187. *Effect of Anti-knock Materials on the Condenser-Discharge-Spark Energy required to ignite the Mixture of Air with the Vapour of Ethyl Ether.*

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The author investigated the effect of diethyl selenide, tetramethyl lead and tetramethyl tin on the condenser-discharge-spark energy required to ignite the mixture of 4.25 % of the vapour of ethyl ether and 95.75% of air. The apparatus used and the method of investigation were the same as in the previous research.¹⁾

The results obtained are shown in the following tables.

Mol. percent. of diethyl selenide added to the mixture.	Minimum igniting capacity at 100 volts. (Microfarad)
0	2.0
0.125	2.5
0.25	3.0
0.50	3.2
1.00	3.4

Mol. percent. of tetramethyl lead added to the mixture.	Minimum igniting capacity at 100 volts. (Microfarad)
0	2.0
0.25	2.5
0.50	2.7
1.00	2.8
1.50	3.9

1) Y. NAGAI and M. FURIHATA: Proc. Imp. Academy, 3 (1927), 352; 355.

Mol. percent. of tetramethyl tin added to the mixture.	Minimum igniting capacity at 100 volts. (Microfarad)
0	2.0
0.25	2.9
0.50	3.1
1.00	3.1
1.50	4.0

These results can be explained along the same line of reasoning as in the previous paper.¹⁾

1) Y. NAGAI and M. FURIHATA : Proc. Imp. Academy, 3 (1927), 352; 355.