



Expertise at the heart of innovation

The ADRC, for the greater good of all.

Civil Engineering and the building industry are part and parcel of our everyday life. The ADRC aims at favouring innovation in this branch of industry in order to improve the performance of firms. This centre brings concrete answers from a technical and technological point of view while improving people's comfort. As long as man innovates, the ADRC will be by his side.

The ADRC : determining resources for the development of your company.

A team of teachers-researchers at the leading edge of expertise.

About fourteen teachers-researchers are actively taking part in the ADRC. Specialized in various fields, they are all building or civil engineers. Over 80% of them are also certified teachers with the highest qualifications in civil engineering. Their skills include the study of construction as well as the study of energy installations and the implementation of structures. The ADRC is always ready to draw from a pool of qualified teachers so as to meet the needs of your firms.

Technical installations adapted to your needs.

- A training centre to meet the specific requirements of recruiting agents in the building industry.
- Fully equipped laboratories to test materials and structures.
- A workshop where full-scale experiments can be carried out.
- A platform combining thermic and climatic installations for energetics.
- Spacious lecture theatres for meetings with partners.

State-of-the-art equipment.

- A roof for training purposes combining the latest technologies in solar energy.
- Measurement acquisition systems of the latest generation.
- Windmill installations for the production of electricity.
- A research system to measure the pressure of fresh concrete in a transparent form for which we have taken out a patent.
- A truly unique test bed for large-sized braces.

The ADRC : a research centre for quality training.

The ADRC aims at promoting teaching, at developing partnerships between the school and firms and at contributing to the transfer of technology to firms. The ADRC backs a practical teaching system linked with the business world and its different trades. It contributes towards the training of young students specialized in building and civil engineering by offering them the techniques and technologies which will enable them to successfully integrate into the workplace. The ADRC increases their motivation and trains them as skilled and efficient professionals capable of tackling any responsibility in the building and civil engineering trades.

ADRC: spheres of activity at the leading edge of progress.

Energetics and renewable energies.

One of the actions of the ADRC is to promote and develop renewable energies in order to reduce fossil fuels consumption. Thus, substantial applied research related to new materials and to the management of new energies is carried out in the centre.

Mechanics engineering and sustainability.

For the ADRC, developing new materials such as hemp concrete, wood concrete or miscanthus concrete, means studying all their characteristics as regards mechanics but also from a sustainable point of view (frost tests, fire tests, UV tests, damp tests...).

Health and safety policy.

Avoiding risks by teaching safety and by developing educational tools is another action led by the ADRC together with its institutional partners (GRAM, OPPBTP, CRDP...). The ADRC works closely with them and produces new guidance materials for firms.

Construction process and implementation of structures.

Developing new materials is not an end in itself. The ADRC studies different suitable construction processes taking into account the particular requirements of each project. Then, the ADRC advocates the most appropriate and the most cost-efficient process, and finally it lays down suitable rules of implementation. That's why the ADRC serves as a distinctive consultant for firms.

The outer skin of buildings.

Man's skin protects him from the outside world. Likewise, buildings need some cladding to protect them from the potential hazards related to weather. The ADRC takes an active part in sharing new technologies with firms specialized in cladding, windows and doors.

Sustainable development.

For the ADRC, it means meeting the needs of the present-day generation without jeopardizing the future of generations to come! The ADRC is fully involved in discovering technical solutions to find renewable energy sources and support local development.