

# SATIF-16

May 28-31, 2024

Shielding aspects of Accelerators, Targets  
and Irradiation Facilities

# ...30 Years of SATIF





Overview

Scientific Programme

Call for Abstracts

Timetable

30 years of SATIF

My Conference

My Contributions

Book of Abstracts

## 30 years of SATIF



*In the 30th anniversary, here are some documents to know the history, the concept and the mission of SATIF*

[30years-HideoHirayama](#)

[30years-TanakaMessage](#)

[ExecutiveSummaries-SATIF1-SATIF15](#)

# OECD DOCUMENTS

## *Proceedings of the Specialists' Meeting on Shielding Aspects of Accelerators, Targets and Irradiation Facilities*

**SATIF is not a Conference...**

**it is a Workshop where common Problems are identified  
with the goal to advance the field in cooperation**

Arlington, Texas (USA)  
28-29 April 1994

*organised by the*  
Nuclear Energy Agency

Reactor Physics Committee (Japan)  
Radiation Shielding Information Center (USA)

From the Proceedings of the first SATIF...

# Proceedings of First Specialists' Meeting on Shielding Aspects of Accelerators, Targets, and Irradiation Facilities

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Nuclear science Nuclear science Proceedings

Proceedings of the First Specialists' Meeting on Shielding Aspects of Accelerators, Targets, and Irradiation Facilities (SATIF) at Arlington, USA on 28-29 April 1994.

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Gas  
Bremsstrahlung  
work for the  
Frascati ADONE  
collider

# *Hideo Hirayama*

Tsukuba-san mountain 871m

9 September 2012



- 30 years **attendance of SATIF** workshops (1994-2024)
- 30 years long **member of the Scientific Committee**
- Session **chairman** at 16 SATIFs (including today!)
- Organizer of **comparisons and benchmarks**
  - Inter-comparison of the medium-energy **neutron attenuation** in iron and concrete (1997-2008)
  - Benchmark Calculation with Simple **Phantom** for Neutron **Dosimetry** (2000-2002)
  - Inter-Comparison of **Particle Production**. (2014-2024)
- together with **Nikolai Mokhov** and others he reviewed **actions agreed on** at SATIF workshops and produced a **synthesis of the discussions and decisions made**

#### Specific contributions:

- A Review of **Shielding Problems concerning Electron Accelerators**
- An **Accelerator Shielding Benchmark Analyses** and Future Items to be solved
- **Gas-Bremsstrahlung in 2.5-GeV Electron Storage Ring**
- BEEP: The **Benchmark Exercise for Electrons and Photons**
- Current Status of a **Low-energy Photon Transport Benchmark**
- Development of DUCT-III Code for Duct Streaming Calculation
- Development of a Radiation Shielding Tool for Proton Accelerator Facilities (BULK-I)
- **Standard data of dose conversion coefficients in Japan**
- **Radiation shielding design for the J-PARC project**
- JASMIN: Japanese-American study of muon interactions and neutron detection
- Dark current and radiation of KEK-Linac accelerating structure protons

- He played a key role in developing and maintaining the **EGS** (Electron Gamma Shower) computer codes, originally started at SLAC and he assured its survival during a period of perturbations
- In more recent years:
  - **Research work related to the Fukushima accident**  
(e.g. Identification of radiation sources, Radioactive source Dosimetry, etc.)



*Hirayama-san,  
Congratulations and  
Thank you for the extraordinary contribution to SATIF !*

*(Hideo means excellent man)*