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EU-supported Transnational Access (TNA) to ChETEC-INFRA Facilities

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Transnational access by scientific users

- ★ crosses national borders,
i.e., users must use an installation located outside the country where they work
- ★ is free of charge to the users,
access fees to the facilities are paid by the European Union
- ★ may include travel support for the users,
funded by the European Union
- ★ should generally foresee to publish the scientific results,
- ★ is open to scientists of all nationalities and based in all countries (worldwide),
with limits on the amount of access given to users outside the EU and associated countries
- ★ can be applied for by submitting a proposal
- ★ is allocated by an independent user selection panel, solely based on scientific merit.

Three Types of Infrastructures



- ★ Accelerator **laboratories** for nuclear studies and accelerator mass spectrometry
- ★ **Telescopes** collect abundance data
- ★ **High-Performance Computing** facilities to perform stellar structure and nucleosynthesis computations

13 Partners Offer Transnational Access



Felsenkeller, DE
Underground ion
accelerator



DREAMS, DE
Accelerator Mass
Spectrometry



VERA, AT
Accelerator Mass
Spectrometry



laboratories



HPC



telescopes



ATOMKI, HU
MGC-20 cyclotron for
H, ^2H , ^3He , and ^4He



Molétai, LT
Ritchey-Chretien
telescope (1.65 m)



IFIN-HH, RO
Tandetron ion
accelerators



Frankfurt, DE
Quasi-Maxwellian
neutron generator



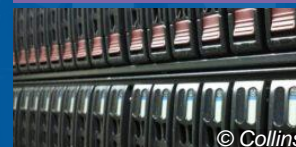
PIAF, DE
Almost mono-energetic
and 'white' neutrons



NOT, La Palma, ES
Nordic Optical
Telescope (2.56 m)



Cologne, DE
10MV Tandem ion
accelerator



VIPER, UK
High Performance
Computing

How to Apply? / Life Cycle of a Project



1. Confirm that your group of proposers qualify for transnational access, and the science case matches the scientific program of ChETEC-INFRA
2. Gather information and prepare the proposal
on www.chetec-infra.eu/tna, during TNA office hours (online, every Monday 14:30 CEST)
Contacting facility managers, or the TNA management team (chetec-infra@hzdr.de)
proposal templates available online
3. Submit a proposal: collection every three months - **next collection date August 17**
4. Wait for evaluation
(I) Feasibility check / (II) ChETEC-INFRA User Selection Panel / (III) Facility PAC
5. Coordinate access with facility (typically 4-6 months after collection date)
6. ★ Access time for your project ★
7. Report on access time, acknowledge ChETEC-INFRA in resulting publications

Selected TNA Projects

Service Mode Access

Work on site provided by facility personnel – no travel required by users.

A. Dimoff „S-process nucleosynthesis in and from AGB stars “



© Markishki

Rozhen, BG



© Bardon

Perek, CZ



© MAO

Molėtai, LT

Hands-On Facilities

Users travel on site to perform their projects.

J. Skowronski
Study of the $^{12}\text{C}(p,g)^{13}\text{N}$ Reaction at High Energies



© Wirsig

Felsenkeller, DE

M. Friedman
Measurement of Thick-Target $^{18}\text{O}(p,n)^{18}\text{F}$ Neutron Energy Spectrum, Yield and Angular Distribution



© PTB

PIAF, DE

A. Di Leva
 ^7Be production for $^7\text{Be}(p,g)^8\text{B}$ measurement with the recoil separator ERNA"



© Szűcs

ATOMKI, HU

Summary



- ★ 13 ChETEC-INFRA infrastructures offer TA
 - ★ covering facility costs and support for travel (where applicable)
- ★ ChETEC-INFRA includes three types of infrastructures
 - ★ Astronuclear High performance Computing
 - ★ Astronuclear Laboratories
 - ★ Astronuclear Telescopes
- ★ Current proposal management system is GATE
- ★ Three-month cycle for proposal collection, and user times
 - ★ Upcoming call for proposals until **August 17, 2022**
- ★ Further information and proposal templates
 - ★ Website: **<https://www.chetec-infra.eu/tna>**
 - ★ TA coordinator and deputy TA coordinator
 - ★ Facility Managers