

東京理科大学・理工学部・横断型コース
エネルギー・環境コース



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野田キャンパス 10号館1階 ホール

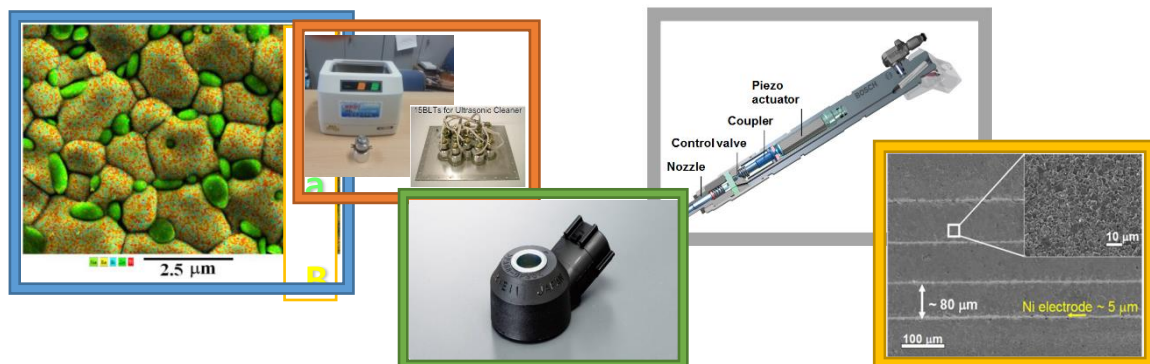
"Introduction to Lead-free Piezoelectric Ceramics"

Two events galvanized a large research effort into lead-free piezoceramics about fifteen years ago:

- I. The European Union banned lead except for a set of temporary exemptions
- II. The Toyota research group published a Nature paper in 2004, summarizing research over a 6-year period, proving that lead-free piezoceramics are a viable alternative to lead-containing piezoceramics.

In the following years the research output rose from 10 to 400 publications per year with China and Japan leading. By now, the first products have arrived at the market place. A number of Japanese companies have invested large sums into research and they aim at solid financial return.

In the presentation I will describe the current situation of the implementation of lead-free piezoceramics into application. To facilitate broad understanding, I will first explain the phenomena of piezoceramics as well as its multifold applications.



問い合わせ先：理工学部・電気電子情報工学科・永田 肇