the310th Open Seminar for Sustainable Humanosphere

RISH , Kyoto University

Antennas for Microwave wireless power transmission

ONLINE (zoom)

Register from HERE

6/26 (WED) , 2024 12:30-13:20

Admission: FREE

Associated Mission

Mission2

Advanced Development of Science and Technology towards a Solar Energy Society

Li Daotong

RISH, Kyoto University

Visiting Associate Professor

Keyword

- Antenna
- Microwave wireless power transmission
- High gain
- Beam steering

Microwave wireless power transmission (MWPT) technology, which plays an important role in Space Solar Power Systems (SSPS) and IoT applications, can convert electrical power into microwave power and wirelessly transmit it into free space through a transmitting antenna, and it is captured by the rectenna and converted into DC power. As one of the most important parts of MWPT, the antenna is the interface between the EM waves propagating in space and the transmitter and receiver. Thus, the antennas with high gain, high efficiency, beam scanning and compact size are urgently desired. In this talk, some types of antennas and arrays withhigh gain, near filed focusing, pattern and beamwidth reconfigurable characteristics and the further application in MWPT will be discussed.

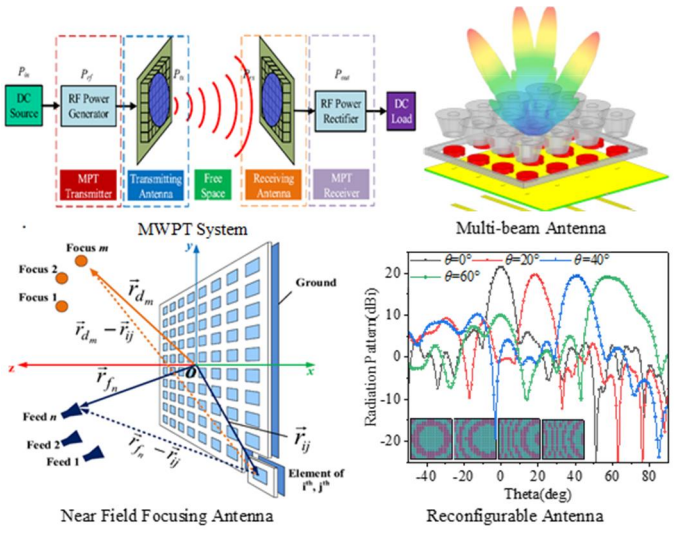

Fig. 1 Antennas for microwave wireless power transmission

The “open seminar” is a casual research meeting during lunch time on Wednesdays, with the aim of sharing research results, and enhancing collaborations.

https://www.rish.kyoto-u.ac.jp/open seminar 2022/

Organized by Research Institute for Sustainable Humanosphare, Kyoto University