

The CAS-NAS Forum for New Leaders in Space Science

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National Academy of Sciences



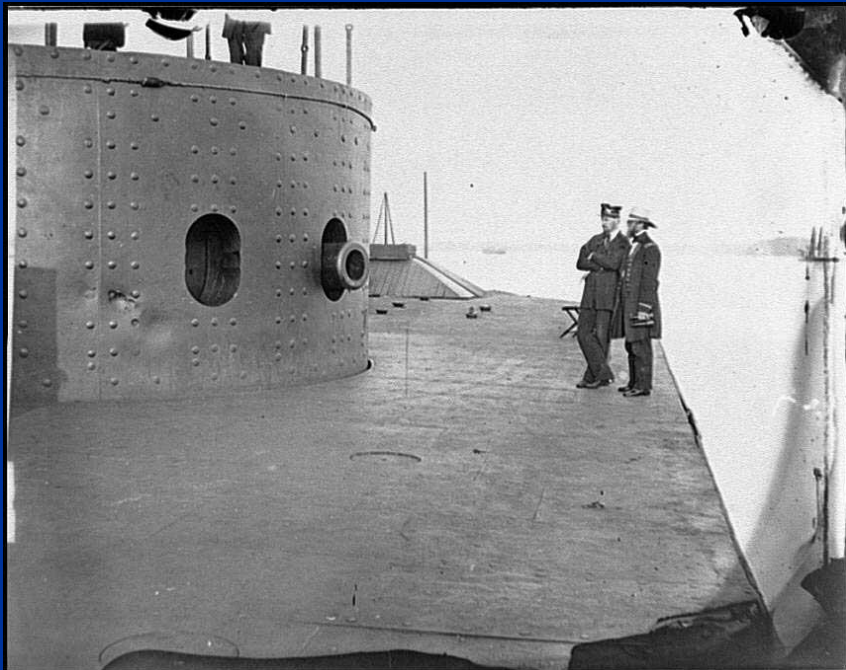
The National Academy of Sciences was signed into being by President Abraham Lincoln on March 3, 1863, at the height of the U.S. Civil War. It is a private, self-perpetuating, society of distinguished scientists.

But, its Act of Incorporation, mandates it to "investigate, examine, experiment, and report upon any subject of science or art" when asked to do so by any department of the government.

NRC and SSB

Early NAS studies concerned issues associated with the conduct of the U.S. Civil War. But, by the end of the 19th century, the small number of NAS members cannot keep up with requests for advice. So, in 1916, the NRC is established as the mechanism by which the NAS fulfills its advisory mandate.

Established as the Space Science Board by the NAS in June 1958 in response to a joint request from the directors of NSF, NACA and ARPA for advice on the conduct of civil space research activities.



Mission of the Space Studies Board

- To be the focus of the interests and responsibilities of the National Academies in space science
- Establish necessary relationships with governmental science activities
- Represent the National Academies in international relations
The SSB is the U.S. National Committee for COSPAR
- Stimulate needed research
- Promote necessary coordination
- Provide advice and recommendations to appropriate individuals and agencies

SSB Interactions with China 2000-2011

- July 2000—COSPAR, Warsaw—SSB and ESSC representatives hold informal discussion with representatives of the Chinese National Committee for COSPAR
- July 2004—COSPAR, Paris — Informal gathering of representatives from SSB, China, Japan, and ESSC
- March 2005—Washington—Sun Mengxin, First Secretary in the Science and Technology Office of Chinese Embassy briefed the SSB on Chinese space activities.
- October, 2007—Washington—SSB staff hold brief meeting with visiting Chinese delegation led by CAS Vice President Jiang Mianheng
- March, 2011—COSPAR, Paris—SSB staff issue open invitation to COSPAR Vice President Wu Ji to attend a future SSB meeting
- October, 2011—Washington—SSB staff meets with delegation from the CAS led by Vice President Yin Hejun

Issues in US-China Space Cooperation

■ Numerous incidents over the years, e.g., Chinese ASAT tests, the U.S. Navy's 2001 Hainan Island incident, etc. etc.

■ More recently, Congressman Frank Wolf from Virginia has used his position on the House Appropriations Committee (funds the federal government) and as chair of the Commerce-Justice-Science Appropriations Subcommittee (funds NASA) to prohibit any and all bilateral contact between NASA and China



October 2011 Visit of CAS Delegation

The direct cause of a series of events:

- CAS issues invitation to SSB to send delegation to Beijing
- SSB successfully applies for internal NAS funds for a limited engagement activity with CAS
- Informal gathering of U.S. and Chinese scientists at COSPAR's Mysore scientific assembly
- Wu Ji attends November, 2012, SSB meeting
- Visit by SSB delegation to Beijing in May, 2013



May 2013 SSB Delegation to Beijing



Establishment of the Forum

- Discussions in Beijing in May, 2013, and at subsequent IAC led to the idea that the most effective thing the CAS and NAS could do was to promote scientist-to-scientist contacts
- SSB applies for and receives additional internal NAS funds to pay for 1-year operation of the Forum.
- Joint CAS-NAS announcement of the forum issued in late-2013



**FORUM FOR
NEW LEADERS
IN
SPACE SCIENCE**

The National Space Science Center (NSSC) of the Chinese Academy of Sciences and the Space Studies Board (SSB) of U.S. National Academy of Sciences' National Research Council (NRC) invites applications for the 2014 inaugural CAS-NAS Forum for New Leaders in Space Science.

The Forum is designed to provide opportunities for a highly select group of young space scientists from China and the United States to discuss their research activities in an intimate and collegial environment at meetings to be held in China and the United States. The goals of the Forum are threefold:

1. To identify and highlight the research achievements of the best and brightest young scientists currently working at the frontiers of their respective disciplines;
2. To build informal bridges between the space-science communities in China and the United States; and
3. To enhance the diffusion of insights gained from participation in the Forum to the larger space-science communities in China and the United States.

The first Forum will be held, in the Beijing-area on May 8-9, 2014. The second Forum will be held in the Los Angeles-area on November 3-4, 2014. The scientific scope of both events in 2014 is limited to the general areas of space astronomy and solar and space physics. Both events will include focused presentations by young scientists interspersed with topical presentations by senior scientists and group discussions.

Participants will be selected by an International Program Committee appointed by the NSSC and SSB. The travel and subsistence costs for U.S. participants will be paid by the NRC. Travel costs for Chinese participants will be paid by their own organizations. Three nights of local accommodation plus selected meals and transportation to/from the meeting site will be provided by the local host organization.

Eligibility

The Forum is open to all active researchers meeting the following criteria:

1. Hold an academic/research position at the postdoctoral level or above at a university or research institute in China or the United States;
2. Be no more than 40 years old on December 31, 2014;
3. Be sufficiently proficient in written and spoken English to be an active participant in high-level scientific discussions;
4. Be eligible to obtain the visa necessary to permit travel to China and the United States;
5. Be available to participate in both the May and November Forums; and
6. Be currently engaged in research in the general areas of space astronomy or space and solar physics.

How to Apply

All applicants must submit the following documents (in PDF format and in English):

1. A one-page letter outlining why you wish to participate in the Forum;
2. A detailed resume, including a list of peer-reviewed scientific publications, date of birth and citizenship;
3. An abstract of the scientific presentation you wish to give at the Forum in May, 2014;
4. The title of a substantially different presentation you wish to make at the Forum in November, 2014; and
5. Letters of recommendation from two faculty members familiar with your work.

6. Current contact information including name, mailing address, telephone numbers, and email address

The abstract should be no more than 2-pages long (minimum 750 words, maximum 1000 words) and must include a title (no more than 12 words), your name, academic affiliation and all necessary references. Figures, equations, and special characters should only be used in the abstract if absolutely essential.

All application materials must be emailed to both sunll@nssc.ac.cn and dhsmith@nas.edu. Incomplete applications and materials received after January 13, 2014, will not be considered.

Individuals who reside in China may direct inquiries to Lili Sun at sunll@nssc.ac.cn

Individuals who reside in the United States may direct inquiries to David H. Smith at dhsmith@nas.edu

The Program Committee will make its selections in January-February, 2014, and successful applicants will be contacted directly by a representative of the Program Committee no later than March 1, 2014.

What is the Forum?

- The Forum is designed to provide opportunities for a highly select group of young space scientists from China and the U.S.A. to discuss their research activities in an intimate and collegial environment
- The Forum consists of a pair of meeting—in Beijing and Irvine, California—attended by the same group of participants. Both events to include focused presentations by young scientists interspersed with topical presentations by senior scientists and group discussions
- The goals of the Forum are threefold:
 - To identify and highlight the research achievements of the best and brightest young scientists working at the frontiers of space science
 - To build informal bridges between the space-science communities in China and the U.S.A.
 - To diffuse insights gained from participation in the Forum to the larger space-science communities in China and the U.S.A.

Eligibility

The Forum is open to all active researchers meeting the following criteria:

- Hold an academic/research position at the postdoctoral level or above at a university or research institute in China or the U.S.A.
- Be no more than 40 years old on 31 December, 2014
- High-level proficiency in written and spoken English
- Eligible to obtain the visas required to enter China and the U.S.A.
- Available to participate in both the May and November Forum
- Engaged in research in space astronomy or solar and space physics.

Applications and Selection Process

- A total of 41 complete applications received
- 19 applications from China and 22 applications from the U.S.A.
- Approximately, 2/3 solar and space physicists and 1/3 astrophysicists
- Participants were selected by a joint CAS-NAS Selection Committee on the basis of the scientific merit demonstrated by their application materials—i.e., a detailed resumé, list of peer-reviewed scientific publications, detailed abstract of proposed presentation and letters of reference
- The NAS and CAS halves of the Selection Committee independently ranked all candidates and nominated eight primary candidates from the U.S.A. and eight from China
- Significant agreement between the initial CAS and NAS lists
- We iterated lists and rapidly converged on a consensus list

2014 CAS-NAS New Leaders

Tao AN

Shanghai Astronomical Observatory

Yongwei DONG

Institute of High Energy Physics

Hui LI

National Space Science Center

LIU, Ying

National Space Science Center

Binbin NI

Wuhan University

Yingna SU

Purple Mountain Observatory

Shuhong YANG

National Astronomical Observatories

Chen ZHANG

National Astronomical Observatories

Justin KASPER

University of Michigan

Vyacheslav LUKIN

Naval Research Laboratory

James McATEER

New Mexico State University

Kunio SAYANAGI

Hampton University

Meng SU

Massachusetts Institute of Technology

Ruslan VAULIN

Massachusetts Institute of Technology

Paul WITHERS

Boston University

Liang ZHAO

University of Michigan

May 2014 Forum in Beijing

The First Forum for New Leaders in Space Science

May 8-9, 2014, Beijing



November 2014 Forum and Beyond?

- The SSB is currently preparing arrangements for the November, 2014, Forum at the National Academies' Beckman Center in Irvine, California
- The SSB and CAS both wish to continue the Forum in 2015
- The SSB has not so far been able to find an independent source of funds to pay its share of the cost of running the Forum
- Considering the possibility of making the Forum multilateral by including European scientists



I hope to report back to COSPAR in Istanbul on positive
developments

Thank You