

## Discovery of Sonochemistry

### 音響化学って何？

日時：2022年6月30日（木）、18:30～19:30 場所：人環棟333演習室  
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Sonochemistry is nowadays considered as one of the most efficient and versatile non-conventional activation methods to perform chemical transformations. Through direct piezoelectric effect, ultrasound can be easily generated within a precise range of frequency to enable a physical phenomenon called cavitation whereby either chemical or physical effects on matter can be obtained. Easy to implement and not as costly as other non-conventional activation methods such as microwave or milling systems, ultrasound is now well introduced and used in R&D laboratories and in strategic industries such as pharmaceutical or food industries. During this seminar, after a short historical background, some basic fundamental and practical knowledge on cavitation and ultrasound will be firstly introduced. Then different existing equipment on lab-scale and higher scale will be shown as well as good practicing rules to run experiments under ultrasonic irradiation. Finally, the scopes of known applications using ultrasound will be briefly presented.



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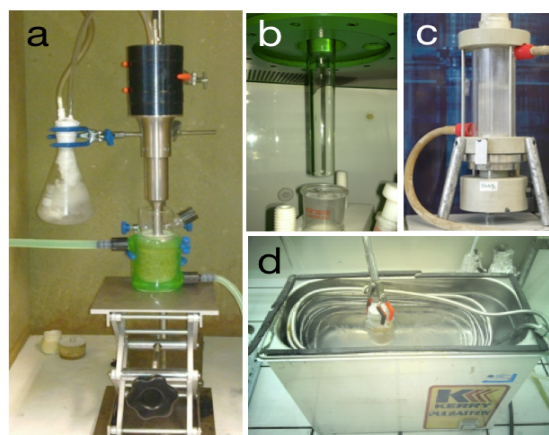


Figure 1: Different lab scale ultrasonic equipment, (a) ultrasonic probe, (b) ultrasonic Pyrex probe, (c) high frequency cup-horn system and (d) ultrasonic bath.

今後の感染状況によりオンライン開催、あるいは中止の可能性があります。変更は、人環ホームページにてお知らせいたします。対面の場合、感染に十分配慮して開催します。