

SPACE POWER SYMPOSIUM (C3)
Poster Session (P)

Author: Mr. Ya Zhang
China, zhangya0226@163.com

THE APPLICATION OF PEMFCS/RFCS IN SPACE FIELD

Abstract

The principle, performance and characteristic of proton exchange membrane fuel cell system (PEMFCS) and regenerative fuel cell system (RFCS) were introduced in this paper, and so were the necessity and feasibility to develop PEMFCS/RFCS applied for space craft. The performance parameters were compared between PEMFCS/RFCS and traditional chemical batteries. The possibility of PEMFCS/RFCS application for lunar base and deep space detection areas is discussed, in which high power and long endurance are needed.