INTDS

Newsletter

International Nuclear Targets Development Society

June 2026
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Contents

Editorial

Dear INTDS Members,

This issue covers several important developments and upcoming activities within our community.

We provide a summary of the 2026 Virtual Board Meetings, highlighting the main discussion points and decisions. Members are also invited to review the profiles of the seven candidates running for the three positions on the INTDS Board of Directors, who will be elected by the INTDS membership during the upcoming INTDS Conference.

On the technical side, we feature a contribution by David Vanleeuw (JRC-Geel Target Preparation Laboratory, European Commission, Joint Research Centre, Geel, Belgium) on the commissioning of a new electron-beam evaporator for the preparation of spectroscopic ^{235}U targets. We warmly thank David for sharing this interesting development and wish him every success in the deposition of ^{235}U thin films on polyimide substrates.

We also report on the Second Meeting on “Targets for Nuclear Physics” within EURO-LABS, where participants exchanged expertise, discussed common challenges, and identified opportunities for future collaboration across European laboratories.

Finally, this issue includes announcements for three upcoming events: the 32nd INTDS Conference, the 20th Workshop on Targetry and Target Chemistry, and the 9th High Power Targetry Workshop. We encourage all interested colleagues to review the information and consider participating.

Have something to share with the target-making community? We are always looking for contributions to the INTDS Newsletter! Whether it is an announcement, a new idea, an advertisement, an event, or a topic of interest, we would be delighted to feature it. Reach out to us at INTDS-Newsletter@gsi.de.

In the hope of meeting you in person at the upcoming INTDS Conference, we wish you success in your target preparation activities.
Kind regards,
Birgit Kindler and Noemi Cerboni

Summary Report on the Virtual Board Meetings 2026

The Executive Board met three times virtually in April and in May 2026 with invited guests.

Status of INTDS 2026 conference (Hiroki)

Hiroki Okuno reported for the local organizing committee (LOC) on the status of the conference.

- 52 abstracts were submitted, one by a Russian citizen.
- 32 persons registered, including one Russian citizen.
- 6 companies were found as sponsors of the conference, Dannie will provide more addresses to the LOC.
- 3 persons applied for VISA-support.
- 2 persons applied for financial support (one from India, one from China).

Questions:

Some institutions prefer an advanced payment that is not provided for the registration at the INTDS.

A bank transfer could be provided by the LOC but is associated with high costs.

Decision about financial support

- After a short discussion both applications for financial support were approved.
- The amount of support was fixed. The support is not meant to cover all expenses for the participants, the home institution must also engage in financing the conference participation.
- The support will be financed solely by the INTDS.
- The support will be paid directly at the beginning of the conference; under the prerequisite that the full paper is handed in before and that the paper will be presented in person.
- After the VBM, it was discussed whether the two-year INTDS membership fee should be waived for the applicants, in addition to the money already paid to them. This was approved unanimously by the board via mail.

Discussion on submitted abstracts

- The board approved that all abstracts fit well within the conference topics.
- Since some European institution do not allow their staff to take part in conferences where Russian participants are present it was decided to ask for rejection of the Russian abstract and cancellation of the associated registration.

Status WTTC20

Hiroki Okuno presented an e-mail from Kohshin Washiyama from the local committee of WTTC20.

- A joint session of the communities of the Workshop on **Targetry and Target Chemistry (WTTC20)**, the **INTDS** and the **High Power Targetry Workshop (9th HPTW)** is planned at WTTC20 **on Wednesday August, 26th** and at INTDS 2026 on **Monday August, 31st**.
- Each community will give a talk introducing their topics to the other community in order to find common points of interest.

Board Election (Christelle, Dannie, Matt)
- The Election Committee consists of Christelle Stodel, Dannie Steski, and Matt Gott.
- Christelle shortly presented the candidates that were proposed.
- The board approves all candidates.
- All candidates will be contacted if they want to run for office. If they agree, they should provide a photo and a personal statement for the election.

Venues for the 33rd INTDS conference

Two institutions presented their application for hosting the next INTDS conference:
- Argonne National Lab, USA, was presented by Claus Müller-Gatermann.
- GANIL, France, presented by Christelle Stodel.

Discussion:
- The location of the INTDS conference used to rotate between North America, Asia, Europe, and Africa. According to this, the next conference should be held in Europe or Africa.
- France provides a better opportunity for participation from most countries, because of the easy accessibility and the complicated procedure to gain a visa for the US.

Decision:

The vote is unanimously in favor of GANIL as a host for the INTDS in 2028.

Ntombi thanked Christelle and Claus for their presentations and congratulated Christelle.

The Board will send an official letter to the management of GANIL for hosting INTDS 2028.

The proposal of ANL for hosting the INTDS conference will be kept for the decision at the VBM in 2027.

At the INTDS membership meeting at RIKEN in August GANIL will be presented as host for the INTDS conference in 2028 and there will be an official call for proposals for hosting the INTDS conference in 2030 until mid of 2027.

Miscellaneous

- Maintaining INTDS mailing list
  - Powell Barber's mailing list is still working and open for everyone.
  - In the next meeting Kristian should report on the status and a new list should be established.
  - The new list should also be open for non-members and should be moderated.
- Maintaining conference mailing lists
  - It is approved to store a list of e-mail addresses of the 3 to 4 previous conferences for the announcement of the next conference in order to maintain an established network across the continents.
  - They will be stored in the restricted board corner of the INTDS website.

Potential European subdivision of the INTDS

- Bettina reported on the workshop of European target makers at GSI. Many of them were not aware of the INTDS when Christelle presented the INTDS to the community.
- Bettina asked for discussion if a European subdivision of the INTDS would be a good idea.
- It was noted that creating a subdivision would only lead to further division of our small community. The goal should be to expand by incorporating new people.
- A problem, especially for people coming from small institutions, is the membership fee. In former times, the membership fee was included in the conference fee, which made it easier for newcomers to join the society. Not all institutions accept the benefit from the reduced conference fee.
- Perhaps the INTDS president could contact the head of institutions directly on the issue.
- More outreach activities in workshops and conferences should be planned.
- More INTDS members could have the INTDS membership in their signature.
- More pushing on all fronts to enhance the society's visibility.
- Perhaps a flyer with information on INTDS could be a good idea.
- A report on the EUROLABS workshop at GSI will be included in the upcoming newsletter.

Election of the Board of Directors 2026

The terms for the three positions on the INTDS Board of Directors, currently occupied by Bettina Lommel, Emilio A. Maugeri and Wim Weterings, are set to expire in August 2026.

At the moment the executive board of the INTDS consists of the following people (in brackets, years of term):

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

Board of directors:
Bettina Lommel (2022 - 2026), GSI, Darmstadt, Germany
Emilio A. Maugeri (2022 – 2026), PSI, Villigen, Switzerland
Wim Weterings (2022 – 2026), CERN, Geneva, Switzerland
Matthew Gott (2024 - 2028), ORNL, Knoxville, USA
Ntombizonke Kheswa (2024 - 2028), iThemba LABS, Cape Town, South Africa
Christelle Stodel (2024 – 2028), GANIL, Caen, France
Dannie Steski (2024 – 2028), Brookhaven National Laboratory, New York, USA

Appointed officers:
Corresponding Secretary/Treasurer: Dannie Steski, Brookhaven National Laboratory, New York, USA
Treasurer Assistant: Matthew Gott, ORNL, Knoxville, USA
Recording Secretary: Birgit Kindler, GSI, Darmstadt, Germany
Newsletter editor: Noemi Cerboni and Birgit Kindler, GSI, Darmstadt, Germany
Bibliography index manager & Webmaster: Anna Stolarz, Heavy Ion Laboratory, University of Warsaw, Poland; Kristian Myhre, ORNL, Knoxville, USA

The Nominating Committee, consisting of Christelle Stodel, Dannie Steski and Matt Gott appointed by the INTDS President, is pleased to present seven candidates, for consideration by the INTDS members. The newly elected directors will commence their four-year term following the election and subsequent inauguration during the 2026 conference at RIKEN, Tokyo, Japan (https://indico2.riken.jp/event/5355/overview).
INTDS members may vote for up to three candidates.
Each INTDS member will soon receive detailed instructions on the voting procedure.

The candidates are introduced in alphabetic order:

Nick Esker (San Jose State University, USA)

My name is Nick Esker, and I am an Associate Professor of Chemistry at San José State University where I am the group leader for the SJSU Targetry Lab. Our lab is an accelerator-independent targetry lab focused on supporting student researchers as they learn experimental nuclear science through thin film production and characterization. It is currently composed of 10 undergraduates and 2 MS students, having graduated 17 SJSU undergraduates and 1 MS student in the past 5 years. Excitingly, ten of our graduates are now pursing advanced degrees or careers in nuclear science or adjacent fields. I have been a member of INTDS since 2018, and (along with an SJSU student) was the recipient of the 2022 INTDS Karasek Training Scholarship. Our team has built up a wide range of capabilities, including solvent casting, PVD, electrodeposition & molecular plating, cold rolling, and more! My main career focus is supporting students as they learn nuclear science & targetry, and I would be honored to bring this perspective and help continue the important work of the INTDS as a board member, if elected.
Contact info: nicholas.esker@sjsu.edu, +1 408 924 4950.

Bettina Lommel (GSI, Helmholtzzentrum für Schwerionenforschung, Germany)

My name is Bettina Lommel. I studied solid-state physics and completed my doctorate in the field of materials development for high-temperature superconductors. Since 1996, I have been head of the Target Laboratory at GSI. Together with Noemi Cerboni, Annett Hübner, Diana Khropost, Birgit Kindler, Anita Reckziegel, and Jutta Steiner, we produce targets across a wide thickness range. Experiments at GSI in materials research, plasma physics, atomic physics, biophysics, nuclear astrophysics, and nuclear physics require targets ranging from a few tens of nanometres up to several millimetres. We purchase all enriched materials for ion source and targets. We advise colleagues from research, accelerator operations, and technology on material-specific questions and provide support in materials analysis. We process enriched materials through reduction, annealing, or chemical conversion to make them suitable for use in GSI ion sources. A major challenge for us is the development of targets for FAIR, the large future project at GSI, as well as the transfer of knowledge to the next generation of target specialists. Since 2006, I have been an elected member of the board of the INTDS. From 2019 to 2022, I supported Birgit Kindler as editor of the INTDS Newsletter. Since 2024, I have been serving as the elected Vice-President of INTDS. The development of targets for next-generation accelerators, along with training and knowledge transfer to future experts, represents one of the key missions of INTDS. I would be pleased to continue contributing to this work and to remain available with my experience and support in the future.

Emilio Andrea Maugeri (Paul Scherrer Institute, Switzerland)

I am a radiochemist at the Paul Scherrer Institute (PSI), working across target development, radionuclide production, and nuclear data. My work focuses on the preparation of high-quality targets for nuclear physics and medical applications, including the development of production routes for radiolanthanides and other emerging radionuclides.
Within INTDS, I have contributed to collaboration between institutions, the exchange of expertise, and support for early-career researchers. I value INTDS as a practical network where technical challenges can be discussed openly and addressed efficiently.
If re-elected, I will continue to strengthen knowledge exchange and practical collaboration within the community, with a focus on improving access to target preparation capabilities and addressing concrete technical challenges. I aim to further connect nuclear physics and radiochemistry with applications ranging from nuclear medicine to neutron-induced reaction studies at CERN n_TOF, where I serve as PSI spokesperson. In parallel, I contribute to the EU APRENDE project, supporting European efforts on isotope and target supply.
Through my involvement in both research and international collaborations, I aim to contribute constructively to the Board and to represent the needs of the community.

Yasuto Miyake (RIKEN Nishina Center for Accelerator Based Science, Japan)

I am Yasuto Miyake, a technical researcher from the RIKEN Nishina Center for Accelerator-Based Science. As a member of the Accelerator Development Team, I am engaged in the research and development of a charge stripper for the RIKEN RI Beam Factory (RIBF).

During my graduate studies, I worked on Accelerator Mass Spectrometry (AMS) using a tandem accelerator to analyze long-lived radionuclides released from the Fukushima Daiichi Nuclear Power Plant accident. This research provided me with foundational expertise in sample preparation, stripper for the accelerator, and the development of isobar separation techniques in low-energy regions. After joining RIKEN, I conducted a verification test of nuclear transmutation of Palladium-107 (Pd-107) using the accelerator. I designed and constructed a beamline to concentrate trace amounts of Pd-107 and successfully demonstrated its transmutation into stable isotopes or short-lived radionuclides via deuteron irradiation.

My current research focuses on evaluating charge exchange in ion beams by analyzing the interactions between high-intensity heavy-ion beams and matter. Under the guidance of Hiroo Hasebe at RIKEN, I am also learning to maintain and manage the rotating carbon-foil stripper used at RIBF. Moving forward, as part of the RIBF intensity upgrade project, I will be developing a two-stage gas stripper system that combines nitrogen and helium.

I first joined the INTDS community during the INTDS 2024 conference in Oak Ridge. While I am still deepening my expertise in beam targets and thin films, I am committed to advancing RIKEN’s thin-film technologies, inheriting Sugai-san's spirit and technical legacy from KEK, and I look forward to continuing my active participation in the INTDS community.

Claus Müller-Gatermann (Argonne National Laboratory, USA)

My name is Claus Müller-Gatermann; I am currently leading the Center for Accelerator Target Science (CATS) at Argonne National Laboratory. Although targets, windows and sources for the Argonne Tandem Linac Accelerator System (ATLAS) is our priority, we try to make targets for the community whenever time allows (reaching up to 50%). Prior to Argonne, I got my diploma and doctorate from the University of Cologne in Germany. About 14 years ago, I made my first carbon foils for secondary electron emission in Microchannelplate detectors and stripper foils for the tandem accelerator. Later on, I focused on hydrogen containing targets and stretched foils for plunger experiments, which used and destroyed mostly myself. Apart from targets I keep my hobbies doing gamma-ray spectroscopy and working on new setups both for detectors and target making. I like to share my knowledge and try to establish the Nuclear Target Development Summer School (NTDSS) as a regular summer school dedicated to targetry and excite the next generation of target makers. INTDS is a great society and knowledge base, which needs to be conserved and constantly modernized. I'm happy to devote my time and get young scientists enthusiastic about target making.

Constance Stoner (ACF-Metals, USA)

I am seeking to serve on the Board of Directors for the International Nuclear Target Development Society because I am deeply committed to ensuring the long-term sustainability of the nuclear target supply that underpins so much of the global scientific community.

As the leader of ACF-Metals, I have focused not only on meeting current demand, but on actively strengthening the future of our field. This includes direct investment in the next generation through student workshops, sponsorship of emerging scientists, and ongoing support of INTDS and related organizations. I believe strongly that without deliberate cultivation of talent and knowledge transfer, our field risks critical gaps in the years ahead.

In parallel, ACF-Metals has taken concrete steps to expand and stabilize the availability of essential target materials. We are working closely with national laboratories to anticipate future needs and ensure that major initiatives will have reliable access to the targets they require, not just today, but a decade from now.

My perspective is grounded in both strategy and execution. I understand the realities of production, supply chains, and customer needs, while also keeping a clear focus on long-term continuity for the field as a whole. As a board member, I would bring a practical, forward looking voice—one that is closely connected to both the current demands and future risks facing our community.

I would be honored to contribute this perspective to help INTDS in supporting a resilient, innovative, and sustainable future for nuclear target development.

David Vanleeuw (European Commission – Joint Research Centre, Belgium)

My name is David Vanleeuw, a nuclear engineer from Belgium with 23 years' experience in the nuclear field. I began my career in radioactive waste management, working first for a global medical isotope producer and later for Belgian authorities. Since 2011, I've specialised in target preparation and characterization at JRC-Geel, where I trained under expert mentors to develop high-precision targets for nuclear data research.

My work spans very thin polyimide foils, PVD-deposited layers, and highly enriched actinide targets prepared by molecular plating enabling nuclear experiments worldwide. Over the years, I contributed significantly to modernizing the lab and introducing novel techniques. My research work has been published in peer reviewed journals, and I had several occasions to present my work at international conferences and workshops. Recent achievements include spectroscopic $235UO_2$ targets via e-beam evaporation and ^{241}Pu target recovery from legacy waste for neutron cross-section measurements at CERN.

JRC-Geel's target preparation laboratory, with decades of expertise and under excellent leadership of previous board member Goedele Sibbens, faced significant transition over the past two years. As the only remaining permanent staff, I've helped rebuild the team, mentoring new colleagues while ensuring continuity in target preparation. Since my predecessor's retirement last year, I'm now leading this effort, and I'm committed to advancing nuclear research through collaboration with and within the nuclear target community. Our facilities, material and expertise are unique, but also with limitations, hence collaboration and information sharing are key in our research domain.

Advancements in actinide target preparation: e-beam evaporation for spectroscopic ^{235}U targets

David Vanleeuw, European Commission, Joint Research Centre, Geel, Belgium

In the 2025 #54 Volume of this newsletter, we outlined the core activities of the **JRC-Geel Target Preparation Laboratory.** This update highlights a key development: the implementation of **electron-beam (e-beam) physical vapour deposition (PVD)** for the fabrication of **^{235}U targets**, important for nuclear data experiments.

Most actinide targets are prepared by molecular plating, due to its efficiency, versatility and low-cost deposition equipment. This method is however not compatible with very thin and **fragile backings**, essential to **spectroscopic targets** requiring minimal energy loss of the emitted particles. Hence, PVD remained an essential technique for actinide target preparation and historically, these targets were prepared by **thermal evaporation of $^{235}UF_4$** with an inhouse developed evaporator. The main constrains we were confronted with was the **ageing** of the system, no longer capable to maintain the required vacuum, and the need to **chemically convert the uranium oxide**, which is the main form of the highly enriched uranium (U_3O_8), to uranium tetrafluoride (UF_4) due to the high evaporation temperature of the oxide. This additional step introduces time delays and impurities.

Based on the experience acquired by the preparation of stable targets by high temperature e-beam evaporation (^{10}B), we explored the feasibility of this technique to **directly evaporate uranium oxide**. Preliminary tests performed in collaboration with JRC-Karlsruhe were promising and demonstrated evaporation at 1700°C with a conversion of U_3O_8 to UO_2.

These findings informed the design of a **custom e-beam evaporator integrated within a nuclear glovebox**, tailored to actinide target requirements. Key features include:

- **Adjustable Z-shift** – Enables precise control over substrate-to-source distance, optimizing deposition uniformity, efficiency, and compatibility with varied substrate dimensions.
- **In-situ RF plasma etching** – Enhances layer adhesion and purity by pre-treatment of the substrate surface.
- **Dual thermal evaporation sources** – Flanking the e-beam pocket, these still allow UF_4 evaporation, or other elements ensuring operational flexibility.
- **Glovebox-compatible chamber design** – All components are removable and replaceable via glovebox manipulation, as the system is ^{235}U-contaminated during use.

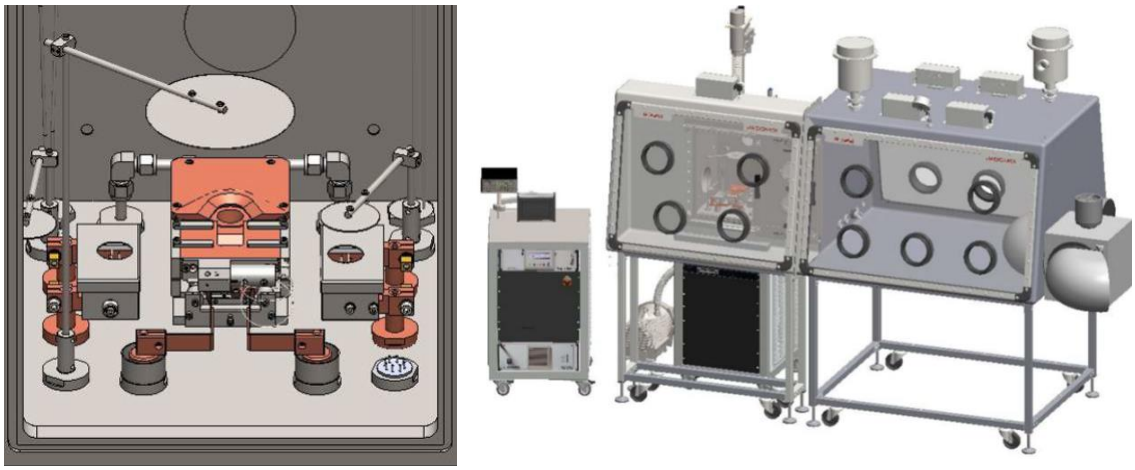


Figure 1: 2D-design of the deposition chamber with a central e-beam pocket flanked by thermal evaporation sources, each equipped with a shutter (left) and 3D-design of the PVD system integrated in a large nuclear glove box (right).

The evaporator was installed in JRC-Geel's nuclear-controlled area following a multi-vendor collaboration. Rigorous **testing** proceeded in two phases:

- Chemical analogue trials – Validated system performance under non-radioactive conditions.
- Polyimide foil testing in view of its resistance to high temperature (performed by boron deposition)
- Uranium oxide deposition – Confirmed process stability and target quality and defined parameter settings.

The system has now produced its first high-resolution ^{235}U targets for a neutron-induced fission (n,f) cross-section measurement at CERN's neutron time-of-flight (n_TOF) facility. The target specifications include:

- Areal density: 180 µg $^{235}U/cm^2$ with an enrichment of 99.934%.
- Substrate: inhouse prepared polyimide foil with an areal density of 100 µg/cm^2

Figure 2: picture of the setup consisting of two connected gloveboxes (left) and spectroscopic target prepared by e-beam evaporation of uranium oxide on a thin polyimide foil (right).

To conclude, the implementation of the new e-beam evaporator guarantees continuity in the preparation of high purity ^{235}U spectroscopic targets and eliminates dependency on UF_4 conversion. The JRC-Geel target preparation laboratories continue to provide high quality spectroscopic ^{235}U targets to the nuclear data community.

Second Meeting on “Targets for Nuclear Physics” within EURO-LABS

Manuela Cavallaro, on behalf of the organizing committee

As part of the EURO-LABS Work Package WP2, 'Access to Research Infrastructure for Nuclear Physics,' and specifically within Task 2.5, 'Service Improvements,' a collaborative initiative focused on 'Targets for Nuclear Physics' has been launched by institutions from Italy, France, Germany, Poland, Portugal, Romania, Spain, Netherlands and Switzerland.

Since 2023, this community has received project funding to support the recruitment of two postdoctoral researchers (for one- and two-year positions at GANIL and INFN respectively) and to cover travel expenses.

Following the last on-line meeting held on May 15th, 2025 (https://agenda.infn.it/event/46874/), an in-person meeting was hosted at GSI, Darmstadt, Germany, on 18-19 May, 2026.

The aim of the meeting was to provide an informal opportunity to learn about the work of each group within the European community of target makers, developers, and users, in order to strengthen our links and enhance synergies, in line with the objectives of EURO-LABS (https://web.infn.it/EURO-LABS/). This objective was achieved through an introduction from the hosts and Christina Hornung, representative of EURO-LABS at GSI, followed by 13 presentations, during which ample time was dedicated to fruitful discussions where almost thirty European attendees participated in presence. The topics covered various news on target production and characterization, applications, status of current targets laboratories, future perspectives etc. Time was set aside to discuss the status of the deliverable for this EUROLABS task, specifically the creation of a database publicly available, containing the information about the preparation and the characteristics of available targets and those newly developed in various laboratories within this subtask. The first version of the database was completed in 2023. A web application is currently under development at GANIL to provide online access to the database, and is expected to be available by the end of 2026, including features allowing activity managers to update data directly.

Tuesday 19th morning was dedicated to the interesting and impressive visits of the facility GSI/FAIR and of the target laboratory.

Tuesday 19th morning was dedicated to the interesting and impressive visits of the facility GSI/FAIR and of the target laboratory.

As the EURO-LABS project will conclude at the end of 2026, this meeting was one of the last opportunities to benefit from such networking and, in case, to propose common activities or future projects. With this in mind, constructive discussions took place at the end of the day mainly about the isotope supply and the sustainability of this project.

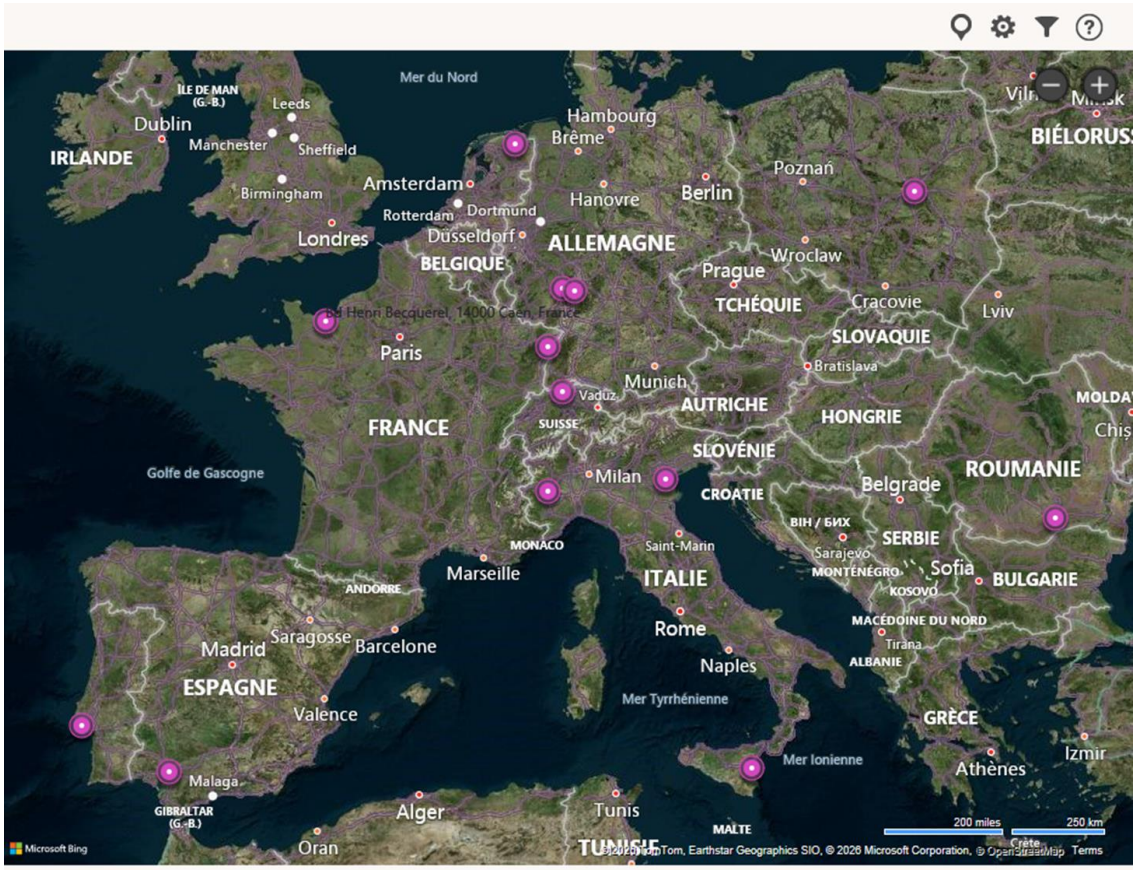
For the isotopic supply, the discussion highlighted the growing concerns regarding the sustainability of isotope supply in Europe. Participants emphasized that the current geopolitical situation has further exposed vulnerabilities in existing supply chains, increasing the risk of shortages for critical isotopes used in research. In addition, procurement costs have significantly increased in recent years and remain considerably uncertain, making long-term planning and budgeting increasingly challenging for research institutions. A coordinated European strategy for securing a reliable and diversified isotope supply was identified as a key priority for sustaining scientific excellence and innovation. Synergies with existing initiatives, such as the EURASIS (EUropean RAre Stable Isotope Supply) project promoted by NUPECC should be actively pursued. It was also noted that efforts to formulate common requests to suppliers may be beneficial, particularly where suppliers require a minimum critical order volume.

About the sustainability of this project, i.e., ensuring sustained communication between target producers, characterizers, and users, we have identified several potential approaches, and highlighted challenging questions. The proposal to regularly organize workshops and advanced schools on these topics has been discussed, even if critical issues need to be addressed to support long-term collaborations.

Participation in future funding calls and in new collaborative projects, such as a successor to EURO-LABS “service improvements” task, was identified as an important opportunity to further strengthen the network and ensure the long-term sustainability of these activities.

We would like to express their special thanks to the local organizing committee, Bettina, Birgit and Noemi, for their efficient management at this meeting.

Participants of the workshop



Partner institutions within the framework

Announcement

This is the second announcement for the **32nd World Conference of the International Nuclear Target Development Society (INTDS2026),** which will be hosted by RIKEN and held at the RIKEN Nishina Center for Accelerator-based Science in **Wako, Saitama, Japan, from August 30th to September 4th, 2026**

We are pleased to announce that a joint session will be held for the first time with the **20th Workshop on Targetry and Target Chemistry (WTTC20)** (https://wttc20.ric.u-tokyo.ac.jp) on **August 31st, 2026**.
WTTC focuses on solid, liquid, and gas targets for accelerator-based radionuclide production, as well as post-irradiation chemical processing.
This joint session aims to foster deeper discussion and interaction on the research and development between beams and targets and to promote cross-disciplinary exchange among the communities.

The conference will be conducted in person.

Important dates:
2026/07/15 Registration deadline
2026/07/18 Program announcement
2026/8/30-9/4 Conference

Conference Web page:
Please visit the conference web page for detailed information:
https://indico2.riken.jp/event/5355/

Conference Venue:
The conference will take place in the large conference room on the second floor of **the Administrative Headquarters at RIKEN Wako campus** (Campus map: C00; https://www.riken.jp/en/access/wako-map/#campus_map).

Scientific Programme:
The INTDS Conference covers current research and challenges in target development and application. Participants are invited to submit their contributions to the following topics or related subjects:

- Preparation and characterization of high-purity and special materials for target fabrication
- Preparation of thin films and foils (e.g., evaporation, sputtering, electrodeposition, rolling)
- Preparation of radioactive targets

- Preparation of liquid and gas targets
- Beam charge strippers (i.e., foil, liquid, gas, plasma)
- Targets for high-intensity beams
- Targets for special applications (e.g., medical, industrial, controlled fusion
- Target characterization
- Target recycling and disposal

Tentative schedule:

Date 2026	morning	afternoon	evening	venue
Aug.30 (Sun)		INTDS board meeting	Registration Welcome reception	Wakoshi Tobu Hotel (Wako)
Aug.31 (Mon)	Registration Opening session(A)	Registration Session(B1) Joint session (B2)		Kou-jirou (Wako)
Sep.1 (Tue)	Session(C)	Session(D) Facility Tour RIKEN RIBF		RIKEN (Wako)
Sep.2 (Wed)	Session(E) Invited talk (Kumiko Sekiguchi)	Excursion to Near Omiya Station Museums visits etc.	Reception dinner Japanese cuisine	Omiya (Saitama City)
Sep.3 (Thu)	Session(F)	Session(G) INTDS membership meeting and election		Ichinoya (Saitama City)
Sep.4 (Fri)	Concluding session(H)	close		

Registration and conference fee:

Registration should be done via our conference web site no later than July 15th, 2026.

https://indico2.riken.jp/event/5355/registrations/469/

Category	Registration fee (JPY)	Registration fee includes:
INTDS Member	**60,000**	Conference Participation, Welcome reception, Banquet with excursion, Lunch (8/31-9/3), RIBF tour, Coffee break, Abstract book, Conference goods
Non-Member	**80,000**	
Student	**30,000**	
Accompanying person	**30,000**	Welcome reception, Banquet with excursion, Lunch (**9/2**), RIBF tour, Coffee break
One-day (8/31)	**10,000**	Conference participation (**8/31**), Welcome reception, Lunch (**8/31**), Coffee break (**8/31**), Abstract book

Please pay the fee at the conference registration desk. Only credit cards (VISA, Mastercard, American Express, etc.) are accepted. We use a Square card reader (https://squareup.com/us/en) for credit card payments (on-site payment only). A receipt will be issued by the LOC.

INTDS Membership:
If you have not renewed or need to join the INTDS, please follow the link:
https://www.intds.org/membership/

Social events

- Welcome reception

A welcome reception will be held on Sunday evening (6 PM – 8 PM, Aug. 30) at the Izakaya restaurant close to Wako-shi station.

- Lunch

Lunch boxes will be prepared for the participant every day.

- Banquet with excursion

We are planning a short excursion to Omiya City, Saitama Prefecture, on Wednesday (Sep. 2). We plan to visit the railway museum (https://www.railway-museum.jp/e/), the Omiya Bonsai Art Museum (https://www.bonsai-art-museum.jp/en/), and Hikawa Shrine (https://musashiichinomiya-hikawa.or.jp in Japanese).

The banquet will be held at ICHI-NO-YA (https://www.ichinoya.info in Japanese).

Local Organizing Committee:

Hiroki Okuno (RIKEN, Chair)
Hiroo Hasebe (RIKEN)
Hiroshi Imao (RIKEN)
Akito Uchiyama (RIKEN)
Taihei Adachi (RIKEN)
Takahiro Nishi (RIKEN)
Yasuto Miyake (RIKEN)
Daiya Kaji (RIKEN)
Kouji Morimoto (RIKEN)
Hiromitsu Haba (RIKEN)
Shin-ichiro Michimasa (RIKEN)
Kaoru Kotoshiba (RIKEN)
Emiko Isogai (RIKEN)

International Scientific Programme Committee:

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Announcement

We are pleased to announce that the 20th Workshop on Targetry and Target Chemistry (WTTC20) will be held August 23–27, 2026 in Nara, Japan. This will be an international scientific event highlighting advancements in solid, liquid, and gas targets used in accelerator-based radionuclide production, along with post-irradiation chemical processing.

The establishment of this biennial workshop took shape during the 5th International Symposium on Radiopharmaceutical Chemistry—the predecessor of the International Symposium on Radiopharmaceutical Sciences (iSRS)—held in 1984 in Tokyo, Japan. The first WTTC took place the following year in Heidelberg, West Germany. This year, 2025, marks the 40th anniversary of WTTC, and in 2026, the workshop will return to Japan—the country where its organization was formally endorsed by the international community. Notably, this will also be the first time WTTC is hosted in Asia

We will meet in Nara, a city with over 2,000 years of history, often regarded as the birthplace of Japan. Nearby are Kyoto and Osaka—major cities known for their rich culture and strong academic presence, where many of our colleagues are based. We hope your time in Nara and your encounters with new friends will leave you with cherished memories.

We look forward to seeing you at WTTC20.

Sincerely yours,
Kohshin Washiyama & Kotaro Nagatsu, WTTC20 co-chairs
On behalf of the WTTC20 Local Organizing Committee

SESSION CATEGORIES

Contributed Sessions

- Solid Targets
- Gas and Liquid Targets
- Radiochemistry
- Therapeutic Radionuclides
- Nuclear Data
- Remote Hardware
- Accelerators
- Modeling and Simulation studies
- Facility Introduction
- Reports from Labs, Sharing (Un)Successful Experiences

Solicited Sessions

- Industrial Session for Sponsors
- Perspectives From Other Targetry Societies
- (confirmed) International Nuclear Target Development Society (INTDS)
- (provisional) High Power Targetry Workshop (HPTW)

Further information on conference website: https://wttc20.ric.u-tokyo.ac.jp/

Contact WTTC20 Loacal Organizing committee: wttc20jpn@gmail.com

Announcement

This is the third announcement of the 9th High Power Targetry Workshop (HPTW2026), which will be hosted at CERN from 16th to 21st November 2026. The workshop coincides with the start of CERN's Long Shutdown 3, a key period for implementing major upgrades to CERN's accelerator complex and the completion of the HL-LHC upgrade.

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

The workshop webpage is available at https://indico.cern.ch/e/HPTW2026.

Reminder: Registration and abstract submission are open – **abstracts will be accepted until June 30th.**

Dates and milestones

- April 15th, 2026: Registration and abstract submission open
- **June 30th, 2026: Deadline for abstract submission (NEW!)**
- October 1st, 2026: Deadline for regular registration, while late registration possible until October 30th, 2026.
- By 10 September 2026: notification of abstract/poster acceptance.

Satellite event/ Numerical modelling for targetry special session (NEW!)

The HPTW2026 LOC, together with CERN's SY-STI group, will host a 2-hour informal session on numerical modelling for targetry applications on Tuesday November 17th in the afternoon. The session will focus on Monte Carlo simulations and methods for importing and validating results in FEM codes.

Who can attend?

Anyone attending HPTW2026 who works with or is interested in:

- The FLUKA Monte Carlo integrated simulation package
- Conceptual design of targetry systems
- Engineering simulations for beam intercepting devices
- Efficient coupling between Monte Carlo and FEA tools

Poster session and awards (NEW!)

The poster session will take place on Tuesday late afternoon during the reception in the iconic Science Gateway. *Poster prizes are foreseen for students.*

Sponsorship

REMINDER: We are currently reaching out to institutions, industry partners, and laboratories - particularly those with established collaborations and partnerships with CERN - to invite expression of interest in sponsoring the event. As a sponsor, you would gain visibility and engagement opportunities within the physics, engineering, and technology communities involved in large-scale scientific projects. More details can be found in the sponsorship package at https://indico.cern.ch/event/1352282/page/42336-sponsoring .

Please feel free to contact us (HPTW2026-CERN-Sponsors@cern.ch) for further information or to discuss alternative sponsorship options.

We acknowledge and are grateful for the support of our confirmed sponsors.

Student's support

Thanks to our generous sponsors, we can offer support to advanced MSc or PhD students who would like to attend the workshop and deepen their knowledge of the field. We will support the travel and stay of a limited number of students. Please apply by sending your motivation letter and CV to hptw.2026@cern.ch no later than the **June 30th, 2026 (NEW!).**

Contact information:

General e-mail address for inquires: hptw.2026@cern.ch

We look forward to your participation to this exciting event.

Marco Calviani (chair)

Thierry Stora (co-chair)

Ana-Paula Bernardes (co-chair)

Charlotte Duchemin (co-chair)

on behalf of the HPTW2026 Local Organising Committee

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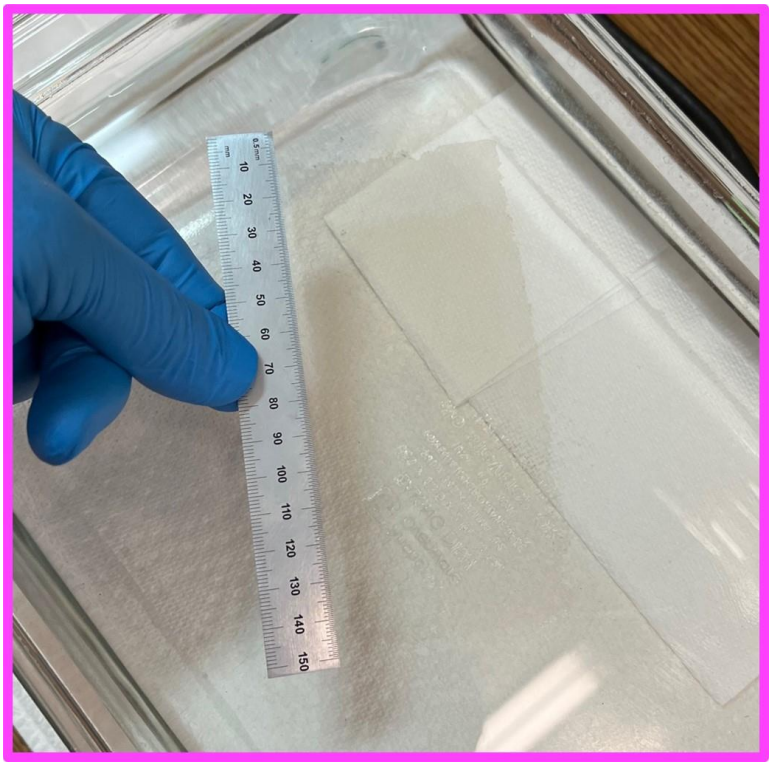

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For further information on the INTDS, please refer to our website: www.intds.org.