

GENERATION OF CARBON NANOMATERIALS
BY PLASMA OF A SECONDARY DISCHARGE

*Iu.P. Veremii, V.Ya. Chernyak, S.A. Filatov¹,
E.M. Shpilevskij¹, V.A. Zrazhevskij, E.K. Safonov*

Taras Shevchenko Kyiv National University,
Faculty of Radiophysics
(2/5, Academician Glushkov Ave., Kyiv 03022, Ukraine;
e-mail: *tin@univ.kiev.ua, chern@univ.kiev.ua*),

¹A.V. Lykov Heat and Mass Transfer Institute
of NAS of Belarus
(15, P. Brovka Str., Minsk 220072, Byelorussia)

S u m m a r y

We describe a plasma setup on the basis of a secondary discharge aimed at the generation of carbon nanoparticles from ethanol. The studies of the influence of modes of the processing of a raw material on the composition of final products are performed. The diagnostics was carried out by the methods of Raman scattering (RS) spectroscopy, thermogravimetric analysis (TGA), and scanning electron microscopy (SEM). The possibility to create carbon nanomaterials with different morphologies in similar systems is demonstrated.