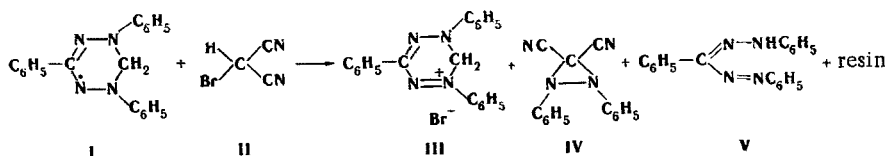


## REACTION OF 1,3,5-TRIPHENYLVERDAZYL WITH BROMODICYANOMETHANE

E. I. Tomilenko, V. I. Staninets,  
and G. P. Vdovin

UDC 547.883

The reaction of 1,3,5-triphenylverdazyl I with bromodicyanomethane II (1:1) in benzene in the dark at room temperature gives, in addition to 1,3,5-triphenylverdazylum bromide III, which precipitates during the reaction (50% yield), a white crystalline substance with mp 99-100° (from n-hexane) and  $R_f$  0.49 (Silufol UV-254, benzene) in 22% yield, which was obtained by chromatography of the filtrate on a plate with a thin fixed (13% gypsum) layer of LS 5/40  $\mu$ m silical gel with a luminescent indicator and elution with benzene. The results of elementary analysis of this product correspond to the empirical formula  $C_{15}H_{10}N_4$ . IR spectrum (KBr pellet): 1590 ( $C_6H_5$ ) and 2255  $cm^{-1}$  ( $C\equiv N$ ). UV spectrum (n-hexane),  $\lambda_{max}$ , (log  $\epsilon$ ): 248 (4.29) and 293 nm (3.78). PMR spectrum ( $CCl_4$ ):  $\delta$  6.08-6.75 ppm (5H, aromatic). Mass spectrum, m/e (%): 246 (67), 194 (18), and 91 (100).



Proceeding from these data, the product was assigned the 1,2-diphenyl-3,3-dicyanodiaziridine (IV) structure. A resin and traces of 1,3,5-triphenylformazan (V) are formed in addition to these reaction products.

Institute of Organic Chemistry, Academy of Sciences of the Ukrainian SSR, Kiev 252660.  
Translated from *Khimiya Geterotsiklicheskikh Soedinenii*, No. 3, p. 417, March, 1977. Original article submitted September 22, 1976.

This material is protected by copyright registered in the name of Plenum Publishing Corporation, 227 West 17th Street, New York, N. Y. 10011. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, microfilming, recording or otherwise, without written permission of the publisher. A copy of this article is available from the publisher for \$7.50.