

Development of the crisis navigator for individuals

Realization of safe and secure operation of energy transport infrastructure with multi-view imaging

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Summary :

For stable supply of energy, it is necessary to efficiently and accurately maintain energy transport infrastructure, such as power lines and gas pipes. For example, an appearance inspection of the power lines with a telescope or a helicopter is currently being conducted, but this type of inspection does not show internal damage (disconnection, corrosion, etc.).

This research is aimed at developing a noncontact and noninvasive inspection technology based on multi-view terahertz imaging. This inspection technology will make it possible to visualize the internal damage from the outside of the cable covering in real time without stopping the supply of electricity, gas, etc., contributing to the stable supply of energy.

課題を実現する シーズ技術

世界初、フレキシブル THzカメラの開発



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輸送システムの異常(送電線損傷・トランス油漏れ・配管水素ガス漏れ)のメンテナンス体制の構築

- ・輸送システムの異常状況の網羅的表示
- ・メンテナンス体制の表示



- ・輸送システムの異常状況(位置、損傷程度)及び進行状態の把握・データベース化
- ・異常進行を踏まえた補修時期の設定

