## Current Trends in Biomedical Imaging

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## **Abstract**

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We will explain various algorithms to detect internal corrosive parts. These algorithms are based on three different physical phenomena: electrostatic, vibration test (guided wave), and ultrasonic, and are designed through rigorous asymptotic analysis under the assumption that the size of the corrosive parts are small. Viability of these methods will be demonstrated with results of numerical simulations. This talk will be base on three papers by three different combination of above mentioned authors.