







Smart Urban Coastal Sustainability

Creation of La Rochelle Université

La Rochelle Université becomes autonomous (extended competences)

History

Adoption of C the University's transformation project and the specialisation on Smart Urban Coastal Sustainability (LUDI): Creation of the LUDI Institute

²Littoral ENvironnement et Sociétés ³Fédération de Recherche en Environnement pour

le Développement Durable 4Centre de Recherche sur les Mammifères Marins

Convergence with the CNRS1

2008

First labellisations by the CNRS:

- · Creation of LIENSs2.
- Creation of the FREDD³

The CRMM⁴, which joined the institution in 2004. evolves and becomes a Joint Service Unit (La Rochelle Université -CNRS): the PELAGIS Observatory

Continued dialogue and contractualisation with the CNRS:

- Integration of the CEBC5
- · Creation of the LaSIE⁶

Creation of the EU-CONEXUS European University on the LUDI concept

Operationalisation of the LUDI Institute



Jean-Marc Ogier President. La Rochelle Université

Christian Inard Director. LUDI Institute

La Rochelle Université is a widely recognised internationaly at the highest level in training and research, following disciplinary and multidisciplinary approaches, around a unique signature in France and abroad on the Smart Urban Coastal Sustainability (LUDI in french).

The LUDI Institute focuses its efforts on the scientific niches in which La Rochelle Université has already gained international recognition and will extend them in an interdisciplinary and systemic vision.

The LUDI Institute also aims to respond to a major societal and economic challenge by targeting studies on the quality of life of populations living in coastal areas strongly impacted by global climate change.

Thus, the environmental transition is addressed from the perspective of integrated coastal zone management. The issues associated with the energy transition are addressed in close relation to the notions of sustainable construction and transport. Digital transformation, a major challenge in the evolution of our societies, is a strong element in the rapprochement of the so-called "hard" sciences and the humanities. The human and social sciences, at the heart of the LUDI Institute, are working on what "living in an urbanised coastline" means, combining the themes of the environment, sustainable construction and transport, and digital technology with a view to the livability and comfort of coastal urban spaces. This desire to provide answers to the challenges of tomorrow is also reflected in the support provided to public policies and in a strong European presence through the EU-CONEXUS European University.



permanent staff (teachers, researchers, engineers, technicians)

1 UAR CNRS

6 observatories

laboratories, including 3 CNRS UMRs

CNRS research

workshop area

The Institute: a few numbers

More than

1,300
students (22 master's courses)

500 publications of rank A/year

European University EU-CONEXUS doctoral students (1 multidisciplinary

million budget (excluding the wage bill for permanent staff)

Broad-based, interdisciplinary themes

The ambition is to address all the scientific questions raised by the transitions and major societal challenges resulting from the anthropisation of the coastline. An incentive policy allows the emergence of new scientific questions, notably through an interdisciplinary approach.



the potential of teacher-researchers, researchers, teaching and research staff around the societal challenges linked to sustainable development in coastal areas

Digital transition

Dematerialisation and valorisation of digital resources, security, images, digital humanities, data management and governance

Societal issues

Migration flows, identities and otherness, law, justice, environmental law

Areas of expertise of the LUDI Institute

Environmental transition

Environmental risk, flooding and coastline erosion, biodiversity and ecosystem services, health, social impacts

Energy transition

Sustainable building, energy eco-efficiency in urban areas, durability of materials and structures, environmental and social impacts

Laboratories





a systemic and interdisciplinary approach to research and training, drawing on the disciplinary excellence of its researchers

CEBC: Centre d'Études Biologiques de Chizé UMR CNRS 7372

Ecology, Agro-ecology, Bio-logging, Physiology, Genetic, Statistics and modeling, Eco-toxicology

Agro-ecology/Contaminants/Conservation/ Demography/Functional ecology

CEIR: Centre d'Études Internationales sur la Romanité

History of law

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Romanity/Society/Law/Institutions/Antiquity legacy

CEJLR: Centre d'Études Juridiques de La Rochelle

Private Law, Criminal Sciences, Public Law, Political Science

Insurance/Companies/Environment/Europe/ Justice

CEREGE: Centre de Recherche en Gestion (co-accredited with the University of Poitiers)

Management

Digitalization/Sustainable development/Corporate social responsibility

CRHIA: Centre de Recherche en Histoire Internationale et Atlantique (co-accredited with the University of Nantes)

History, Literature, Civilisation

Cities/Cultures/Migration/Atlantic/Americas

D2iA: Dynamiques, Interactions, Interculturalité Asiatiques

Languages, literatures and cultures of Asia, Geopolitics, History, Didactics.

Belt and Road Initiative/Diaspora/Religions/ Representations/Linguistics, didactics

L3i: Laboratoire Informatique, Image et Interaction

Computer Science, Computer engineering, Automation, Signal processing

Digital Documents/Data Mining/Internet of Things/ Artificial Intelligence/Big Data

LaSIE: Laboratoire des Sciences de l'Ingénieur pour l'Environnement UMR CNRS 7356



Environmental Engineering/Civil Engineering/ Modeling in mechanics and transfer phenomena/ Material Design and behavior/Corrosion

LIENSs: Littoral Environnement et Sociétés UMR CNRS 7266

Biology, Ecology, Geophysics, Oceanography, Geography, History, Chemistry, Biotechnology, Environmental law. Political science

Ecology/Risks/Biotechnology/Sustainable management

MIA: Mathématiques, Image et Applications

Mathematics, Computer Science, Signal processing

Applied mathematic/Computer vision/Deep learning/Partial differential equations/Applied geometry

Observatoire Pelagis UAR CNRS 3462

Ecology

~~

Conservation/Marine megafauna/Public policies/

Structuring

partnerships and creating objects together with companies

RUPEE LAB

valbiotis*

Start-up specialising in food supplements for disease prevention, which has been developing and exploiting technologies resulting from a collaboration with the University since 2014.

Joint La Rochelle Université/ CNRS/ Tipee laboratory, created in 2020 and specialised in the improvement of buildings on the energy, environmental and digital aspects.



Joint La Rochelle
Jniversité/IRD/
JSTH international
aboratory created in
2014, specialised in the
design and development
of methods and tools
combining surveys in



A joint La Rochelle Université/CNRS/EDF R&D laboratory dedicated to the Energy and Environmental Efficiency of Envelopes and Cities, created in 2016, conducts research to improve the energy and environmental performance of buildings and the quality of life of the inhabitants of urban spaces.

public/ private



Transfer unit specialising n the study of nteractions between ndustrial activities at sea



European Centre for Digita Valorisation supported by the University, which aims to develop new economic opportunities by boosting nnovations related to the dematerialisation and valorisation of content.

In order to fully play its role as an economic player in the region, La Rochelle Université has set up CampusInnov, a global approach based on partnership innovation, in order to develop and support projects.

Master training



high-level professionals in the Institute's main disciplinary fields and to intensify the coupling of research and training from the master's to the doctorate level The diversity of our training courses aims to train experts who will share a common culture of taking into account societal issues and a commitment to meeting the challenges of tomorrow.



With the European University EU-CONEXUS, joint masters will be set up with our 8 partners to train European eco-citizens.

1 multidisciplinary doctoral school

To produce international experts in different disciplinary fields of a very high level on the theme of Smart Urban Coastal Sustainability, with a systemic understanding of the issues of a theme clearly positioned as interdisciplinary.





Law

Environmental

sciences

(biology, earth

sciences, ecology,

geography...)



Mathematics, computer science



Engineering sciences (materials, chemistry, physics, fluid mechanics)



Management Sciences



Humanities and social sciences (history, literature, languages, cultures)

But also a lifelong learning offer to meet the needs of stakeholders and decision-makers for sustainable coastal management at local, regional, national and international levels.

Towards a European Phil with FU-CONEXUS

CampusInnov

To stimulate

a dynamic of innovation

contributing to the development

of the socio-economic environment
and to accompany the valorisation
of research



CampusInnov aims to support and accelerate a dynamic of innovation and entrepreneurship at the service of territorial socioeconomic development. As a true link between the academic world and the business world. CampusInnov offers a variety of mechanisms, each at their own level, to help the emergence. implementation or maturation of innovation and entrepreneurship projects, for students, researchers, doctoral students. companies, local authorities and associations.

Campusinnov also supports the valorisation of research work from La Rochelle University,

notably through the partnership with SATT Aquitaine Science Transfert.

Currently under construction, the Campusinnov co-innovation centre is designed to be a technological centre of excellence supported by academic research. A genuine scientific intermediary, it hosts innovation projects that intensify the link between research and the socio-economic sector.

Its aim is to combine complex technological infrastructures and high-level specialised expertise by hosting researchers and companies for the duration of a project.

Contribute

to the dissemination of scientific and technical culture







Ma thèse en 180 secondes



Open house



Festival du film (pas trop) scientifique





Rencontres LUDI

Encouraging scientific culture is performed by the centre for scientific, technical and industrial culture Cap Science and Mendes France.



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