

# HIGO program 企業セミナー

## 糖鎖ナノバイオテクノロジーによる 高感度・正確なウイルス検査診断法

隅田 泰生

鹿児島大学大学院理工学研究科 化学生命・化学工学専攻 教授  
株式会社スティックスバイオテック 代表取締役

Sugar chains located on cell surface or in the extra-cellular matrix, as a form of glycoprotein, glycolipid, proteoglycan, or glycosaminoglycan (GAG), are responsible for many biological functions and play crucial roles in cellular binding and signaling, which also includes the infection of microorganism or the metastasis of cancer. Therefore, sugar chains are being recognized as one of the most important research subjects in life science for the next generation of post-genome research.

For the research of sugar chains at the molecular level, structurally defined sugar chains are essential. However, it is not easy to obtain appropriate amount of structurally defined sugar chains from natural source or by chemical synthesis, preventing the progress of the research field. To solve the problem, we developed "Sugar Chip" and "Sugar-chain immobilized Gold-Nanoparticle (SGNP)", in which structurally defined sugar chains are immobilized on the gold coated glass slide (chip) or on the gold nano-particle as a clustered form, which mimics nature (Figure).

Using these tools, we have developed highly sensitive and accurate diagnostic method for viruses. In this seminar, the past and on-going results including influenza virus and SARS-CoV-2 will be discussed.

10月8日(木)

15:00~16:30

ZOOMによるオンライン講演

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We await you,  
any member of  
Kumamoto University!



# Business Seminar

## Sugar Chain-based Nano-Biotechnology for the Highly Sensitive and Accurate Diagnosis of Viruses

Yasuo Suda

Department of Chemistry and Biotechnology,  
Graduate School of Science and Engineering,  
Kagoshima University, Japan &  
SUDx-Biotec Corporation, Kagoshima, Japan

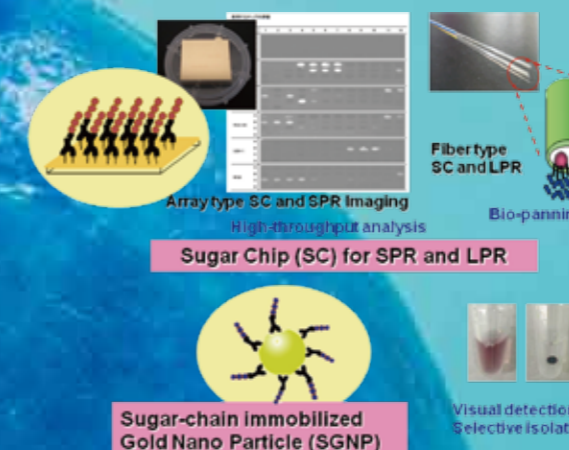


Figure. Sugar Chain immobilized chips (SCs) and gold nanoparticles (SGNPs)

8 Oct. (Thu.) 2020  
15:00~16:30

This Seminar will be held via Zoom.

You can find the ZOOM meeting ID and Password  
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