

国立大学法人 九州工業大学

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# Point-of-care Biosensors and their applications

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総合教育棟 C-1B講義室

Highly sensitive point of care (POC) platform or any method of such kind for the examination of thyroid hormones such as TSH, T4, T3 are not available on the market. In addition, there exists a limitation to detect relatively low amount of such hormones present in serum by using lateral flow assay method. To meet this end, he has developed time-resolved fluorescence based detection module and he has used optimized lanthanide chemicals, more specifically europium conjugated beads in an attempt to measure the ultralow levels of hormones. As a preliminary results, he has obtained precision of within 7% and sensitivity of 1mIU/mL for the detection of above mentioned hormones.