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## **Pacificchem2010 生体分子の固体 NMR シンポジウムの案内**

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2010 環太平洋国際化学会議(Pacificchem 2010)において生体分子の固体 NMR のシンポジウム Advances in solid state NMR of biological molecules (#58)を開催いたします。このシンポジウムではポスター発表を募集していますので是非参加していただくよう案内申し上げます。

1) 日時 2010 年 12 月 15 日(水) - 20 日(月)

2) 場所 米国ハワイ州、ホノルル市

3) 発表形式

- ・招待講演(Invited Paper): シンポジウムで招待されている発表
- ・一般講演(Contributed Paper): 招待以外の一般発表(若干名の口頭発表をポスター発表より選出、#58 シンポジウム参加希望の方は一般講演で申し込んでください。口頭発表を希望される方は Sub-Type 欄に Oral と記入してください。ただし Oral 選出は Organizer にご一任ください。)
- ・ポスター発表(General Poster): シンポジウムを指定せず一般ポスターボードで行う発表

4) 発表申込/アブストラクト提出 申込方法

ホームページ (<http://www.pacificchem.org/>) から指示に従ってアカウントを作成し、次にアブストラクト(2000 文字以内)を提出してください。

アブストラクト提出開始: 2010 年 1 月 1 日(金)

アブストラクト提出締切: 2010 年 4 月 5 日(月)(厳守)

5) シンポジウムの概要

Title of Symposium: Advances in Solid-State NMR in Biological Molecules (#58)

Organizers: Akira Naito(Yokohama National University)

Michele Auger(Laval University)

Ayyalusamy Ramamoorthy(University of Michigan)

Frances Separovic(University of Melbourne)

Scope of Symposium

Technical developments in resolution and sensitivity enhancements of solid-state NMR.

- (i) High-resolution structure determination of biomolecules by solid-state NMR.
- (ii) Advances in structural biology of membrane proteins and peptides.
- (iii) Dynamics and biomolecular function by solid-state NMR.
- (iv) Characterization of supramolecular complexes and fibril-forming proteins.

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# Pacificchem 2010

Honolulu, Hawaii, USA, December 15-20, 2010



**Announcing an upcoming symposium at Pacificchem 2010  
in the Topic Area of Biological Chemistry.**

## **Advances in Solid-State NMR of Biological Molecules (#58)**

Organized by: Akira Naito, Michele Auger, Ayyalusamy Ramamoorthy, Frances Separovic

Invited Speakers: Michele Auger (CA), Jerry Chan (TW), Timothy Cross (US), Gary Drobny (US), Toshimichi Fujiwara (JP), John Gehman (AU), Mei Hong (US), Yoshitaka Ishii (US), Yongae Kim (KOR), Vladimir Ladizhansky (CA), Gary Lorigan (US), Ann McDermott (US), Francesca Marassi (US), Isabelle Marcotte (CA), Nobuaki Matsumori (JP), Konstantin Momot (AU), Akira Naito (JP), Kaoru Nomura (JP), Eric Oldfield (US), Stanley Opella (US), Tatyana Polenova (US), William Price (AU), Ayyalusamy Ramamoorthy (US), Takeshi Sato (JP), Jacob Schaefer (US), Frances Separovic (AU), Simon Sharpe (CA), Steven Smith (US), Suzana Straus (CA), Kiyonori Takegoshi (JP), Satoru Tuzi (JP), Gianluigi Veglia (US), David Weliky (US), Katherine H. Wildman (US), Kurt Zilm (US)

Solid-state NMR is a powerful tool for elucidating structure-function relationships at atomic resolution in a variety of biological systems. As an approach of structural biology, recoupling methods in solid-state NMR spectroscopy have greatly progressed to determine interatomic distances of site specific and uniformly labeled biomolecules. This distance information together with chemical shift interactions are used as structural constraints for determining the 3D structure of solid biological macromolecules. Solid-state NMR can also provide molecular images based on orientational information in mechanically and magnetically ordered systems of biomolecules, such as membrane proteins and peptides and including antimicrobial peptides, fusion peptides, toxins and ion channels. Unique information about dynamics can be obtained in the solid-state or in membranes since local motions can be studied without the complexity of overall tumbling over a wide range of time scales, which are relevant to biological function. The following topics will be discussed in this symposium: (i) technical developments in resolution and sensitivity enhancements of solid-state NMR; (ii) high-resolution structure determination of biomolecules by solid-state NMR; (iii) advances in structural biology of membrane proteins and peptides; (iv) dynamics and biomolecular function by solid-state NMR; and (v) characterization of supramolecular complexes and fibril-forming proteins.

**Abstract submission: January 1st – April 5th, 2010**  
**All abstracts are submitted through the WEB link:**

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