

**SYNTHESIS AND STRUCTURE OF NEW
PHOSPHORILATED METHANOFULLERENES
WITH CARBONYL GROUPS**

Valentina P. Gubskaya, Flyura G. Sibgatullina, Ildus
A. Nuretdinov, Vitaly V. Yanilkin, Asia V. Toropchina and
Nail M. Azancheev

A.E.Arbuzov Institute of Organic and Physical Chemistry
Arbuzov str.8
Kazan 420088
Russia

Phosphorilated derivatives of fullerenes are interesting for obtain of biologically active compounds and new materials. However in literature little date on the synthesis of phosphorilated derivatives of fullerenes containing of the carbonyl group. Here we report on the synthesis phosphorilated methanofullerenes containing carbonyl groups.

A.

Is it similarly received compound B, containing carbonyl and acetal group.

B.

Structure of obtained compounds is proved by the spectral methods (IR, UV, NMR ¹H, ¹³C, ³¹P), their composition is proved by elemental analysis and mass-spectrums MALDI TOF, of purity is confirmed the HPLC.

This work was financially supported by the Russian Foundation for Basic Research , the Russian Scientific and Technical Program "Fullerenes and Atomic Clusters" and by the Academy of Sciences of Tatarstan