

## SECOND CIRCULAR

for

### **The International Symposium on the Progress in Magnetic Resonance Methodologies**

Wuhan, China  
October 22-23, 2001

Dear Colleagues,

We are pleased to invite you to participate in the International Symposium on the Progress in Magnetic Resonance Methodologies that will be held in Wuhan, China on Oct. 22-23, 2001 and organized by:

Wuhan Center for Magnetic Resonance  
Wuhan Institute of Physics and Mathematics (WIPM)  
The Chinese Academy of Sciences (CAS)  
The National Natural Science Foundation of China,  
The Ministry of Science and Technology of China  
The Chinese Society of Magnetic Resonance  
The European-Chinese Society for Clinical Magnetic Resonance.

#### **Advisory Committee**

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## **Scope**

The Scientific Program of Symposium will include invited review lectures on the specific fields and contributed reports on recent results. The scope will cover the following topics:

- Theoretical and methodological developments in functional magnetic resonance imaging (fMRI).
- New NMR methods and applications to structural characterization of biomolecules
- Solid State NMR and its applications

## **Language**

English or Chinese will be the official language of the symposium.

## **Proceedings**

A book of abstracts will be published in English and distributed among the participants at the registration desk. Full paper of presentations will be published after the symposium in the Chinese Journal of Magnetic Resonance.

## **Presentation**

All lectures and reports will be oral. Including discussion about 40 minutes could be available for each invited talk and 20 minutes for a contributed.

Conventional over-head projector and slides projector as well as computer interfaced multimedia projector are available for the presentations.

## **Location**

The symposium will be held at Lake View Garden Hotel (#115 Luo Yu Lu, Wuhan 430071, Tel: +86 27 87448858, Fax: +86 27 87448744).

## **Registration**

Registration will take place at the Lake View Garden Hotel from 9:00am to 10:00pm on Oct.21 and from 8:00am till 12:00am on Oct.22, 2001.

## **Registration Fee**

Registration fee is RMB 200 for each participant and RMB 100 for student. The registration fee covers all accommodations starting from the evening of Oct. 21 to the morning of Oct. 24. The registration fees will be paid in RMB in cash at the registration desk.

## **Climate**

The average temperature in the late October in Wuhan is about 18-20°C

## **Accommodation**

For convenience of the participants, all participants lodge at Lake View Garden Hotel, single room with two beds. Please indicate the name of your partner sharing the room, if that is feasible. If you like single room with one bed, you should pay RMB 140 Yuan additionally yourself.

## **Letter of invitation**

A formal invitation letter for getting your visa is ready to send to participant upon request.

## **Transportation**

Taxi: Approximately RMB 160 Yuan one way from Wuhan Tianhe Airport to the Lake View Garden Hotel (about 65km or 55 minutes). Approximately RMB 20 Yuan one way from Wuchang Railway Station (about 10km) and RMB 50 Yuan from Hankou Railway Station.(about 30km ).

Please tell us when you will arrive if you need help.

## **Post-symposium sightseeing tour**

After the symposium there will be a tour to the Three Gorges (part of the Yangtze River), Oct. 24-27. (to leave the hotel on the morning Oct.24 and will be back at 1:00pm Oct 27). The fare for the tour is RMB 300 Yuan per person. It should be paid in RMB in cash at registration desk.



2001-10-18 p. m. (Thursday)  
Site: Friendship Palace No.1 A1

**Presiding: Steve C. F. AU-YEUNG**

- 1:30 E19 Brazzein, the intensely sweet protein from the fruit of *Pentadiplandra brazzeana* Baillon: three-dimensional solution structure of recombinant des-pGlu1-brazzein as determined by multinuclear NMR spectroscopy  
Michele L. DeRIDER, E. Sonay KULOGLU, Frits ABILDGAARD, David J. ACETI, Fariba M. ASSADI-PORTER, Mikkel WEST-NIELSEN, and John L. MARKLEY
- 2:05 E23 Advanced isotope assisted NMR method for structural studies of proteins  
Masatsune KAINOSHO, Tsutomu TERAUCHI, Shin-ya OHKI, Toshiya HAYANO, and Masato SHIMIZU

**2:40-3:00 Recess**

**3:00-5:00 POSTER SESSION**

**Site: Corridor on 2<sup>nd</sup> floor of the Friendship Palace**

**NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY AND IMAGING**

- E53 <sup>31</sup>P MRS observation of the hatching process of hen eggs  
*Yue FENG, Jianhua CHANG, Xu ZHANG, Guang LU, and Maili LIU*
- E55 Multiexponential T<sub>2</sub> relaxation of brain water of traumatic rats  
*Xu ZHANG, Feng LI, Chunqing LI, Dan HAN, Xianrong ZHANG, Chaohui YE, and Maili LIU*
- E57 **Studies on the competitive binding of ibuprofen and salicylic acid to human serum albumin using NMR relaxation measurements**  
**Yanfang CUI, Conggang LI, Chaohui YE, and Maili LIU**
- E59 *Implementation of spiral EPI on 4.7T MRI scanner*  
**Guang LU, Xu ZHANG, Yunhuang YANG, Liyun LI, Chaohui YE, and Maili LIU**
- E61 **An evaluation of the lanthanide polyoxometalates as possible MRI**

**contrast agent**

**Jianghua FENG, Fengkui PEI, Guoying SUN, Xu ZHANG, and Maili LIU**

E63 Bioeffects evaluation of a long-term administering ChangLe by  $^1\text{H}$  NMR spectroscopy

**Jianghua FENG, Xiaojing LI, Fengkui PEI, and Yuxiu NIE**

E65  $^1\text{H}$  NMR studies of micelles

**Youru DU, Hanzhen YUAN, Sui ZHAO, Jiayong YU, Xijia MIAO, Shizhen MAO, and Lianfang SHEN**

E67 Multiple quantum  $^{27}\text{Al}$  MAS NMR of SAPO-44 molecular sieves  
Xianchun LIU, Xiuwen HAN, Ding MA, Zhongmin LIU, Xinhe BAO, Hongbing HU, and Steve C. F. AU-YEUNG

E69 Investigation of interaction between molybdenum and MCM-22 zeolite in Mo/MCM-22 catalysts by multiquantum MAS NMR technique  
Ding MA, Xiuwen HAN, Xianchun LIU, Yide XU, Xinhe BAO, Hongbing HU, and Steve C. F. AU-YEUNG

**E71 Identification of the distribution of tetrahedral aluminium sites in MCM-22 type zeolites by solid-state NMR**

Ding MA, Xiuwen HAN, Zhimin YAN, Xiumei LIU, Xinhe BAO, Riqiang FU, Hongbing HU, and Steve C. F. AU-YEUNG

E73  $^{27}\text{Al}$  multiquantum MAS NMR study of methane dehydro-aromatization catalysed by Mo/HZSM-5  
Lingling SU, Xiuwen HAN, Ding MA, Yide XU, Xinhe BAO, Hongbing HU, and Steve C. F. AU-YEUNG

E75 Observation of spillover hydrogen and adsorbed hydrogen on supported rhodium by  $^1\text{H}$  MAS NMR  
Zhimin YAN, Jianqin ZHUANG, Xianchun LIU, Hongtao MA, Xiumei LIU, Xiuwen HAN, and Xinhe BAO

E77 Brønsted acid sites populations on the external and internal surface of HY zeolite with different crystal sizes: a solid state NMR study  
Zhimin YAN, Jianqin ZHUANG, Gang HU, Xianchun LIU, Xiumei LIU, Xiuwen HAN, and Xinhe BAO

E79 Characterization of acidity in TS-1 using  $^{31}\text{P}$  MAS NMR of the probe molecule trimethylphosphine  
Jianqin ZHUANG, Zhimin YAN, Xiumei LIU, Xianchun LIU, Xiuwen HAN, and Xinhe BAO

E81 Solid-state NMR investigation of aluminosilicate zeolite catalysts

- Yiqing YANG, Xiangming KONG
- E83 Solid-state NMR study on the phase structures of poly(3-hydroxybutyrate) and poly(3-hydroxybutyrate-co-3-hydroxyvalerate)**
- Yan CHEN, Guang YANG, Qun CHEN**
- E85 Hydration of layered sodium silicate SKS-6 studies by solid state NMR*
- Xuanjun AI, Jinxiang DONG, Feng DENG, and Chaohui YE**
- E87 Analysis of removal of inhomogeneous second order broadening in MQMAS NMR**
- Lei CHEN, Feng DENG, Chaohui YE*
- E89 Characterization of organofunctionalized MSU-x zeolite by high resolution solid state NMR**
- Qing LUO, Feng DENG, Yanjun GONG, Chaohui YE, and Dong WU*
- E91 The NMR pulses program's design of any N-qubit Grover's algorithm and the experiment realization**
- Xiaodong YANG, Xijia MIAO*
- E93 NMR study of metallosupramolecular cube with nanometer-sized cavity*
- Maochun HONG, Yingjun ZHAO, Weiping SU, and Rong CAO
- E95 NMR investigations on electron irradiated ferroelectric poly(vinylidene fluoride-trifluoroethylene) copolymers**
- Liyang WANG, Jiwen FENG, Chaohui YE**
- E97 2D NOESY investigation of the Interaction between sodium dodecylsulfonate and poly-ethylene glycol in aqueous solution**
- Xiaowen FANG, Hongchang GAO, Shizhen MAO, Sui ZHAO, Jiayong YU, and Youru DU
- E99 <sup>1</sup>H NMR study of self-assembly of Dendr.PE-PAA, an amphiphilic block copolymer in aqueous solution**
- Shizhen MAO, Tianzhi WANG, Xijia MIAO, Xiaowen FANG, Hanzhen YUAN, Youru DU, Linyong ZHU, Miaozen LI, and Erjian WANG

- E101 NMR analysis of matrine and oxymatrine  
**Guoyun BAI, Daqi WANG, Chaohui YE, and Maili LIU**
- E103 *Characterization and antiglobulin tests of polyelectrolyte*  
**Xujie YANG, Lude LU, Tongbin ZHOU, Xin WANG, and Jianfeng LIAN**
- E105 Study of preparation of  $K_3[VO(O_2)_2(C_2O_4)]$  in solution by  $^{51}V$  NMR  
**Jianliang YE, Hongchen XIE, Zhong CHEN, Zhiwei CHEN, and Peiqiang HUANG**
- E107 Study of chemical exchange in  $SnCl_nBr_{4-n}$  system by Sn-119 NMR spectroscopy  
**Yonghong ZHANG, Xi'an MAO**
- E109 Study on the complex site of metal ions  $Cr^{3+}$ ,  $Mn^{2+}$  and  $Fe^{3+}$  with fluoroquinolone antimicrobials  
**Liang CHEN, Hao XU, Lihua MA**
- E111 *The NMR study on radiation effect on lighter body*  
**Xin ZHAO, Aixin QIAO, Hongjian YANG**
- E113 NMR of monocrotaline and retronecine  
**Xiaojun WU, Hanzhen YUAN**
- E115 Application of CPLD/FPGA in NMR spectrometer  
**Chaoyang LIU, Jianqing QIU, Chaohui YE**
- electron paramagnetic resonance spectroscopy***
- E117 Paramagnetic silver nanoparticles in sodalites  
Jacek MICHALIK, Hirihito YAMADA, Joanna PERLINSKA
- E119 ESR studies on Cu/zeolite of dehydration, oxidation and absorption  
**Li WANG, Puyu ZHANG, Zhaoyang YE, Shan JIANG, and Linxian FENG**
- E121 ESR studies on hydrated Cu/mordenit, Cu/erionit, Cu/ZSM-5 and Cu/ferrierite  
Li WANG, Puyu ZHANG, Zhaoyang YE, Shan JIANG, and Linxian FENG

E123 ESR studies on paramagnetic calixarenes

**Qi WANG, Jiasong WANG, Yong LI, and Guoshi WU**

E125 ESR studies of copper(II)-15-crown-5 complexes

**Xiwang DU, Lan ZHANG, Yong LI**

E127 ROS generation and some antioxidant components in Aloe

Y. LIU, Z. W. CHEN, H. M. WANG, Y. K. XU, K. LIU, and W. CHEN

E129 Utility of the phosphorylated analogue of DMPO in spin trapping-ESR

Y. K. XU, K. LIU, J. SUN, and Y. LIU

2001-10-19 a. m. (Friday)

Site: Friendship Palace No.1 A1

Presiding: Maili LIU

8:30 E25 Structure-thermodynamic relationships: Application to DNA modelling  
Steve C. F. AU-YEUNG, W. L. A. Kurtz CHIU, Amy Y. M. KEUNG, and  
Sherlock S. L. LAM

9:05 E27 Diffusional elucidation of rod-like polymers in the thermotropic liquid  
crystalline state by field-gradient NMR spectroscopy  
Isao ANDO, Yige YIN, C. ZHAO, Hideyuki YAMAKAWA, and Shigeki  
KUROKI

**9:40-10:00 Recess**

10:00 E15 Fast parallel MR imaging with interleaved water/fat acquisition  
Jianhui ZHONG, Edmund KWOK, Zhong CHEN, and Saara M.  
TOTTERMAN

10:35 E31 Characterization of the hydrogen bond network in tRNA<sup>Tp</sup> by NMR  
spectroscopy  
Xianzhong YAN, Youlin XIA, Xiangming KONG, and Guang ZHU

10:55 E33 Studies of the native starch granules: A multinuclear NMR approach  
H. R. TANG, B. P. HILLS

11:15 E35 Biexponential <sup>13</sup>C spin-lattice decay behavior of the crystalline region of  
semicrystalline copolymers and its origin  
Weixin LIN, Qiujin ZHANG, Guang Yang, and Qun CHEN

11:35 E37 Solid-state  $^{13}\text{C}$  NMR chemical shift anisotropy tensors of polypeptides  
Yufeng WEI, Dong Kuk LEE, A. RAMAMOORPHY

2001-10-19 p. m. (Friday)

Site: Friendship Palace No.1 A1

Presiding: Fengkui PEI

1:30 E39 Magic-angle hopping : Anisotropies, heterogeneous catalysis and NMR  
Camille KEELER, Herman LOCK, I-Ssuer CHUANG, and Gary E.  
MACIEL

2:05 E43 Rearrangement processes in molecular crystals as studied by dynamic  
magic angle spinning NMR spectroscopy  
Zeev LUZ

**2:40-3:00 Recess**

3:00 E41 Application of  $^{27}\text{Al}$  MQ MAS NMR method in determination of aluminum  
status in zeolites  
Ding MA, Xiuwen HAN, Lingling SU, Xianchun LIU, Xinhe BAO, Hongbing  
HU, and Steve C. F. AU-YEUNG

3:35 E45 NMR spin locking of proton magnetization under frequency switched  
Lee-Goldburg(FSLG) pulse sequence  
Riqiang FU

3:55 E47  $^1\text{H}$   $T_1$  and  $T_{1\rho}$  CRAMPS studies of the phase structure of  
poly-(R)-(3-hydroxybutyrate)/chitosan and  
poly-(R)-(3-hydroxybutyrate-co-3-hydroxyvalerate)/chitosan blends  
Man Ken CHEUNG, Kris P. Y. Wan, Qing'an MENG

4:15 E49 Binding site of  $\text{Mg}^{2+}$  at purine of ATP  
Ling JIANG, Xi'an MAO

4:35 E51 Variable-temperature  $^{129}\text{Xe}$  NMR studies of zeolite MCM-22  
Fang CHEN, Mojie CHEN, Feng DENG, Yong YUE, and Chaohui YE