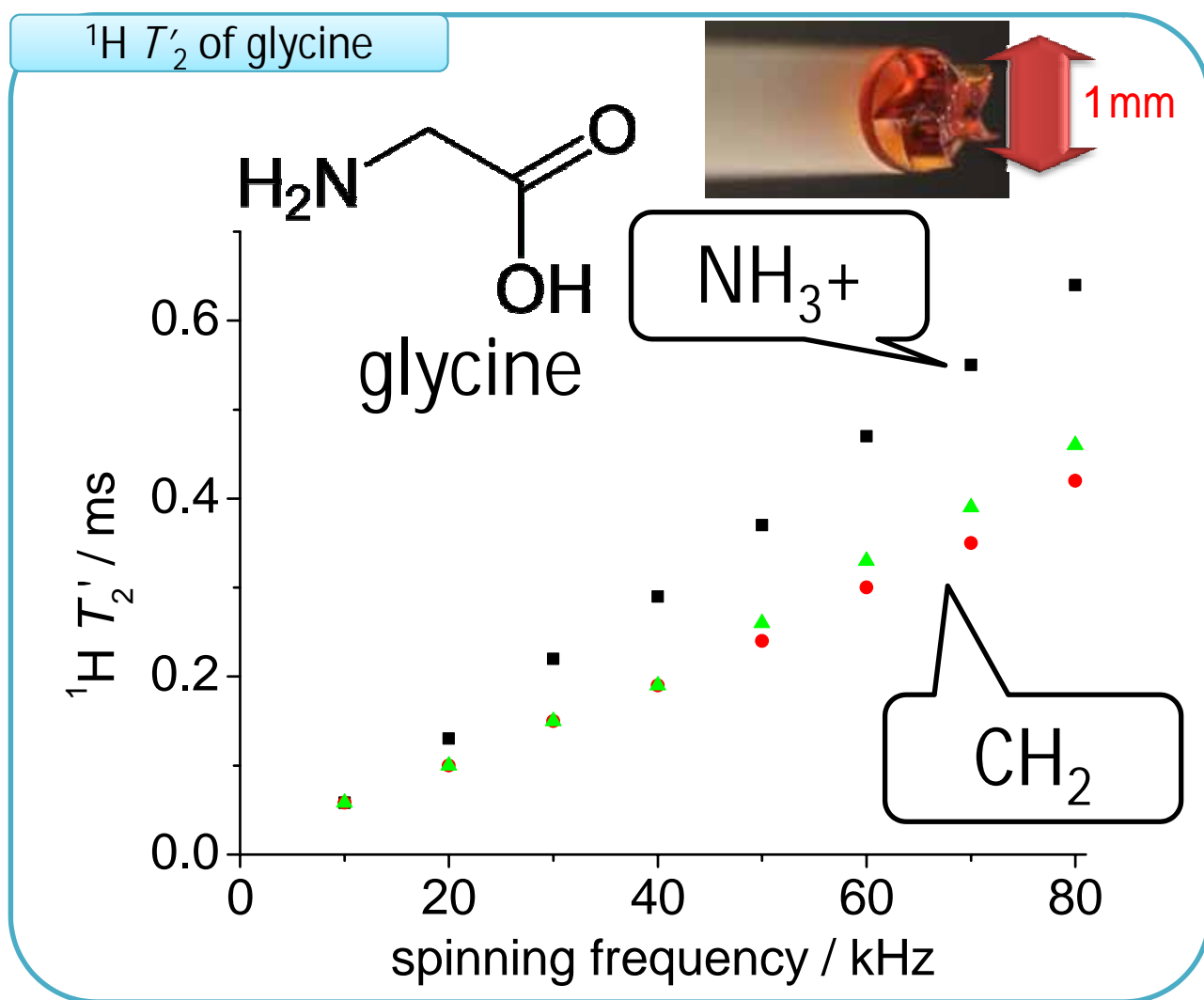


New application field by 80 kHz MAS NMR

Here we show new fields which will be explored in the very near future by 1 mm MAS system. Very fast MAS enhances the transverse relaxation time (T_2') of ^1H with spin echo. This is caused by partial decoupling of ^1H - ^1H dipolar interaction, leading to reduction of homogeneous broadening. The experimentally observed T_2' of glycine is linearly increased with the spinning frequency. It is expected that enhanced T_2' ensure high efficiency in magnetization transfer such as INEPT or HSQC. 1 mm MAS is very suitable for HMQC, HSCQ, INEPT, R-INEPT etc.



JNM-ECA500



This work has been supported by JST-SENTAN(JAPAN).