

# Theme: Components and Materials for 5G

## - Sub Theme: Components and Materials for 5G Mobile Device

Today, the commercialization of 5G technology for broadband and high-speed communication requires changes in functions and characteristics of components and materials. And we need products and ideas that are applicable to these fields.

We need technologies for components and materials that are capable of operating in a variety of frequency bands, including the mmWave and Sub-6GHz bands. In particular, we will openly invite various device technologies and ideas that can be used in the mmWave band.

The topics we pursue through this GRO are as follows:

- Array antenna design technology for mobile device that can reduce the size of RF module innovatively.
- Multiband antenna or filter design technology for mobile device that is capable of covering various frequency bands.
- Packaging technology for mobile device that is applicable in the mmWave band and has low cost and excellent reliability.
- Components(Capacitor, Inductor...etc.) technology and materials for mobile device that is available in the mmWave band.

※ The topics are not limited to the above examples and the participants are encouraged to propose original idea.

※ Funding : Up to USD \$150,000 per year