

INTDS NEWSLETTER

The Masters Series

International Nuclear Target Development Society



Irving Feigenbaum
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www.intds.org

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Cover Photo

Photo courtesy of the Brookhaven Bulletin showing Irving Feigenbaum in his laboratory.

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Note from the Editor

To the INTDS Membership,

In this issue we present the Minutes of the 2007 INTDS Board Meeting held via email. This was the first attempt by the Board to hold such a meeting as downsized travel budgets prevented convening an actual meeting in person. These Minutes therefore were more extensively documented over those held in a normal setting. We ask your indulgence as to their extended length. Over time it is hoped that the process of holding the off-conference-year Board meetings become more streamlined and efficient.

WE ARE IN NEED OF TECHNICAL CONTRIBUTIONS!

As Editor of the INTDS Newsletter, I wish to invite you to submit contributions of general or technical interest to the membership for upcoming issues.

Examples include:

- Description of recent target activities, i.e. your annual (or semi-annual) laboratory progress report.
- Information on any newly developed techniques.
- Requests for advice on making specific targets or obtaining special materials (enriched isotopes).
- Literature information regarding techniques and sample preparation.
- Employment opportunities.
- Nominations, promotions, retirement announcements, ... etc.

The Newsletter will accept advertisements placed by members, at the discretion of the editor. These ads should be one page in length or less and must be relevant to target preparation. For instance, isotope services, equipment for sale, thin foil materials and/or targets in stock, etc.

Please send your contribution to my attention at your earliest convenience, preferably, by email. Thank you.

I look forward to your contribution.

John P. Greene
Editor

The Masters Series

Irving Feigenbaum

Dear INTDS members

It is with deep sadness that I inform the INTDS community of the death of Irving Feigenbaum. Irv worked at Brookhaven for over 50 years in a variety of positions but is best known as the target maker for the BNL tandem Van de Graaffs. He was very active in the target making community and will be missed.

One of Irv's many contributions was the production of very thin carbon stripper foils for the BNL's tandems. These foils are crucial in the tandem's role as injector of heavy ions for the Relativistic Heavy Ion Collider (RHIC). Without these foils it is doubtful that RHIC would have been as successful.

When Irv retired in 1999, I took over responsibility for target making and although he passed on many of his foil making tips, techniques and tricks I can not match his years of experience. On his many visits to BNL, he was always willing to share his thought and experiences with any problem that I had. He was a wealth of knowledge and always willing to help. Although he has been retired for almost 8 years the target making laboratory is still affectionately known as "Irv's Lab"

Below is a link to an article about Irv on the occasion of his retirement.

<http://www.bnl.gov/bnlweb/pubaf/bulletin/1999/bb081399.pdf>

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Lamenting the death of friend Irving

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Isao Sugai

I received from Bill Lozowski on 18 Jan.2007 the bad news of Irving Feigenbaum's death. It was a great unwelcome surprise.

The first time I met him was at the 10th World Conference of the INTDS, October 19-23, 1981 at the Kiryat Anavim Hotel near Jerusalem, Israel. That conference was organized by L.Sapir of the Weizmann Institute of Science. We enjoyed with Irv and his wife many things there. He and she were very kind. When she died it was of course a great loss to him, but he continued his work to prepare plenty of targets for BNL.

Sixteen years ago, Irv visited my lab at the Institute for Nuclear Study University of Tokyo. For a week, he and a colleague from the Ion Source Group of the Tandem Accelerator of BNL discussed with us many aspects of thin carbon stripper foils.

Irv's experience with targets was wide and he contributed a great deal for a very long time to our INTDS. I warmly pay last respects to my colleague and friend "Ivy."

The picture below was taken 15 October 1991, at a Sushi bar near my lab.

We can see his fine smile, which recalls to me many wonderful old days.



News of the INTDS

MINUTES OF THE 2007 INTDS BOARD MEETING

(Held electronically via email and Dated: 3 December 2007)

Invited:

members of the Board:

Klaus Eberhardt
David Gilliam
John Greene
Bettina Lommel
Bill Lozowski
Anna Stolarz
John Jr. Stoner
Stefan Zeisler
Josef Comor,

and

Isao Sugai
(chair of the 23rd INTDS Conf)
Christelle Stodel
(chair of the 24th INTDS Conf)

I. INTDS matters:

1. Financial and membership status report (Bill)
2. Personnel
 - Succession of presidency
 - Appointing the Vice-President (suggestion: J.Greene)
 - Recording secretary (John, will you keep this for the moment?)
 - Appointing the Nominating committee for next election, (David)
3. Election: how to cope with principle of 'candidate from the floor'? This caused a lot of stress at the last election and not always reasonable suggestions. Do we need to modify the bylaws?
4. Awards for 2008?? Any suggestions
 - What about repeating ceremony for Peter Maier-Komor if he comes??

II. Conf 2006

1. Approval of minutes of Board Meetings from October 2006: (John G-minutes please)
 - Pre-conf Board meeting on 15 October at Shinonome Hotel
 - INTDS Business meeting (including elections results, discussions) on 19 October?
 - INTDS Reviewers meeting (list of reviewers will be submitted by Anna as she has the full list with further corrections)
2. Final report (Isao): budget, summary (number of participants, no. of papers)
3. Proceedings
 - Report on status - Isao, David
 - Problem of papers not fulfilling scientific requirements – publication in Newsletter??
 - Discussion what to do (see explanation in the mail)?
 - Staying with NIM A? Separate issue or bundling with next conference?
 - Looking for other solution to have the proceedings as soon as possible? (e.g. as KEK report, Isao check if possible? If yes how quickly?)

III. Conf 2008: 15 - 19 September,

additional day for board meeting: 14.09.2008

Report by Christelle

1. Status
2. Announcement for Web and link to the conf web site.
Will it be on the GANIL server or on intds.org?
3. Way of spreading the info? Will it be mailed, e-mailed?
4. Contact/contract with Elsevier. What arrangements have been made so far?
5. Accommodation, programme, Organising + Scientific committees,
6. Place for pre-conf. Board meeting on 14 September

Financial support by INTDS for participants: principles, limit of the, announcement on the web?

IV. Web:

1. updating the INTDS site
 - Recent bibliography (index) not the one from 2005, newer version exists!!!!
 - Recent Newsletter or none
 - Change info about conf: 2006, instead of recent text suggest some summary,
 - 2008 conf. announcement with info on manuscripts requirements (let's hope it will be NIM A) and with link to the conf web site
 - Photo (2002!!!! at 2007)- let's made gallery better
2. To be added to the site??
 - a. Short history with structure of the society; yes/no
 - b. Extracts from bylaws, particularly related to election principle yes/no
 - c. Keywords - modified version yes/no
3. New webmaster after 2008 if the rumours about Bill's retirement become true - conditions for replacement (permission for access to the server-Bill please let us know how it looks at IU)

V. Newsletter

1. Last one was July 2006. Will the 2007 appear? (John)
2. Continuation or 'death'? Change of the form? I think it was already decide it will be issued once a year
3. In coming issue (if) should we have:
 - the farewell notes due to death of Irving Feigenbaum (January 2006) and George Thomas (March 2006)?
 - David's speech at Peter's awarding?
 - notes about retirements?:
PMK , J.P Richaud-Grenoble, some more??? Marie Antoinette Saettel (she haven't retired but quitted target activity for good)

VI. Miscellenous

**AWARD OF RECOGNITION TO INTDS MEMBER
PETER MAIER-KOMOR**

David Gilliam
2006 INTDS Conference
Tsukuba, JAPAN
(submitted February 2008)



During the 2006 INTDS Conference in Tsukuba, JAPAN, a career achievement award was presented to Dr. Peter Maier-Komor. Dr. Maier-Komor started his career in target preparation in 1966 and attended the first world-wide target conference organized by Oak Ridge National Laboratory in Gatlinburg, USA, in 1971. When a few years later the INTDS was incorporated, Dr. Maier-Komor became a member of the first INTDS Board of Directors. During his decades devoted to target preparation, he has made great contributions not only to new techniques but also to theoretical target developments. His dedicated service to the INTDS as a former President and Conference Co-Chair is also highly appreciated. Unfortunately however, he could not attend this conference and the award was presented *in absentia*, during the conference banquet. The award plaque was delivered to Dr. Maier-Komor sometime later and a second, formal presentation was made to him at the 2008 Conference in Caen, FRANCE.

Ed. Note: Previous recipients of the INTDS Award of Recognition can be viewed from the INTDS Website: http://www.intds.org/Awards_about-us.

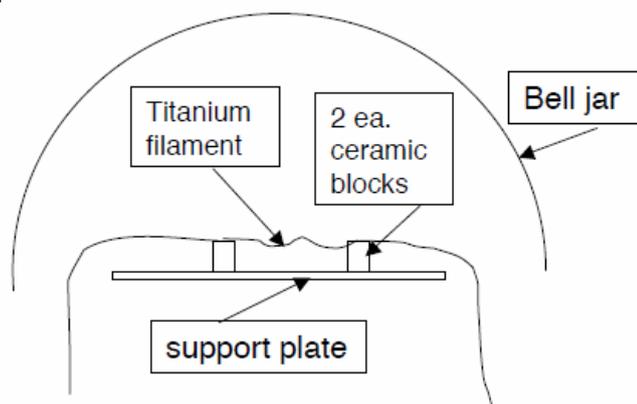
Technical Contributions

Auxiliary titanium sublimation pump in a previously existing bell jar system

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(submitted 13 December 2007)

Occasionally an experimenter wishes that he/she could obtain lower pressure during an evaporation, in order to reduce or minimize incorporation of impurities in the target being produced. It is widely believed that impurities, in addition to providing additional unwanted reactions in a nuclear experiment, affect stresses in the target. We have obtained clear evidence that this happens in production of titanium targets.

Titanium sublimation pumps are available commercially and are widely used to lower the pressure in vacuum systems. However, in a mature evaporator used on a daily basis, it is neither easy nor convenient to install such an apparatus. We realized that the topmost hemispherical inner part of a bell jar was actually unused for most of our purposes. With a simple arrangement, we turned it into a pump.



The titanium filament is type TSP-12-VA, obtained from Duniway Stockroom (<www.duniway.com>). The support plate, which prevents titanium evaporant and flakes from bombarding the apparatus below it in the bell jar, is aluminum, and the connecting leads are copper. The ceramic blocks have dimensions 19 mm x 19 mm x 25.4 mm, but ordinary porcelain standoffs used for electrical wiring would work as well.



