Desilylative or Decarboxylative Photoadditions with Graphitic Carbon Nitride

**Significance:** A graphitic carbon nitride (g-C$_3$N$_4$) catalyzed the desilylative addition of $\alpha$-silylamines to alkenes or heteroaryl chlorides under visible-light irradiation to give the corresponding adducts in up to 96% yield (eq. 1). g-C$_3$N$_4$ also promoted the decarboxylative additions of $\alpha$-amino acids to alkenes under similar conditions to afford the corresponding products in up to 79% yield (eq. 2).

**Comment:** In the desilylative addition of $N$-methyl-$N$-[(trimethylsilyl)methyl]aniline to 4-(2,2-dicyanoethenyl)toluene, g-C$_3$N$_4$ was reused eight times without significant loss of its catalytic activity. g-C$_3$N$_4$ was applied for the continuous-flow reaction of $N$-methyl-$N$-[(trimethylsilyl)methyl]aniline with cyclohexanone to afford the desired amine in 85% yield.

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**Selected results:**

![Desilylative additions](image1)

![Decarboxylative additions](image2)