



# Print - FURG

Internationalization Institutional Project of the  
Federal University of Rio Grande - FURG

## Sustainability in Coastal and Oceanic Ecosystems: Cluster of Excellence in the Extreme South of Brazil

CAPES/Print - FURG: 2019-2023





Introducing the...

# FEDERAL UNIVERSITY OF RIO GRANDE -FURG



FURG  
50  
anos 

*Um passado de memórias,  
um futuro de histórias.*

A university focused on the coastal and oceanic ecosystems!



# FEDERAL UNIVERSITY OF RIO GRANDE -FURG

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**50**  
anos 

*Um passado de memórias,  
um futuro de histórias.*



Four university campi: Carreiros in **Rio Grande**, **Santa Vitória do Palmar (2)**, **São Lourenço do Sul (3)** e **Santo Antônio da Patrulha (4)**

Twenty-five sites for distance learning courses!

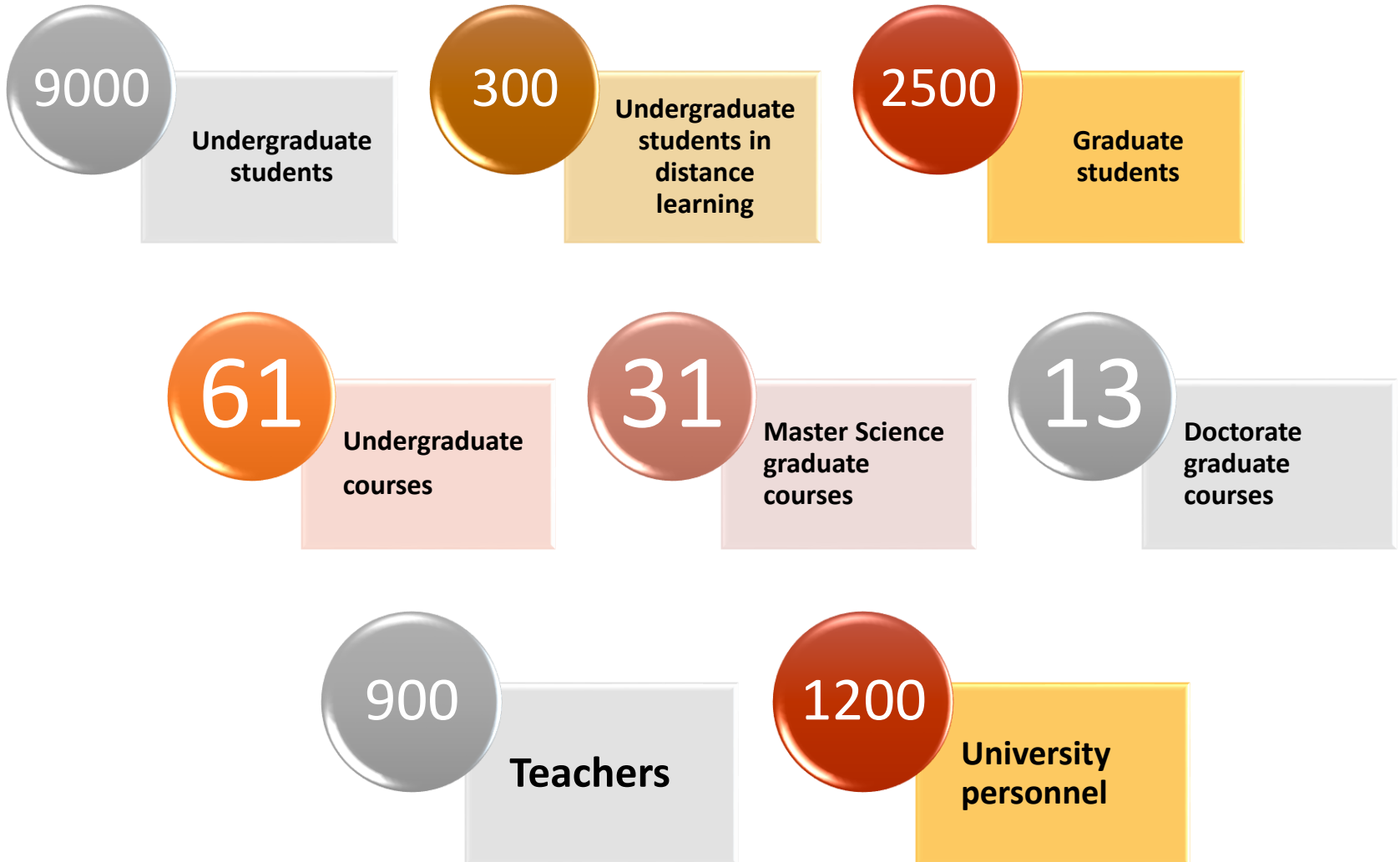




# FURG IN NUMBERS



*Um passado de memórias,  
um futuro de histórias.*





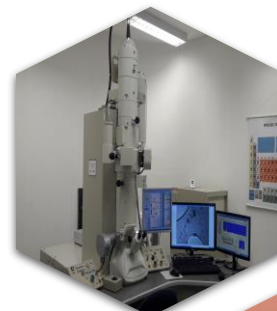
# FURG HIGHLIGHTS

FURG  
**50**  
anos 

*Um passado de memórias,  
um futuro de histórias.*



**University  
Hospital**



**Southern  
Electron  
Microscopy  
Center**



**Antarctic  
Support  
Station**



**Analysis  
Integrated  
Center**



**Health  
Integrated  
Center**

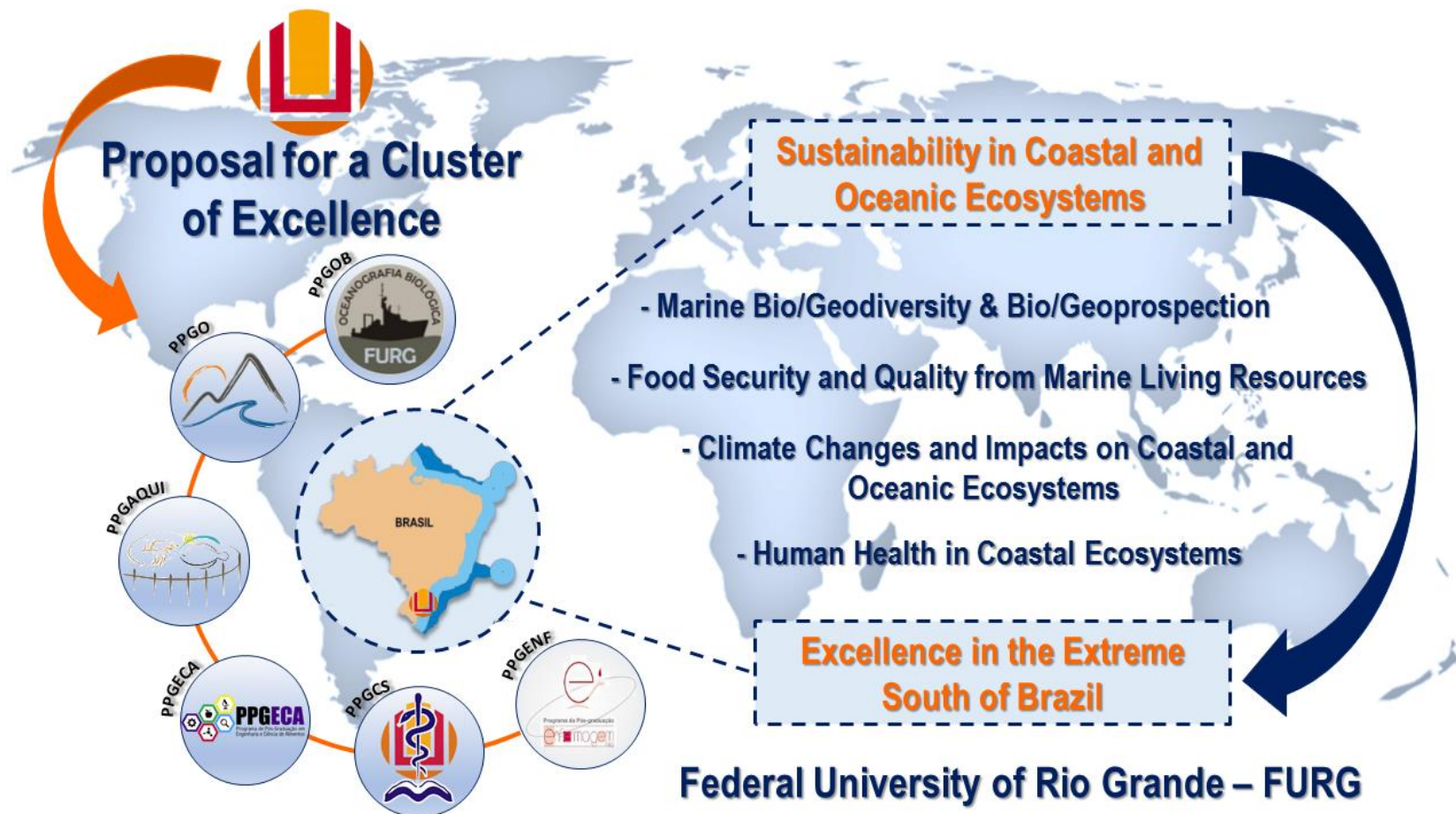
*Coming soon...*



**Marine  
Animal  
Rehabilitation  
Center**



# Sustainability in Coastal and Oceanic Ecosystems: Cluster of Excellence in the Extreme South of Brazil



Aligned with contemporary issues of global relevance, and the institutional vocation of FURG

# Sustainability in Coastal and Oceanic Ecosystems: Cluster of Excellence in the Extreme South of Brazil

## Management Group



### Manager

- Prof. Eduardo Resende Secchi, PhD
- Dean of Research and Graduate studies - FURG

## Members - FURG



**Prof. Carlos Prentice Hernandez, PhD**  
School of Chemistry and Food - FURG



**Prof. Mara Regina Santos da Silva, PhD**  
Nursing School - FURG



**Prof. Gilberto Fillmann, PhD**  
Oceanography Institute – FURG



**Prof. Mauricio Magalhães Mata, PhD**  
Oceanography Institute – FURG



**Prof. Luis Andre Nassr de Sampaio, PhD**  
Oceanography Institute – FURG



**Prof. Ronaldo Olivera Cavalli, PhD**  
Oceanography Institute – FURG

## Foreign Member



**Prof. Martin Visbeck, PhD**  
GEOMAR Helmholtz Centre for  
Ocean Research Kiel - Germany



# Sustainability in Coastal and Oceanic Ecosystems: Cluster of Excellence in the Extreme South of Brazil

## Integrate the Graduation courses of Excellence



**Biological  
Oceanography**

CAPES: 7

**Oceanography  
Institute**



**Oceanology**

CAPES: 6

**Oceanography  
Institute**



**Aquaculture**

CAPES: 6

**Oceanography  
Institute**



**Food Engineering  
and Science**

CAPES: 5

**School of  
Chemistry and  
Food**



**Health Sciences**

CAPES: 5

**Faculty of  
Medicine**



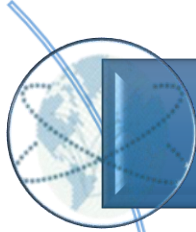
**Nursing**

CAPES: 5

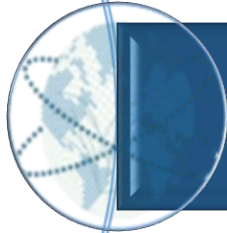
**Nursing School**

← CAPES GRADUATION EVALUATION SCORE (1 - 7): 5=NATIONAL EXCELLENCE; 6 E 7 =INTERNATIONAL EXCELLENCE →

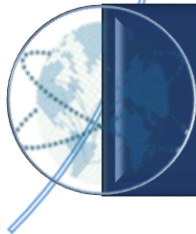
## MAIN ACTIONS



Train PhD students and researchers (senior or junior visiting professor) in institution of excellence abroad



Attract visiting international teachers and young talented researchers with international experience for the development of activities of teaching and research



Abroad missions to undertake agreements for collaboration to join FURG and international graduate courses, in special for double supervisors for PhD students and also to grant double PhD degrees in both institutions

## COLLABORATION AGREEMENTS IN 2019

### AGREEMENT TO GRANT DOUBLE PhD DEGREES:

- ✓ VRIJE UNIVERSITEIT BRUSSEL (VUB), BELGIUM / FURG: **Biological Oceanography Graduation Course**
- ✓ PARMA UNIVERSITY, ITALY / FURG: **Health Sciences Graduation Course**

**FUNDED BENEFITS**

- ✓ Visiting Professor
- ✓ Junior Visiting Professor Abroad
- ✓ Senior Visiting Professor Abroad
- ✓ Missions Related to the Research Project
- ✓ Pos Doctorate with Experience Abroad
- ✓ Young Talents
- ✓ PhD sandwich

**BENEFITS ARE DISTRIBUTED AMONG FOUR SPECIFIC PROJECTS:**

**I. Bio/Geodiversity and Bio/Geoprospection in Coastal and Oceanic Ecosystems: Emphasis on the South Atlantic**

**II. Global Climate Change and its Consequences for Coastal and Oceanic Ecosystems**

**III. Safety and Food Quality from Coastal and Oceanic Living Resources**

**IV. Prevention and Control of Diseases and Illnesses that Affect Human Health and Quality of Life in Coastal Ecosystems**

**SPECIFIC PROJECT I**

**Bio/Geodiversity and Bio/Geoprospection in Coastal and Oceanic Ecosystems: Emphasis on the South Atlantic**

**Coordinator: Prof. Dr. Luis Henrique da Silva Poersch**

**Participating Graduate Programs: Oceanology, Biological Oceanography, Food Engineering and Science and Health Science**

**Main objective:** Identify, map, quantify and monitor the bio and geodiversity of the oceans and their coastal zones, focusing especially in the South Atlantic.

The project will promote the exchange actions focused on the following areas:

- 1) Bio / Geodiversity in different Brazilian sedimentary basins
- 2) Marine pollution and its threats to biodiversity and ecosystems
- 3) Marine biodiversity and endangered species
- 4) Bioprospecting in coastal and oceanic ecosystems



**BIO/GEODIVERSITY AND BIO/GEOPROSPECTION IN COASTAL AND OCEANIC ECOSYSTEMS:  
EMPHASIS ON THE SOUTH ATLANTIC**

EXPECTED BENEFITS	2019	2020	2021	2022
Missions Related to the Research Project	3	4	3	-
PDSE - Ph.D. sandwich (6 months)	2	3	2	4
PDSE - Ph.D. sandwich (12 months)	-	1	-	-
Visiting Professor (15 days)	1	1	2	-
Visiting Professor (1 months)	1	1	1	1
Junior Visiting Professor Abroad (3 months)	-	1	-	-
Senior Visiting Professor Abroad (3 months)	-	1	-	-
Senior Visiting Professor Abroad (6 months)	-	1	1	-

SPECIFIC PROJECT II

## Global Climate Change and its Consequences for Coastal and Oceanic Ecosystems

**Coordinator:** Prof. Dr. Margareth da Silva Copertino

**Participating Graduate Programs:** Oceanology, Biological Oceanography, Aquaculture.

**Main objective:** Assess the effects of global climate change on the oceans and their consequences for ecosystems and society.

The project will promote the exchange actions focused on the following areas:

- 1) Paleoceanography / Paleoclimatology
- 2) Ocean acidification and changes in the properties of sea water
- 3) Cryosphere, polar oceanography and high latitudes
- 4) Sea level rise and coastal erosion:

## GLOBAL CLIMATE CHANGE AND ITS CONSEQUENCES FOR COASTAL AND OCEANIC ECOSYSTEMS

EXPECTED BENEFITS	2019	2020	2021	2022
Missions Related to the Research Project	2	3	3	-
Young Talents- A (6 months)	-	-	3	-
PDSE - Ph.D. sandwich (6 months)	2	1	-	1
PDSE - Ph.D. sandwich (12 months)	-	2	1	-
Visiting Professor (1 months)	-	2	-	-
Visiting Professor (6 months)	-	1	-	-
Junior Visiting Professor Abroad (3 months)	-	1	-	-
Senior Visiting Professor Abroad (3 months)	1	1	-	-
Senior Visiting Professor Abroad (6 months)	-	1	-	-

**SPECIFIC PROJECT III**

**Safety and Food Quality from Coastal and Oceanic Living Resources**

**Coordinator: Prof. Dr. Jorge Alberto Vieira Costa**

**Participating Graduate Programs: Food Engineering and Science, Aquaculture, Biological Oceanography.**

**Main objective:** Investigate the potential of living marine fishery resources and aquaculture as a sustainable source of high quality food quality for the growing human population.

The project will promote the exchange actions focused on the following areas:

- 1) Sustainable use of marine resources
- 2) Development of responsible aquaculture
- 3) Potential for aggregation of nutritional value to marine products
- 4) Development of new products through studies in food science



## SAFETY AND FOOD QUALITY FROM COASTAL AND OCEANIC LIVING RESOURCES

EXPECTED BENEFITS	2019	2020	2021	2022
Missions Related to the Research Project	-	1	2	-
PDSE - Ph.D. sandwich (6 months)	-	1	2	1
PDSE - Ph.D. sandwich (12 months)	-	-	1	-
Visiting Professor (1 months)	-	1	1	-
Junior Visiting Professor Abroad (6 months)	-	-	1	-
Senior Visiting Professor Abroad (6 months)	-	-	-	1

**SPECIFIC PROJECT IV**

**Prevention and Control of Diseases and Illnesses that Affect Human Health and Quality of Life in Coastal Ecosystems**

**Coordinator:** Prof. Dr. Andrea von Groll

**Participating Graduate Programs:** Nursing and Health Science.

**Main objective:** Prospect and develop strategies to prevent and control diseases and illnesses affecting human health and the quality of life in coastal ecosystems.

The project will promote the exchange actions focused on the following areas:

- 1) AIDS and its comorbidities and other sexually transmitted diseases
- 2) neglected diseases such as tuberculosis and intestinal parasitoses
- 3) issues of local relevance such as mental health, drug addiction and prison health
- 4) assess the impact of pollutants on human health

**PREVENTION AND CONTROL OF DISEASES AND ILLNESSES THAT AFFECT HUMAN HEALTH AND  
QUALITY OF LIFE IN COASTAL ECOSYSTEMS**

EXPECTED BENEFITS	2019	2020	2021	2022
Missions Related to the Research Project	2 ✓	2	-	-
Pos Doctorate with experience abroad	-	1	2	-
PDSE - Ph.D. sandwich (12 months)	-	1	-	-
PDSE - Ph.D. sandwich (6 months)	-	2	1	1
Visiting Professor (1 months)	-	1	-	-
Junior Visiting Professor Abroad (6 months)	1 ✓	2	4	1
Senior Visiting Professor Abroad (3 months)	1 ✓	-	-	-

# Internationalization Institutional Project - FURG

## E-MAIL CONTACTS

### Institutional Project Management

**Manager: Eduardo Resende Secchi**

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<https://print.furg.br/en/>

**e-mail:** print@furg.br

### Specific Projects

**Bio/Geodiversity and Bio/Geoprospection in Coastal and Oceanic Ecosystems**

**Coordinator:** Luis Henrique da Silva Poersch  
**e-mail:** lpoersch@mikrus.com.br

**Global Climate Change and its Consequences for Coastal and Oceanic Ecosystems**

**Coordinator:** Margareth da Silva Copertino  
**e-mail:** marga.copertino@gmail.com

**Safety and Food Quality from Coastal and Oceanic Living Resources**

**Coordinator:** Jorge Alberto Vieira Costa  
**e-mail:** jorgealbertovc@terra.com.br

**Prevention and Control of Diseases that Affect Human Health in Coastal Ecosystems**

**Coordinator:** Andrea von Groll  
**e-mail:** avongrol@hotmail.com

### Coordinators of Graduation courses

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