



中国科学院生物物理研究所

## 贝时璋讲座

### The Nonsense of Biofuels

报告人：Hartmut Michel, Prof. Dr. Dr. h.c. (1988年诺贝尔奖)

报告时间：2016年9月8日(周四)上午10:00

报告地点：生物物理研究所9501会议室

主持人：许瑞明研究员



### 报告人简介

Dr. Hartmut Michel is a distinguished professor of Biochemistry and director of the Molecular Membrane Biology department at the Max Planck Institute for Biophysics, Germany. His research is on structure, function and mechanism of action of membrane proteins. Current focus lies on the complexes of the respiratory chain, active transporters and G-protein coupled receptors. He received the Nobel Prize in chemistry jointly with Johann Deisenhofer and Robert Huber in 1988. They used X-ray crystallography to determine the exact structure of a membrane protein complex, called photosynthetic reaction center. Their research increased the general understanding of the mechanisms of photosynthesis, revealed similarities between the photosynthetic processes of plants and bacteria and established a methodology for crystallising membrane proteins. He became a foreign member of the Royal Netherlands Academy of Arts and Sciences in 1995, and elected a Foreign Member of the Royal Society (ForMemRS) in 2005.

### 代表成果

1. Hunte, C., Screpanti, E., Venturi, M., Rimon, A., Padan, E., Michel, H. Structure of a Na<sup>+</sup>/H<sup>+</sup> antiporter and insights into mechanism of action and regulation by pH. *Nature* 2005;435(7046):1197-1202.

2. Safarian, S., Rajendran, C., Müller, H., Preu, J., Langer, J.D., Ovchinnikov, S., Hirose, T., Kusumoto, T., Sakamoto, J. and Michel, H.: Structure of a bd oxidase indicates similar mechanisms for membrane integrated oxygen reductases. *Science* 2016; 352, 583-586.