## 21COE 講演会

- 1. 講師 Prof. Sidney M.Hecht シドニー・ヘクト教授
- 2. 現 職 Prof. of Chemistry and Biology, University of Virginia 米国 ヴァージニア大学生物科学科教授
- 3. 日 時 2004年6月29日

 $15:00\sim17:00$ 

- 4. 場 所 京都大学理学部2号館 第1講義室(120号)
- 5. 講演題目

New Strategies for the Ribosomal Synthesis of Modified Enzymes 「非天然酵素の新しい合成戦略」

## 講演内容:

The cell free synthesis of proteins containing non-natural amino acids at specific, predetermined sites can be accomplished by the use of misacylated tRNAs. The methodology is now well established, but there are significant limitations as regards the amounts of protein that can be prepared and the nature of the amino acids that can be introduced. Presently, the modification of the bacterial ribosome to enhance the introduction of D-amino acids is described. Also described is a strategy to enhance the stability of the misacylated tRNAs employed for protein synthesis by the use of bisacylated tRNAs.

世話役:理学研究科化学専攻

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