# 2<sup>nd</sup> Tokyo-NRO Workshop Chemical Diagnostics of Star and Planet Formation

**Date** March 5 and 6, 2009

Venue Rm. 381 Faculty of Science Bldg. 1, Hongo Campus, The University of Tokyo

See the access map: http://www.phys.s.u-tokyo.ac.jp/en/access/index.html

# Purpose and Scope of the Workshop

This workshop will focus on a link between astrochemistry and star formation. Chemical processes are deeply related to physical conditions and their changes during star formation, understanding of physical processes of star formation is indispensable for detailed understanding of chemical evolution from interstellar clouds to planets. On the other hand, chemical compositions can provide us with novel information on the present and past physical processes of star forming regions. A role of such chemical diagnostics of star and planet formation will be more important in the ALMA era. In this workshop, we would like to have an intense and fruitful discussion on a relation between physics and chemistry in star and planet formation. This workshop is supported by Nobeyama Radio Observatory and GCOE program of the University of Tokyo. The scope of the workshop will be as follows:

- (1) Chemistry of Starless Core Phase
- (2) Deuterium Fractionation
- (3) Hot Corino/ Hot Core Chemistry
- (4) Warm Carbon Chain Chemistry
- (5) Role of Outflows in Chemistry
- (6) Chemistry in Massive Star Forming Regions / IRDCs
- (7) Chemistry of Protoplanetary Disks
- (8) Other related topics

### **Workshop Style and Presentation**

This is a small workshop inviting four or five foreign participants and about 20 domestic participants for detailed discussions and personal communications with one another. The workshop consists of invited talks and poster presentations. Invited speakers at this moment are as follows:

Yuri Aikawa (Kobe U.)

Henrik Beuther (MPI, Heidelberg)

Tomoya Hirota (NAOJ)

Shu-ichiro Inutsuka (Kyoto U)

Jes Jorgensen (U. Bonn)

Sheng-Yuan Liu (ASIAA)

Hideko Nomura (Kyoto U.)

Kazuyuki Omukai (NAOJ)

Takashi Onaka (U. Tokyo)

Nami Sakai (U. Tokyo)

Yancy Shirley (U. Arizona)

Ken'ichi Tatematsu (NAOJ)

Koji Tomisaka (NAOJ)

and a few more...(TBD).

In addition to invited talks, we call for contributed papers. Most of the contributed papers will be presented in poster, whereas a few selected ones will be in oral. Anyone who wishes to present contributed papers should submit a title, authors, a short abstract (100 words), and a your preference of presentation style (oral or poster) by an e-mail to the following address by <u>February</u> 4, 2009.

yamamoto@phys.s.u-tokyo.ac.jp

#### **Registration and Travel Support**

Because of a capacity of the meeting room (40 in maximum), if you wishes to join us in the workshop, please send a mail expressing your participation to the above address by <u>February 12</u>, <u>2009.</u> Registration is not necessary for invited speakers.

A limited travel support for attending the WS is possible for domestic participants. Please note your request for travel support on the registration mail. Since the fund is limited, we may not be able to support all the requests.

Travel and hotel arrangements should be done by individuals. Exceptions are for only invited overseas participants, for whom we would make necessary arrangements.

# **Workshop Program and Banquet**

The scientific program will be informed soon. We will have a WS banquet on March 5.