

## 600M 核磁共振仪 ( 600M NMR )

### 功能用途:

能进行有机化合物、无机配位化合物等结构中的包括  $^1\text{H}$ 、 $^{13}\text{C}$ 、 $^{18}\text{F}$ 、 $^{31}\text{P}$  等的分析和各种测量（包括各种一维谱和二维谱测定）。用于有机化合物等结构测定；进行动力学或化学反应机理的研究；可用于研究液相中特殊分子的相互作用和简单混合物的定量分析。



### 技术指标:

磁场强度: 14.09 特斯拉 ( $^1\text{H}$  共振频率约 600MHz), 可检测  $^1\text{H}$ ,  $^{19}\text{F}$  和共振频率  $^{15}\text{N}$ – $^{31}\text{P}$  之间的所有核, 灵敏度:  $^1\text{H} \geq 960: 1$  (0.1% EB);  $^{13}\text{C} \geq 330: 1$  (ASTM);  $^{19}\text{F} \geq 850: 1$  (0.05% TFT);  $^{31}\text{P} \geq 150: 1$  (0.0485M TPP);  $^{15}\text{N} \geq 40: 1$  (90% Formamide), 变温范围:  $-100 \sim +150^\circ \text{C}$

It is used to analysis and measurement of organic compounds, inorganic coordination compounds and other structures including  $^1\text{H}$ ,  $^{13}\text{C}$ ,  $^{18}\text{F}$ ,  $^{31}\text{P}$ , etc. It researches on structural determination of organic compounds, the mechanism of kinetic or chemical reactions, interaction of special molecules in liquid phase and quantitative analysis of simple mixtures.

### Specifications

Center magnetic field: 14.09 T (for  $^1\text{H}$  at 600 MHz)

Nuclei for observation and irradiation:  $^1\text{H}$ ,  $^{19}\text{F}$ ,  $^{31}\text{P}$  to  $^{15}\text{N}$

Sensitivity:  $^1\text{H} \geq 960: 1$  (0.1% EB);  $^{13}\text{C} \geq 330: 1$  (ASTM);  $^{19}\text{F} \geq 850: 1$  (0.05% TFT);  $^{31}\text{P} \geq 150: 1$  (0.0485M TPP);  $^{15}\text{N} \geq 40: 1$  (90% Formamide)

Variable temperature range:  $-100$  to  $+150^\circ \text{C}$