

# International Nuclear Target Development Society

<https://www.ints.org>

**INTDS is a not-for-profit educational organization tracing its root in 1963 composed of members and an executive board** open to all interested in the science and technology of target fabrication

It aims to **share the knowledge**, know-how of technics to provide high-quality targets for basic research in nuclear fields, physics, chemistry, related science

# Its Organization

Who we are?

**INTDS is a not-for-profit, educational organization composed of members and an executive board** open to all interested in the science and technology of target fabrication

The INTDS is governed by:

- a Board of Directors, elected by Society members, (the Board of Directors shall consist of seven members representing different geographical locations).
  - and Officers such as President, Vice-President, Corresponding Secretary/Treasurer and Recording Secretary and others as appointed by the Board of Directors.
- Officers may or may not be the members of the Board of Directors.

Dear colleagues,

To become the INTDS member, one need to pay a \$100 membership fee. These are the benefits of becoming a member of the society: A once off reduced INTDS conference fee, newsletter, access to a wealth of INTDS bibliography, world target laboratory information and the easy access to target community.

The society also has a Karasek fund which partially assists imerging target makers to obtain hands-on-training from the world target laboratories of their choice depending on the skill they want to acquire.

# INTDS Newsletter (Birgit - Noemi)

**INTDS NEWSLETTER**  
International Nuclear Target Development Society



December 2022  
Volume 49



The INTDS2022 attendees in the main auditorium at PSI

**INTDS**  
Newsletter

International Nuclear Targets Development Society



Stable Isotope Materials and Chemistry Group: Dispensing and Technical Services  
Oak Ridge National Laboratory, Oak Ridge, Tennessee, United States

May 2023  
Volume 50  
Number 1



**INTDS**  
Newsletter

International Nuclear Targets Development Society



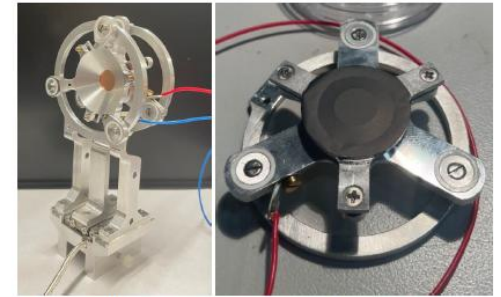
Target Preparation Laboratory of Nuclear Physics Department  
Horia Hulubei National Institute for Physics and Nuclear Engineering  
Măgurele, Romania

December 2023  
Volume 51  
Number 2



**INTDS**  
Newsletter

International Nuclear Targets Development Society



New plunger (left) with a carbon target on gold backing (right).  
Center for Accelerator Target Science, Argonne National Laboratory,  
Lemont, Illinois, United States.

June 2024  
Volume 52  
Number 1

# THE FRANK KARASEK AWARD

## SCHOLARSHIP & grants

The Frank Karasek Memorial Scholarship Fund was established by the International Nuclear Target Development Society (INTDS) in 1996 in recognition of Frank's enormous contributions to the production of thin metal foils by the method of rolling. This fund is designated for the support of researchers from other laboratories engaged in target foil rolling for nuclear physics research. Frank's prodigious work is well known throughout the world [1, 2]. The large rolling mills he used at Argonne National Laboratory (ANL) are still in use in the Material Science Division.

[1] Frank J. Karasek, *Proc. Of the Seminar on the Preparation and Standardisation of Isotopic Targets and Foils, Harwell, England, AERE-R 5097 (1965) p.111*

[2] F. J. Karasek, *Nucl. Instr. and Meth.* **102** (1972) 457-458

Justin Diaz (undergrad) and Dr. Nick Esker of San Jose State University visited Argonne National Laboratory in June 2022



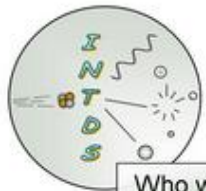
Noemi, Jukka and Jolanta at the Targetlaboratory at GSI and at the Institute of Nuclear Chemistry at the Gutenberg-University Mainz on March 2023



# INTDS web site (Anna & )

Welcome to the new version of our web site.

The site is not only expanded but as well reorganised. Parts of the new version are accessible only to INTDS members. Passwords necessary to access the protected areas should be provided to INTDS members by e-mail by mid April 2021. If you are an INTDS member and you haven't got the mail please first check your spam folder and if there is no mail from (wordpress@intds.org) contact the *webmaster*.



Who we are?



Targepedia



Library



Conferences



Gallery



My INTDS

**Actualities:**

**Virtual Workshop**

The workshop on Target simulations organized by SNS, Oak Ridge National Laboratory will take place **April 6, 2021**. There is **no fee** but **registration is needed** to get access to workshop. The web site of the workshop is: <https://conference.sns.gov/event/267/>

**Election 2020**

Due to COVID restrictions election of new

# INTDS web surfing (Anna & )



- About INTDS ▾
- Targepedia ▾
- Library ▾
- Conferences ▾
- My INTDS ▾**

## Biblio index

Below (open access mode) you find the list of contributions to the latest meeting, the 29<sup>th</sup> World Conference held in October 2018, published in EPJ Web Conf. 229, 2020.

The **entire INTDS bibliography index** currently listing 1165 articles (searchable with keywords, authors name, journals or papers title) is available after [log in](#).

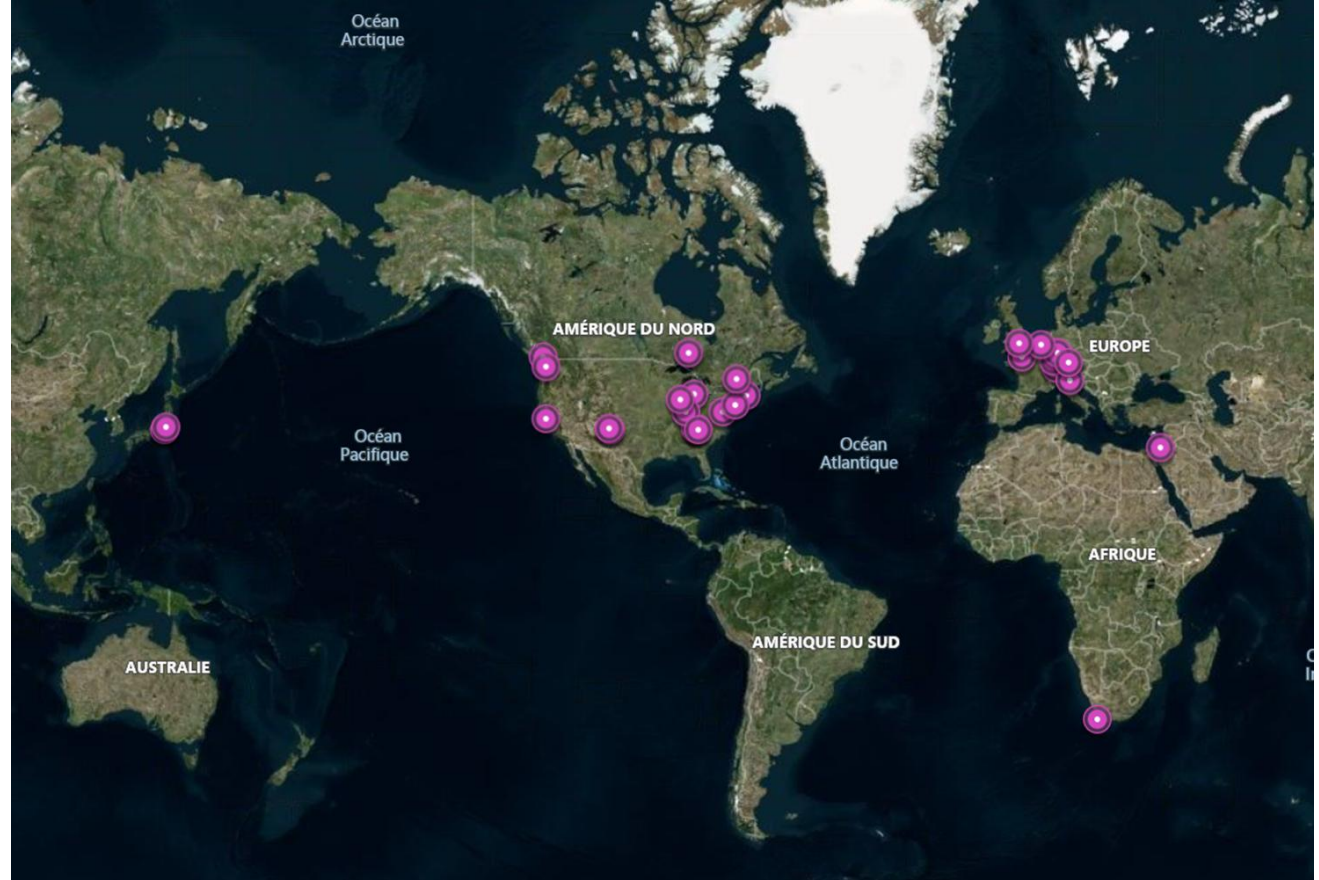
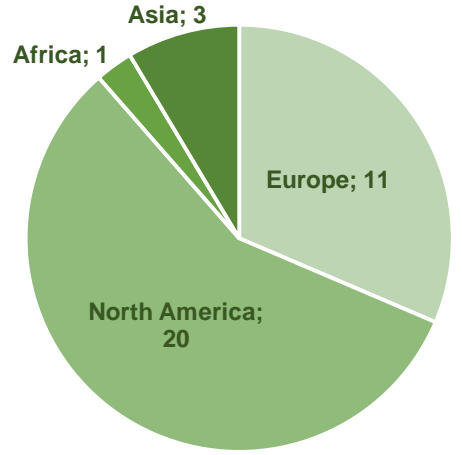
When entering keywords in the search box please be aware of spelling differences between British and American English: e.g. aluminium/aluminum, vapour/vapor, etc. Both forms are present in the index.

Search:

Id	Author	Title	Journal	Keywords
1	G.H. DEBUS	Sample preparation at the Central Bureau of Nuclear Measurement	Report AERE-R 5097 (1965) 1	electrodeposition; electrospraying; electrophoresis; thermal cracking; resistance heated source; induction heating; alloy; powder targets; rolling;

# Biennial Meetings

35 INTDS Meetings 1963-2024 (Symposium, workshop, annual meeting, World conf.)  
Proceedings





2028 @ GANIL, Caen, France

# Executive Board

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- and **Officers** such as President, Vice-President, Corresponding Secretary/Treasurer and Recording Secretary and others as appointed by the Board of Directors.



**Current Executive Board of the INTDS** (in brackets years of term):

**President** (2024 – 2028) **Ntombizonke Y. Kheswa**, iThemba LABS, Cape Town, South Africa  
**Vice-President** (2024 – 2028) **Bettina Lommel**, GSI, Darmstadt, Germany  
**Past-President** (2024 – 2026) **Christelle Stodel**, GANIL, Caen, France

**Appointed officers:**

*Corresponding Secretary/Treasurer:* Dannie Steski, BNL, USA; (since 2018)  
*Treasurer assistant:* Mathew Gott, ORNL, USA; (since 2020)  
*Recording Secretary:* Birgit Kindler, GSI, Germany; (since 2010)  
*Newsletter editor:* Birgit Kindler, GSI, Germany; (since 2019) & Noemi C. Cerboni, PSI Switzerland (since 2020)  
*Bibliography index manager and Webmaster:* Anna Stolarz, HIL UW, Poland; (since 2000 and 2008) & Kristian Myhre ORNL, USA (since 2024)

**Elected directors:**

**term 2022 – 2026:**

*Bettina Lommel*, GSI, Darmstadt, Germany  
*Emilio A. Maugeri*, PSI, Villigen, Switzerland  
*Wim Weterings*, CERN, Geneva, Switzerland

**term 2024 – 2028:**

*Matthew Gott*, Oak Ridge National Laboratory, USA  
*Ntombizonke Kheswa*, iThemba LABS, South Africa  
*Dannie Steski*, BNL, USA  
*Christelle Stodel*, GANIL, Caen, France

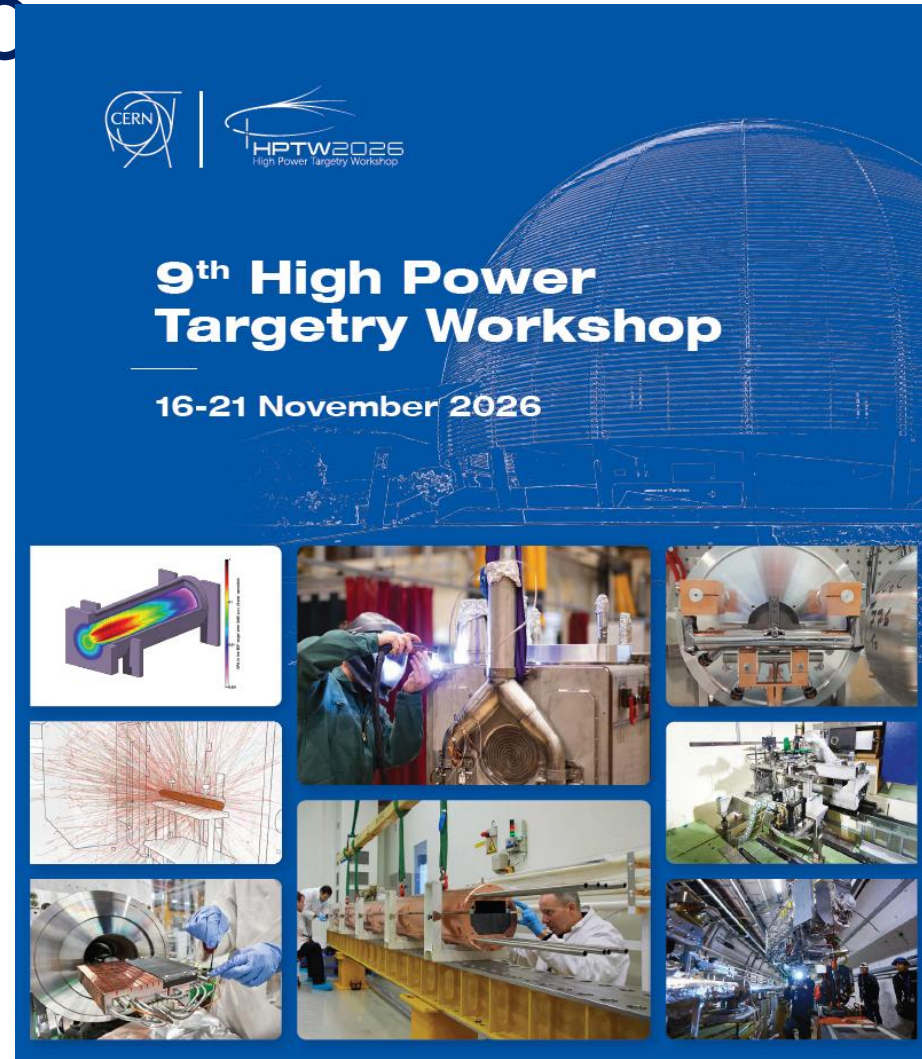
# High Power Targetry Workshop

The High Power Targetry Workshop convenes scientists and engineers from the international particle accelerator targetry community. Its scope encompasses applications in neutrino, neutron, radioactive ion beam and material & medical R&D irradiation facilities, including accelerator-driven systems and intensity frontier experiments.

- R&D activities to support design concepts
- Beam intercepting devices design, analysis and validation of concepts
- Radiation damage effects to materials - simulations and experimental studies
- Post-irradiation examination of systems and components removed from service
- Target facility challenges & opportunities
- Fabrication, assembly, inspection and quality assurance
- Operational experience
- Sustainability, dismantling and repurposing in target systems



<https://indico.cern.ch/e/HPTW2026>



**9<sup>th</sup> High Power Targetry Workshop**  
16-21 November 2026

**SCOPE:**

The HPT Workshop convenes scientists and engineers from the international particle accelerator targetry community. Its scope encompasses applications in neutrino, neutron, radioactive ion beam and material & medical R&D irradiation facilities, including accelerator-driven systems and intensity frontier experiments.

**Themes for the workshop include :**

- R&D activities to support design concepts
- Beam intercepting devices design, analysis and validation of concepts
- Radiation damage effects to materials - simulations and experimental studies
- Post-irradiation examination of systems and components removed from service
- Target facility challenges & opportunities
- Fabrication, assembly, inspection and quality assurance
- Operational experience
- Sustainability, dismantling and repurposing in target systems



# RADIATE

<https://radiate.fnal.gov/>



The Radiation Damage In Accelerator Target Environments (RaDIATE) collaboration, led by Fermilab, supports advances in the field of particle physics by identifying ways to mitigate radiation damage to accelerator materials with the objective of enabling a significant boost to beam power in the future.

<https://indico.fnal.gov/event/71651/>

## RaDIATE Topics:

- Radiation damage and thermal shock in materials
- Post-Irradiation Examination (PIE) techniques and results
- Irradiation testing and PIE facility capabilities
- Modeling and simulation of target material behavior
- Novel target material and manufacturing technologies

