

Oxidative Addition of Methyl Iodide to Dinuclear Gold(I) Amidinate Complex: Schmidbaur's Breakthrough Reaction Revisited with Amidinates

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Gold chemistry was stimulated nearly 30 years ago by the addition of methyl iodide to a dinuclear Au(I) ylide complex by Schmidbaur. Congratulations Hubert on the occasion of your 70th birthday. God speed for many more.

Oxidative-addition of methyl iodide, CH₃I, to the dinuclear gold amidinate [Au₂(*o*-Me₂-form)₂] in THF generates a metal-metal bonded Au(II) product, formulated as [Au₂(*o*-Me₂-form)₂CH₃I], in quantitative yield under nitrogen at 0 °C and in absence of light. The product is characterized by ¹H NMR, elemental analysis and preliminary X-ray crystallography.

Key words: Oxidative-Addition, Gold, Amidinate Complexes, Methyl Iodide