

IAF SPACE POWER SYMPOSIUM (C3)  
Wireless Power Transmission Technologies and Application (2)

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USING PHOTOELECTRIC EFFECT ON HIGH TEMPERATURE  
SUPERCONDUCTORS/PHOTOELECTRIC MATERIALS FOR WIRELESS TRANSMISSION OF  
POWER WITH VARIABLE FREQUENCY RANGE.

**Abstract**

For transmitting the power wirelessly we have that the photoelectric effect can be used for generation of electrons from surface of metals or any kind of material and also we have space being at a very lower temperature we can build a super conductor where we can reduce losses and transmission in a circuit. Now we know that the photoelectric effect energy generation depends on frequency of incident waves  $E = hf$ , where the  $f$  is frequency and thus we have that the following energy generated can be changed via the frequency changing and thus a variable transmission of power can be achieved via this method and also we have that any kind of power can be transmitted from solar power to radiation power by satellite or any kind of transmission via power generated and frequency having inverse relation and thus we can use this to transmit power from one place to another. We can have the frequency generated at the transmission side with respect to power generated being used for sending the signal and then a receiver can be used for collecting the waves and convert it to power using photoelectric effect.