



Training and Education

Training at international facilities: MATE is on trend at FRM-II

Six argentine employees from the Atomic Energy Commission met at the Heinz Maier-Leibnitz Zentrum (MLZ) in Garching, Germany in the framework of the [BEC.AR](#) training programme. They are Mgtr. Diana Garcés, currently a PhD student, Dr. Manuel Suárez Anzorena (see below) and Engineers Andrés Glücksberg, Gabriel Juárez, Luis Romero and Santiago Bazzana. Some of them visited MLZ to gain experience as users of neutron scattering techniques or become instrument scientists, while others — who are currently working in the design teams of the ANDES and ASTOR instruments at LAHN — will get training in similar instruments under operation. Their stays were financed jointly by the Atomic Energy Commission and the [BEC.AR](#) programme. You can read the MLZ newsletter featuring their visit [here](#).



BEC.AR training programme: Interview with Dr. Manuel Suárez Anzorena after his return to Argentina

In 2017 and 2018, the [BEC.AR](#) programme granted training scholarships to promote the increase of technical expertise at the CNEA in association with the LAHN project, through short stays at neutron scattering facilities abroad. We talked with Manuel after his return from Germany.



Where was your training stay?

For 9 months I joined the Sample Environment team (SE) at the FRM II research reactor, which is operated by Technische Universität München (TUM), in Garching, Germany.

What is your job at LAHN?

At LAHN I am the responsible for the Sample Environment area. We call “sample environment” to all those ancillary equipments in a given instrument for neutron (or X-Ray) scattering that allow the control of external variables in an experiment: temperature, pressure, gas atmosphere, applied stress, magnetic fields, vacuum systems, etc.

Which were your main tasks at FRM II?

The main goal of my visit was to gain experience in providing SE systems such as low-temperature, high-temperature, high-pressure, vacuum, magnetic fields, etc. and to get trained using the equipment for SE as furnaces, cryostats, magnets, etc. On the other hand, my job also focused on understanding the internal operations for the organization, management and technical service of all the equipment. Finally, I also worked on strengthening bonds between LAHN and the SE community, both at FRM II and other facilities. These goals were achieved by joining the SE team as one more member, not only in operational activities for

the setup and installation of SE equipment at the instruments of FRM II, but also contributing to the design of novel equipment for SE.

Which aspects of your work would you highlight? Were there any differences or similarities in everyday work life?

I would like to stress the high degree of professionalism to deliver high-quality SE services to the users. I also highlight the technological innovative aspects of the new designs that the team was developing. For instance, the application of laser devices for high-temperature compact furnaces. Regarding the work style, it was surprising for me that the work methods are not so different to the ones here at CNEA. However, I remark the importance they give to keeping record and presenting technical documentation, even for the simplest tasks.

Has this experience changed your perception of the LAHN or of your own responsibilities within the project? How?

This stay has given me the possibility to visit for the first time a large-scale neutron scattering facility, and for this reason—in addition to the opportunity of working there for 9 months—it gave me a vision and comprehension of what the LAHN means for Argentina and the Latinamerican region. Moreover, as there was not yet any SE conformed group in Argentina, this experience has given me the opportunity to learn how to understand and calibrate the role and huge impact that this area has on a large-scale facility such as LAHN.

How do you think this stay will impact on your activities at LAHN?

On the one side, this stay has provided me a common language and a vision about what the SE area means to a large-scale facility and this allows me to better understand the requirements and discussions with more experienced colleagues. On the other side, I now feel that I have much more to contribute to the discussions in this area. Somehow, the fact of becoming part of a team and participating in the everyday tasks of a laboratory helps you have a more complete idea of the functioning of these facilities. I think it would be extremely hard to conduct such an ambitious project without spending any time at other facilities such as FRM II. This experience has had a profound effect in my personal and professional life and, for sure, this new regard will impact on the LAHN.

2018 ETNA School Edition is just around the corner

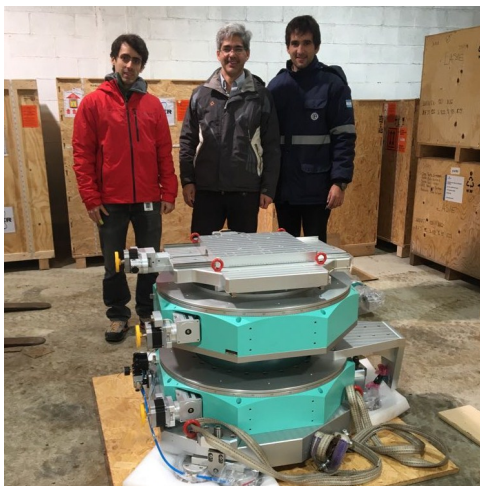
With a total of 86 participants registered in our website, registration was closed on 1st July for the 2018 Edition of ETNA: Escuela de Técnicas Neutrónicas Aplicadas. This year the school will be hosted by Centro Atómico Constituyentes in Buenos Aires with the academic support of the Dan Beninson Institute. In addition to our local speakers, classes will be delivered by two international experts: Dr. Nikolay Kardjilov from HZB in Germany and Dr. Gabriel Cuello from the ILL institute in France. The results of the candidates accepted to participate in the School will be published soon.



Instrument development

The sample positioning tables for the stress scanner/diffractometer ANDES and the imaging instrument ASTOR have arrived last week, together with their control system. The devices will allow the positioning of a sample in the neutron beam with an accuracy of a few microns. The table withstands weights of up to 500 kg and allows to locate any point of the object in the measurement position thanks to the independent control of axes XYZ and Φ . Along with these devices, an Euler goniometer was also purchased that will additionally allow to orient the measured object in the direction selected by the user, as well as the positioning system for the detector of ANDES.

The first components of the ANDES and ASTOR instruments have arrived at LAHN

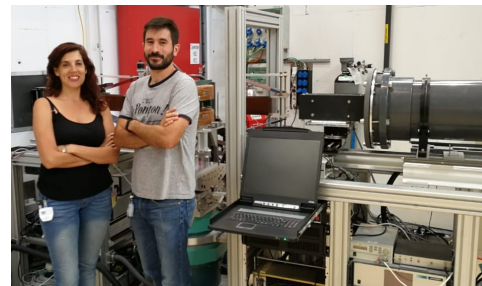




Instrument development

Towards the second phase of the LAHN: Training of young researchers in Polarized Neutron Reflectometry

Dafne Gojman and Mariano Paulin, postdoctoral researchers from CONICET, are currently spending short-term stays abroad with the objective of developing the user community for the reflectometry instrument at LAHN. Dafne is conducting research in the Pierre et Marie Curie University in Paris, under the supervision of Dr. Massimiliano Marangolo, whereas Mariano is working at the V6 instrument in HZB's BERII reactor in Berlin, under the supervision of Dr. Luca Silvi. During their stay, they both met in France to jointly perform NPR experiments at ILL in Grenoble (picture above) and at LLB in Saclay (picture below), together with Dr. Julián Milano from Centro Atómico Bariloche and Dr. Frederic Ott from LLB. In addition, Mariano and Dafne will get trained in instrumentation aspects and data treatment.



News from RA-10



New video

See the advancement of the construction of the RA-10 Complex in this new video published by the [Comisión Nacional de Energía Atómica](#).



Upcoming events

- [III LACA Meeting: LATinoamerican Crystallography Association](#), 10-12 October, 2018, Valparaíso Chile.
- [XIVRAC: Reunión Anual de Cristalografía](#) 31 Oct - 2 Nov Buenos Aires, Argentina.
- [DiffEngMat School: Diffraction on Energy Materials](#) October 8-9, 2018, Grenoble, France
- [ECNS 2019: European Conference on Neutron Scattering 2019](#) July 1-5, 2019, St Petersburg, Russia



Calls and Job Offers

Announcements

- **ILL Call for Proposals.** Next deadline for standard proposal and long term proposal submission is **17th September 2018**, midnight (EU time). Accepted proposals will be scheduled during the first 1.5 cycles in 2019. Outreach for new users: A limited beam time access for new users from non-member countries will also be available via the EU project FILL2030. Those presenting proposals during this round are kindly asked to contact us in order to keep a record and get informed on collaboration opportunities. [More info](#).
- **CERIC-ERIC Call for Proposals.** As usual, there will be two deadlines: 3rd September, 17hs CET, to have a pre-evaluation and the possibility to improve your proposal and 1st October 17hs CET, recommended only for expert users of all the techniques requested. More information [here](#).

Scholarships and Permanent Positions

You can see all the published announcements for **scholarships, grants, posdocs and positions** [here](#).

Schools and Courses

- [ETNA|2018](#) 16-26 Octubre, Buenos Aires Argentina.
- [ESAACRIS](#) (Escuela de la Asociación Argentina de Cristalografía) X-Ray diffraction for the study of Phase Transitions. 5-9 Nov, Buenos Aires Argentina. [Contact](#).

[More events here](#)