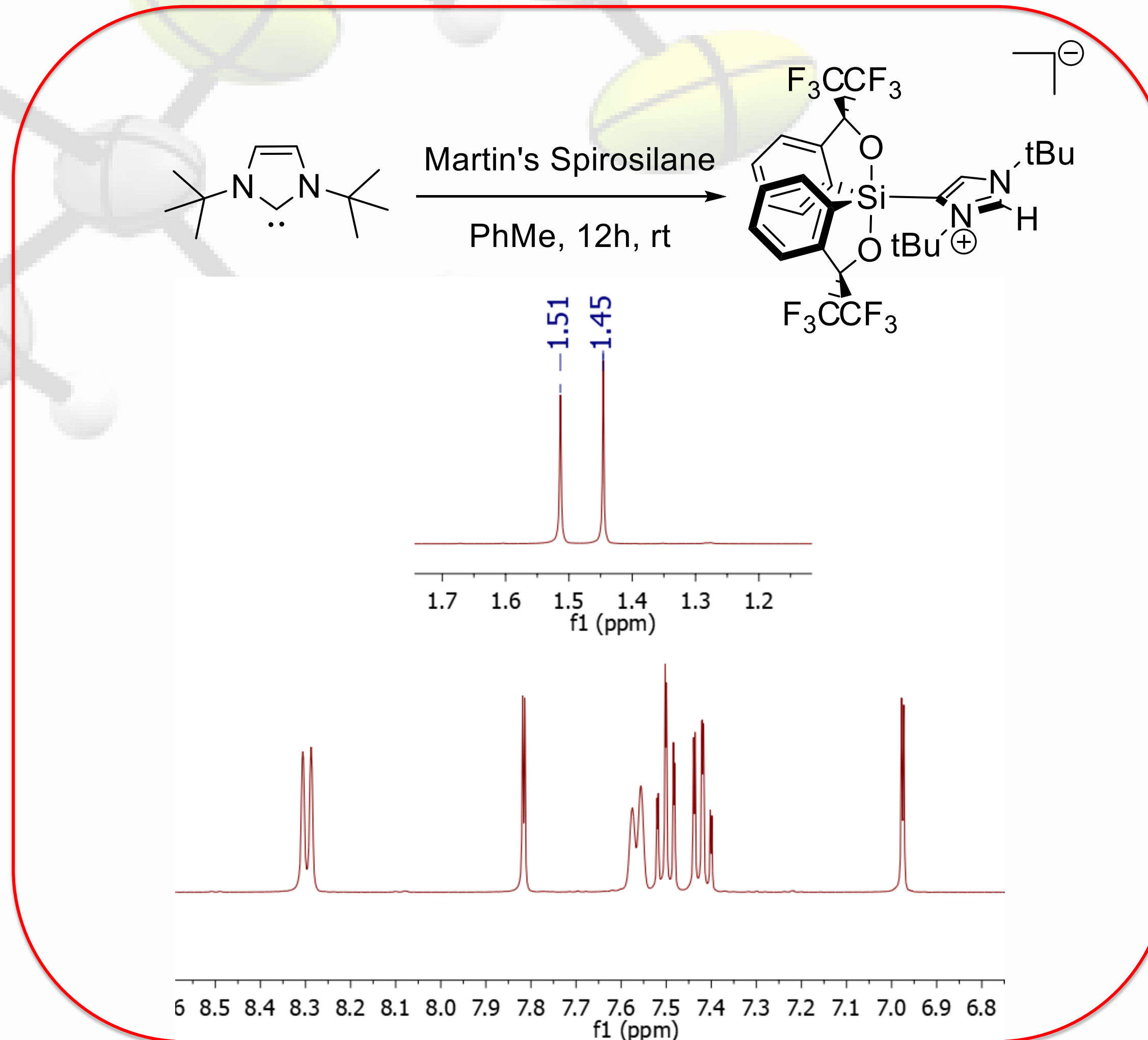
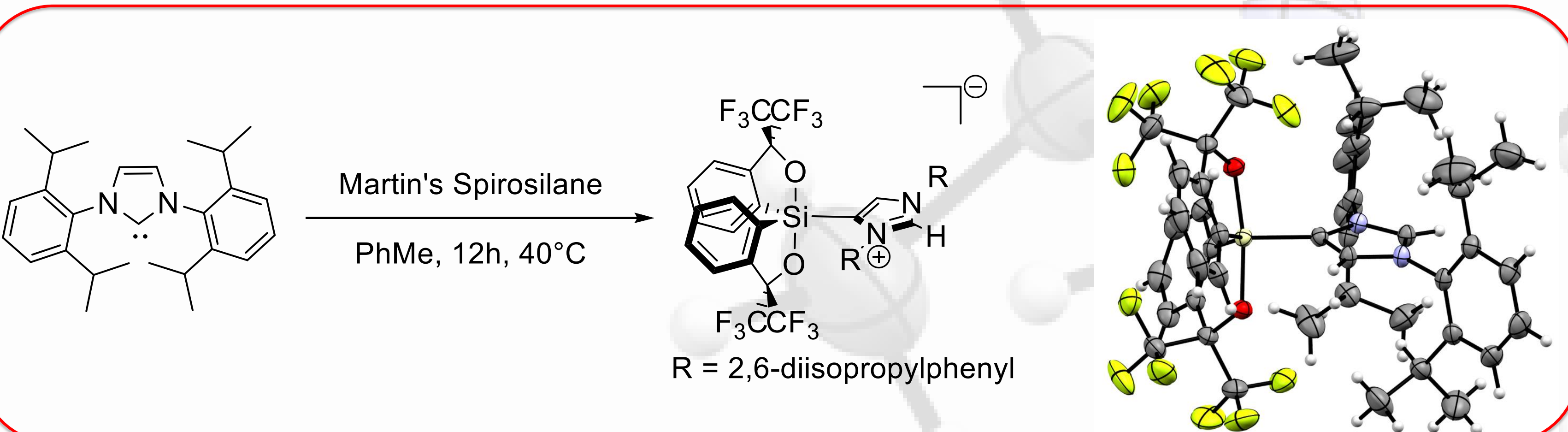
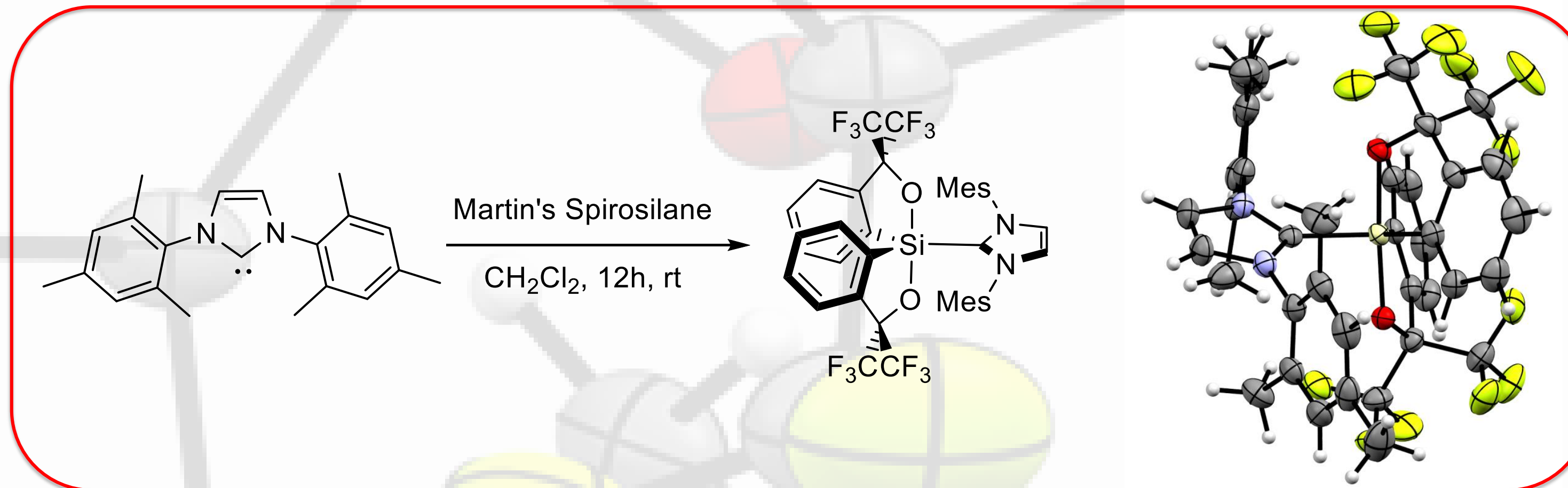
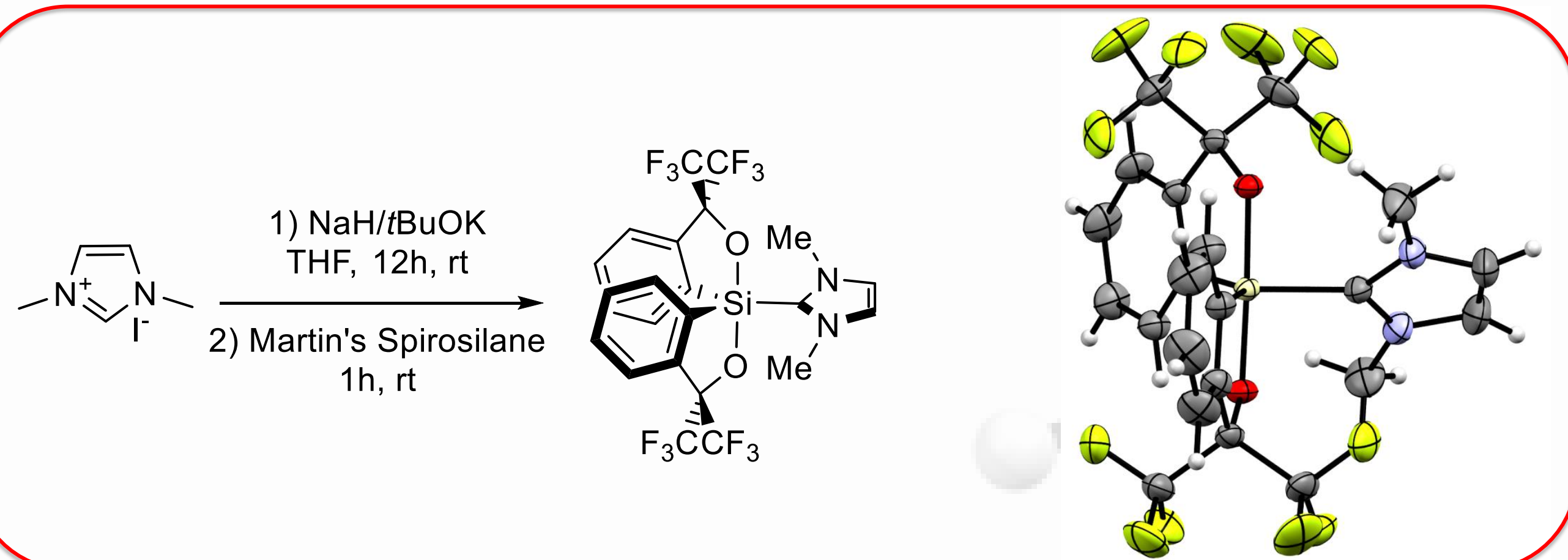
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Synthesis of Martin's spirosilane

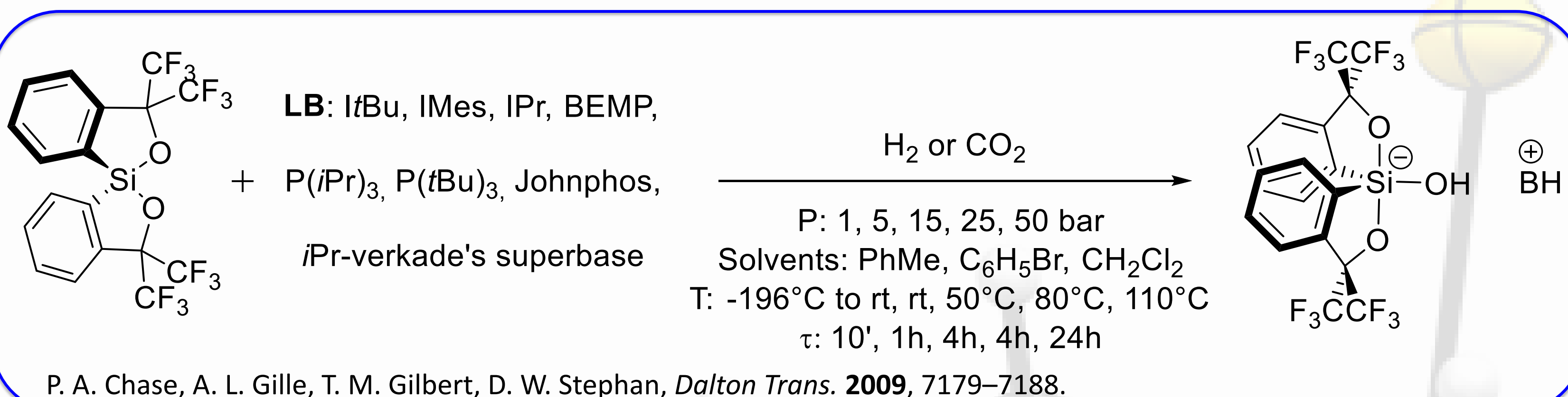


- Cheap starting material
- Multi-Gram scale reaction
- Good yield and high reproducibility

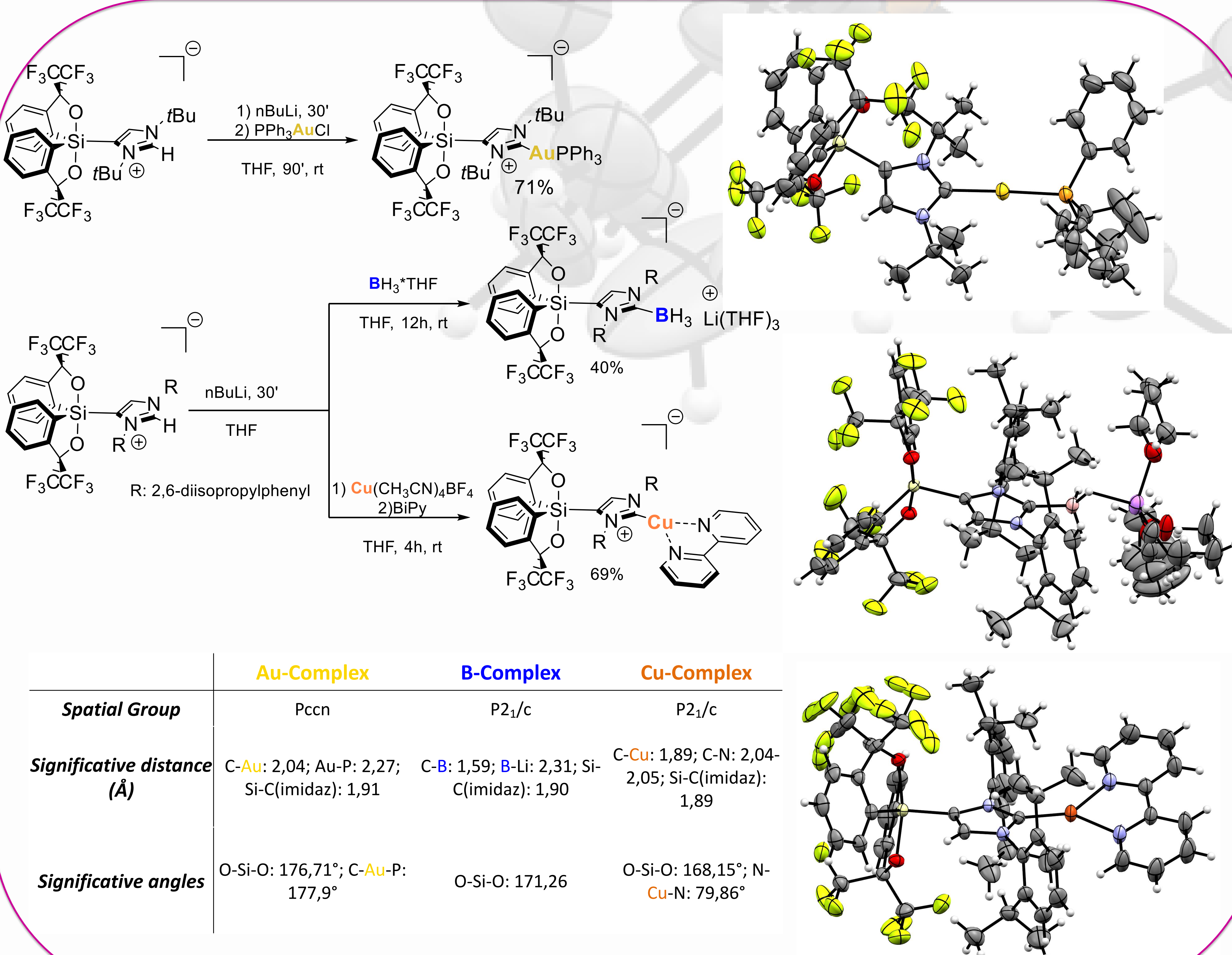
NHC-adducts formation



Applications: from Frustration...



... to Coordination



Conclusion

- Update of Martin's Spirosilane Synthesis;
- Synthesis and characterisation of the different adducts with NHC; first synthesis of two abnormal adducts with a tetravalent non halosilane precursor;
- Investigation of the FLP properties;
- Synthesis and characterisation of the anionic abnormal carbene metal adducts

Outlook

- Conclusion of the investigation on FLP properties;
- Synthesis of new metal complex: [Ag], [Rh], [Pd], [Pt], [Rh], [Ir]...
- Start the catalysis test;
- Synthesis and studies of new pentacoordinate species. Reaction between Martin, NHC and other nucleophiles: carboxylate and alcoholate;