



The synthesis of II was accomplished by condensing the previously described<sup>4,5</sup> N,N-dimethyl-N'( $\alpha$ -pyridyl)-ethylenediamine with  $\alpha$ -thienyl cholride.<sup>6</sup> The product, b. p. 173–175° at 3 mm.,  $n_{D}^{25}$  1.5835 was obtained in a 64% yield. *Anal.* Calcd. for C<sub>14</sub>H<sub>19</sub>N<sub>3</sub>S: N, 16.09. Found: N, 16.12. The monohydrochloride melted at 161–162°. *Anal.* Calcd. for C<sub>14</sub>H<sub>20</sub>N<sub>3</sub>SCl: N, 14.12. Found: N, 14.16. The methiodide had m. p. 156–157° (dec.). *Anal.* Calcd. for C<sub>15</sub>H<sub>22</sub>N<sub>3</sub>SI: N, 10.42. Found: N, 10.39.

Preliminary pharmacological data<sup>7</sup> indicate that, experimentally in animals, II exhibits the same order of antihistaminic activity as I. The toxicity of both compounds is approximately equal.

Additional information concerning II and other homologs will be published at some future date.

(5) Whitmore, Mosher, Goldsmith and Rytina, *ibid.*, **67**, 393 (1945).

(6) Blicke and Leonard, *ibid.*, **68**, 1934 (1946).

(7) Roth, Richards and Shepperd, *Federation Proc.*, in press (1947).

ORGANIC RESEARCH DEPARTMENT

ABBOTT LABORATORIES

NORTH CHICAGO, ILLINOIS

ARTHUR W. WESTON

RECEIVED MARCH 18, 1947

#### *t*-BUTYLSILICON COMPOUNDS

Sir:

From *t*-butyllithium<sup>1</sup> and silicon tetrachloride we have synthesized in 55% yield the first tertiary alkyl silicon compound, *t*-butyltrichlorosilane, m. p. 98–99°, b. p. 133° at 740 mm.

(1) Organolithium compounds have been used to make organosilicon compounds: Fleming and Laurens, U. S. Patent 2,386,452, (1945); *C. A.*, **40**, 603 (1946); Gilman and Clarke, *THIS JOURNAL*, **68**, 1675 (1946).

*Anal.* Calcd. for C<sub>4</sub>H<sub>9</sub>SiCl<sub>3</sub>: Si, 14.6; Cl, 55.6; mol. wt., 191. Found: Si, 14.7; Cl, 55.7; cryoscopic mol. wt. in benzene, 189.

*t*-Butyltrichlorosilane is unusual. It is a white waxy solid which becomes granular on standing and sublimes readily at room temperature, giving well-defined fern-like crystals (Fig. 1). It is less easily hydrolyzed than other alkyltrichlorosilanes.



Fig. 1.—Photograph of crystals of sublimed *t*-butyltrichlorosilane by Dr. M. L. Willard, H. Francis, G. Kauffman, T Reissmann.

With methylmagnesium bromide the above compound gives a 61% yield of *t*-butyltrimethylsilane, m.p. 75–77°, b. p. 103° at 740 mm.

*Anal.* Calcd. for C<sub>7</sub>H<sub>18</sub>Si: Si, 21.6; mol. wt., 130. Found: Si, 21.7; mol. wt., 132.

It is a white waxy solid with faint camphoric odor. It sublimes readily to crystals resembling those in Fig. 1. Distillation of *t*-butyltrimethylsilane from hot concd. sulfuric acid gave a product with unchanged m. p., thus indicating a high degree of inertness of the C–Si bond.

SCHOOL OF CHEMISTRY AND PHYSICS  
PENNSYLVANIA STATE COLLEGE  
STATE COLLEGE, PENNA.

L. J. TYLER  
L. H. SOMMER  
F. C. WHITMORE

RECEIVED MARCH 7, 1947