平成 30 年 11 月 21 日

応用物理学会北海道支部
会員各位

応用物理学会北海道支部

講演会のお知らせ

下記講演会を開催いたしますので、多数ご参加下さいますようご案内
申し上げます。

演題：Primary reaction mechanisms observed by broadband 10-fs pulse lasers
講師：Atsushi Yabusita 氏
（National Chiao Tung University, Taiwan・Professor）
日時：平成 30 年 11 月 30 日（金） 14:30～15:30
場所：北海道大学工学部応用物理学専攻会議室(A3-62)
主催：応用物理学会北海道支部

講演の要旨

Photo-reactions excited by visible light play important roles in porphyrin derivatives for photo-synthesis, retinal proteins for light sensor, etc. It is important to elucidate their primary reaction mechanism for their further development and improvement. For the study of those primary reactions in visible region, we have developed broadband visible sub-10-fs pulse laser which can perform the transient absorption spectroscopy covering most of the visible spectral region. The development of the broadband laser and multi-channel detection system allows us to study probe wavelength dependence of the dynamics in single scan of measurement. Moreover, the ultrashort pulse duration can detect signal modulation caused by real-time molecular vibration which visualizes the molecular structure change during the reaction via observation of vibrational dynamics. The sub-10-fs pulse lasers were developed for visible and near ultraviolet spectral region and used to study the primary reaction dynamics of bacteriorhodopsin (light-driven proton pump) and heme protein, respectively.

世話人　足立　智
北海道大学大学院工学研究院
電話：011-706-6709　adachi-s@eng.hokudai.ac.jp