

## **Electromagnetic compatibility in very small spacecrafts**

Vira Pronenko, Valery Korepanov, Fedir Dudkin and Serhiy Belyayev  
Lviv Center of Institute for Space Research, Lviv, Ukraine.

The reduction of financial support of space scientific research forces the scientists to develop new small spacecrafts for the experiments realization. The most popular recently are cubesats which are available as commercial construction kit with the size 10x10x10 cm, by this several cubes (nU) may be connected together. But with such kits mostly technological and demonstration experiments may be realized. To create scientific grade structure able to provide high resolution measurements within so small volume it is necessary to solve several important problems, between which the most complicated one is providing electromagnetic compatibility of all units composing the nU cubesat and electromagnetic cleanliness (EMC) of all structure. The goal of this report is to outline the problems connected with the EMC procurement within so small and densely packed volume. Also a dedicated system development which will be able to determine the electromagnetic interference sources location and their radiated power is described. The results of experimental works realized with such a system during the development of 3U cubesat for electromagnetic study in space plasma are discussed.

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