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Report

Report **2019**



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D. Juan Manuel Cerqueira Ozores

President

One more year, I have the honor of presenting the ANFACO-CECOPES-CA Scientific-Technological Activities Report. In this report the 2019 data, indicators and images are collected, but behind these results lies the enormous business activity and effort of our clients, who year after year place their trust in our technological capabilities to jointly achieve the highest levels of competitiveness.

ANFACO-CECOPESCA is a joint business venture with 116 years of history whose original values remain intact. The marine and food sector continues betting decisively on technology, knowledge and innovation, especially in a society and a business models highly dynamic, with new trends and needs to respond quickly and efficiently. We can only congratulate ourselves on having a technological center like ANFACO-CECOPESCA thanks to which we can create a collaborative network to stimulate the exchange and application of knowledge and technological solutions that allow the industry to continue being at the forefront of international markets, competing in terms of product diversification, process efficiency, food quality and safety, sustainability and traceability.

In this way, the indicators reached in 2019 undoubtedly reflect the trust of

our clients and the excellent scientific and technological capabilities of ANFACO-CECOPESCA, especially through the vanguard equipment available in the more than 10,000 m2 of built surface at CYTMA, the Center for Advanced Research Technologies for the Food and Marine Industry. The indicators reflect a figure of \in 7.4 million in total revenues, of which more than 86% are from R&D&I activities and technological services, which supports the great involvement of the industrial sector in ANFACO-CECOPESCA activities.

To achieve these indicators, the effort made by ANFACO-CECOPES-CA in order to constantly update scientific-technological equipment and the commitment to consolidate a highly trained and multidisciplinary human team is notable. Thus, in 2019, significant investments were made in new infrastructures and scientific-technological equipment, with a staff of 113 highly qualified professionals, with 25% of doctors and 78% of researchers and technologists. All these achievements would not be possible without the involvement that the ANFACO-CE-COPESCA staff demonstrates daily. Thanks to their knowledge, dedication and involvement in the continuous improvement day by day, the competitiveness of ANFACO-CECO-PESCA associates and clients are strengthened.

D. Juan M. Vieites Baptista de Sousa

General Secretary

Last year 2019 has meant an increase in the main activity indicators of ANFACO-CECOPESCA, which makes us feel very proud of both our services and the human team that carry them out. Also, the trust that associates and clients place in our capabilities, as indicated by a 12% increase in the number of clients compared to the previous year, reaching 613 this year, of which more than 14% are foreigners.

These indicators are the result of ANFACO-CECOPESCA's long history of excellence in the provision of services aimed at increasing the competitiveness of the industry through the development and effective implementation of innovative technological solutions, advanced technological services and counseling based on in-depth technical and regulatory knowledge, all of them applied to the reality of the marine and food industry. At the Analytical Technology level, the center has more than 190 procedures accredited by ENAC and it has managed more than 35,000 samples in 2019, achieving a significant increase in activity, with a turnover increase of more than 17% and more than 5% of clients, compared to the previous year. From the Technical Assistance and International Cooperation Area, more than 1,729 technical queries have been solved and 60 training actions have been carried out in companies both at the national and international level, developing a total of 175 cooperation activities in

more than 40 countries in the last 21 years. The R&D&I Area develops projects framed in the field of biotechnology and industry 4.0, the two main pillars of the research activity of ANFACO-CECOPESCA and CYT-MA, the Center for Advanced Technologies of Research for the Marine and Food Industry. In this past year 2019, 91 research projects have been executed, of which 63% have been carried out through contract with companies, and 19% of them were international projects.

"We are proud to verify year after year that through R&D&I and the constant updating of our technological services, new solutions are generated that allow us to anticipate to the needs of the sector"

We are proud, therefore, to verify year after year that our indicators not only respond to the industry demands, but that through R&D&I and the constant updating of our technological services, new solutions are generated that allow us to anticipate to the needs of the sector, providing a differential value. This makes ANFACO-CECOPESCA the reference center for the marine and food sector through its 116 years path.

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D. Juan M. Vieites Baptista de Sousa ANFACO-CECOPESCA

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TECHNICAL ASSISTANCE AND INTERNATIONAL COOPERATION AREA

ANALYTICAL TECHNOLOGY AREA

26

Investments and Equipment

21.8 M€ of total investment.

Located on the Campus of the University of Vigo, ANFACO-CECOPES-CA has a plot of 6,000 m^2 with a total constructed area of more than 10,000 m², in which the Advanced Technology Center for Marine and Food Industry Research (CYTMA) is placed. This modern infrastructure, whose total investment is today € 21.8 million, is distributed in five plants exclusively for research. Regarding equipment and technological machinery, CYTMA contains the most advanced and sophisticated technologies of processing, packaging and food preservation, robotics and vision systems, equipment for the valorization of by-products and modern techniques for its application in food and health and food safety. CYTMA has unique equipment like: High pressures, Multienergetic Cavity, Induction Systems, Extrusion Systems, Skinpack, Mass-coupled liquid chromatography systems (LC-MS/MS and UPLC-MS/MS), FPLC, Mass spectrometer with inductively coupled plasma (ICP-MS), system for determining the bioavailability in tissues-Ussing Chamber, equipment for the extraction of nucleic acids, a digital PCR, massive sequencer, Supercritical Fluid Extraction, spray dryer, Hydrolysis Reactor, Vertical Centrifuge, and Ultrafiltration Membranes Systems.

There is also an experimental pilot plant destined to the scaling of technological solutions at semi-industrial level, processes simulation,

modelling, design, optimization and production process control, energy efficiency studies and resource savings, development of prototypes of industrial processing and valorization of by-products and wastes at a pilot scale. Furthermore, at this pilot plant, is located the Integrated Pilot Area for the research and breeding of aquatic organisms, which has various tanks for the culture of fish and bivalve molluscs, a room for the culture of microalgae, a wet laboratory and a room for storage, pumping and water treatment. This new infrastructure, added to the rest of the unique equipment in the chromatographic and genetic field, will allow carrying out research activities taking into account aspects related to nutrition, farming conditions and environmental sustainability, aimed at offering support and innovative solutions to the aquaculture sector.

Among the facilities located in the Center, also stands out the laboratory of Control, Digitalization and advanced Automation Technologies (TECDA), which seeks to promote the implementation of the so-called industry 4.0 in the agri-food sector. TECDA will implement new technological developments in areas such as artificial vision, process simulation, data management and analytics, automation and industrial robotization, advanced sensory, 3D printing, ICT tools for the integral control of processes or industrial cybersecurity.



Hydrolyzer



Filtration system with membranes



Aquaculture facility



Photobioreactor for microalgae



UPLC-MS



Massive sequencing System



Multi-Energy Cavity

Economic Data

7.45 *M*€ of total revenues.

6.46 M€ of revenues from technological and R&D&I services.

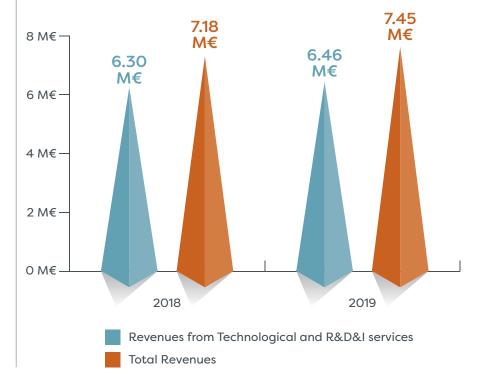
86.8% of revenues come from R&D&I activities and the provision of technological services.

64.2% of income coming from private funding.

0% non-competitive public funding.



The sustained growth of ANFA-CO-CECOPESCA in recent years underpins its consolidation as a leading Technology Center for the marine and food industry, as it can be seen in this year's figures.



Human Resources

Professionalism and Efficiency





113 profesionals

Multidisciplinary team

of Chemists, Biologists, Veterinarians, Engineers, Marine scientists, Pharmacists...

Research Excellence

78% researchers and technical staff, of which 25% hold a Ph.D.

High qualification of personnel

70% of university graduates.

Employment Stability

80% of professionals with permanent contract.

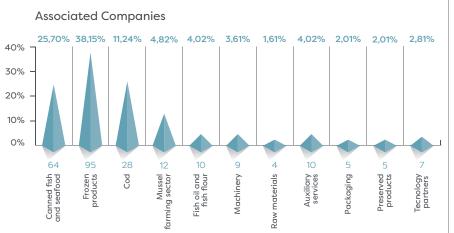
Training

Training and professional internships for 43 scholars and students.



Representativeness

Clients and Associated Companies



249

National and international associated companies

More than **10,900 M€** of global turnover.

More than 26,000 directly employed professionals of which more than 60% work in Galicia.

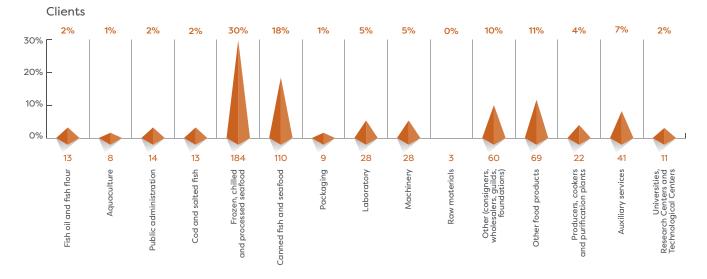
More than 50% of production goes to export, being present in more than 140 countries in 5 continents.

In 2019 exports of canned, prepared and semi-preserved fish and seafood grew at a sustained rate (+ 1% in volume and + 0.4% in value) compared to 2018.

613

Clients of technological and R&D&I services belonging to multiple sectors of marine and food industry (11% more than 2018).

523 national clients from 46 provinces. **90 internatinal clients** from 39 countries.



Research Lines

BLUE BIOTECHNOLOGY

FOOD SAFETY AND INDUSTRIAL HYGIENE

- Chemical and biological contaminants:
 - Advanced detection systems. Risk control and prevention.
 - Reduction/decontamination strategies
 - Toxicology. Mechanisms of action and biochemical targeting.
 - Bioaccessibility and bioavailability.
 - Synergistic and antagonistic effects

- Development of biosensors for detection of parameters in food or in the environment, from the point of view of the biochemical reactions.
- Predictive microbiology in food. Mathematical models.
- Predicting shelf life through accelerated studies. Challenge test.
- Development of more sustainable and efficient sanitation solutions.
- Optimization of purification in live molluscs. Reduction or elimination of its microbial / contaminant load.
- Marine biotoxins.

BY-PRODUCTS VALORIZATION-CIRCULAR ECONOMY

- By-products valorization in the food industry through the development of new industrial chemical- biological processes to obtain new marketable products for food, pharmaceutical and cosmetic applications.
- Application of supercritical fluids for the extraction of high added value products.
- Microencapsulation of bioactive compounds for application in food or nutraceutical matrices.
- Concentration of added value compounds in liquid streams





through ultra and nanofiltration processes.

- Valorization of food industry processing effluents.
- Development of new materials of interest from by-products or food raw material. Nanotechnology applied for this purpose.

HEALTH- NUTRITION AND PHARMAINDUSTRY

- Research for the development of bioactive ingredients, functional foods and adapted diets for people with certain pathologies and specific nutritional needs.
- Chemical and functional characterization of bio-functional extracts or functional ingredients. In vitro evaluation of ingredients bioactivity.
- Studies of digestibility and intestinal absorption of nutrients.
- Ex vivo evaluation of nutrients and functional ingredients bioavailability.
- Development of new ingredients: new protein sources, natural antioxidants, pre and probiotics, additives ...

- Studies on the influence of intestinal microbiota in metabolic diseases and methodologies for the incorporation of probiotic microorganisms in food matrices.
- Obtaining microorganisms and enzymes with biotechnological potential to produce functional ingredients with higher bioactivity and bioavailability of bioactive components.
- Nutricosmetics.
- Nanotechnology applied for nutritional purposes.

MARINE RESOURCES AND AQUACULTURE

- Optimization of culture techniques in aquaculture from a biological and species point of view.
- Development of biotechnology-based tools for genetic improvement, larval development and pathogens prevention, diagnosis and control and for improvement of aquaculture production.
- Development of new probiotic diets to mitigate the impact of pathogens and optimize productive yield.
- Natural alternatives to the use of chemicals in aquaculture industry.
- New ingredients for feed and formulation. Development of new diets.
- Technology for small-scale aquaculture: breeding conditioning, fattening and purification systems.
- Study of the marine species zoology and introduction of new culture species.
- Development of culture techniques in the marine environment for new products of interest (algae, microalgae, etc.).



INDUSTRY 4.0

PRESERVATION TECHNOLOGIES-PRODUCT INNOVATION

- Development of new products minimally processed and easy to prepare - V Range Products.
- Application of emerging technologies for processing (cooking, freezing, defrosting...), preservation (sterilization, pasteurization) and product optimization (high pressure, ultrasound, microwave, infrared...).
- Optimization of physical- technological parameters (temperature, time, etc.) used in the food processing: smoking, dehydration, sterilization, cooking, etc., in order to improve quality, performance, etc.
- Development of new forms of presentation for fresh and refrigerated foods, to improve their lifespan (skinpack, modified atmosphere, vacuum packed, etc.).
- New packaging materials, films and new edible coating materials for conservation.
- Development of new differentiated

products. Application of additives and ingredients with the purpose of improving sensory characteristics and lifespan.

- Development of new technologies for quality control and characterization of raw materials and products in the production line - real time.
- Valorization of raw materials by the development new food products (coextrusion, micro-encapsulation, lyophilization, etc.).

PROCESS ENGINEERING -INDUSTRY 4.0

- Scalability of industrial processes from an engineering point of view (electricity, mechanics, heat transfer, etc.).
- Design, development and validation of industrial prototypes as well as optimization of their operation. Hygienic design of equipment.
- Automation and robotics applied to production processes.
- Development of vision technologies for the characterization of raw materials and products. Quality

control on production lines - real time.

- ICT technologies applied to processes improvement. Technological application during processing, distribution and commercialization.
- Development of ICT control platforms. Communication between processes. Internet of things.
- Development of technology for 3D printing with food matrices.
- Instrumentation and sensorics applied to industrial processes.
- Simulation and calculation of industrial processes. LEAN manufacturing.
- Development of blockchain-based communication solutions
- Management of thermal processes. Design of intelligent monitoring platforms.
- Optimization of energy and water consumption and Carbon Footprint calculation. Emissions reduction.
- Study for the implementation of renewable energy and its applicability to current production processes.

Dissemination, Technology Transfer Activities and Business R&D&I Support

Support to companies for their participation in national, international and regional R&D&I funding programs.

- Guindance in project design.
- Search for funding.
- Consortium configuration / partners search.
- Administrative support.
- Drafting of technical and economic reports.
- Support in the application of Tax Deductions for R&D&I.

Other support services.

- Technological surveillance.
- Advice on the implementation of the standard UNE 166002 for R&-D&I management.



Dissemination of Scientific knowledge.

- The CYTMA Blog (http://www.anfaco.es/blog_ct/), provides information on the most relevant research projects and scientific-technical conferences of interest, and also contains a specific section called "Mapa de Ayudas" for the consultation of research grants.
- Participation in the main Spanish Technological Platforms related to fishing, food and health: PTEPA, Food For Life-Spain, Clusaga, Bioga, CSG.
- Industry 4.0 promoter The Smart Factory for the marine and food industry.
- Coordination of the Galician Intersectoral Technological Alliance (ATIGA).
- 22 scientific publications and participation in national and international scientific conferences.
- 21 patents on new processing and conservation technologies and biotechnology.
- Execution of **8** technology transfer projects
- ANFACO-CECOPESCA is part of the **Digital Innovation HUBs** promoted by GAIN: DATALIFE (Biotechnology) and GALICIAFoFHUB (Industry 4.0)
- Collaboration agreement with IGA-PE for the detection and analysis of sectoral opportunities for Galician companies in the field of Industry 4.0.

Indicators 2019

91

R&D&I projects developed, 63% under direct contract with companies.

5 contracts with companies.

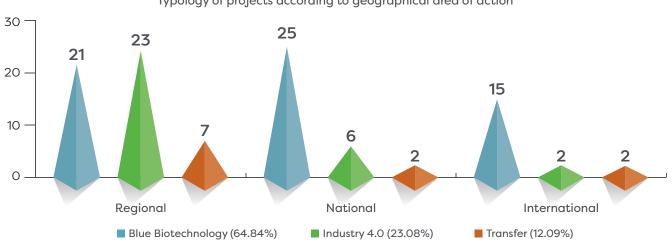
18 international projects.

Partner in the only Cervera Network of Technology Centers of Excellence financed by CDTi in the food sector with a global budget of 3.9 M€.

1 Industry for the Future 4.0 Project -Smart factory with Hijos de Rivera with a global budget of **2.1 M€** for the period 2019-2021.

1 Joint Research Unit with **Emenasa** Group with an overall budget of 2 M€ for the period 2016-2019.

8 CIEN projects (2015-2023).



Typology of projects according to geographical area of action

Projects

FISH4FISH

Title: Fish chitinolytic biowastes for fish active and sustainable packaging material.

Objective: The Fish4Fish project investigates the use of chitin and chitosan derivatives extracted from marine biomass residues to manufacture new packaging for the fishing sector. These innovative products will improve the shelf life of fish and, at the end of their life, can be used as fertilizer and antimicrobial agents for growing vegetables.

Call: EMFF-BlueEconomy-2018 (EMFF-01-2018; EM-FF-AG).

Partners: University of Siena, ANFACO-CECOPESCA, Next Technology Tecnotessile SRL, University of Tuscia, CSIC, Tecnopackaging.



HI BIO 4.0

Title: Hybridization of biotechnology and 4.0 tools in the agri-food industry for the accelerated development of new formulations. The future of functional and personalized food.

Objective: The HI-BIO 4.0 project aims to implement advanced industry 4.0 tools to model a biotechnological process. This modeling will facilitate and optimize the development processes to achieve greater quality and functionality in the products obtained.

Call: Future Industry 4.0 program, GAIN, Xunta de Galicia.

Partners: Hijos de Rivera, S.A., ANFACO-CECOPESCA.











«Subvencionado pola Axencia Galega de Innovación»

FOODSENS

Title: Transfer of sensory technologies to prevent food risks.

Objective: The project's main objective is to promote collaboration between entities to develop sensors that detect bacterial biofilms, allergens, PAHs, drug residues, toxic phytoplankton and mycotoxins at the environmental level and in the agri-food industry. Sensory devices will be developed to assess the presence of these pollutants, and the transfer to companies will be carried out, as well as the evaluation of end users.

Call: Interreg V A Spain - Portugal (POCTEP) 2014-2020

Partners: ANFACO-CECOPESCA, ICETA, IIM-CSIC, LEI-CAR (Association of milk and meat producers), University of Minho, University of Vigo.

ALGALUP

Title: Integral alternative for the exploitation of macroalgae in the Galicia and Portugal area.

Objective: The ALGALUP project aims to develop a comprehensive strategy to promote research and innovation in the exploitation of macroalgae in Galicia and Portugal, to explore the potential of little or no exploited species, promote cultivation and develop new ways of exploiting the biomass for human consumption, biomedical and cosmetic applications, and nutrition in aquaculture.

Call: Interreg V A Spain-Portugal (POCTEP) 2014-2020

Partners: ANFACO-CECOPESCA, CETMAR, Polytechnic Institute of Guarda, Portuguese Catholic University (UCP) - Regional Center of Porto, University of Vigo, University of Porto.





R&D&I Area Projects

CONSERVAL

Title: Valorization of by-products and wastewater from the canning industry in the POCTEP space.

Objective: The CONSERVAL Project pursues the valorization of by-products and wastewater through the production of volatile fatty acids and the obtention of oils and proteins from by-products and wastewater from the canning industry of the Galicia-North of Portugal Euroregion.

Call: Interreg V A Spain- Portugal (POCTEP) 2014- 2020.

Partners: CETAQUA – Galician Center for Water Research, ANICP (National Association of Canned Fish Industry Portugal), ANFACO-CECOPESCA, University of Porto, Santiago de Compostela University, FEUGA (Galician Industry-University Foundation).

ELIMET

Title: Development of innovative technologies for the elimination of heavy metals in waste generated by the fishing sector and its valorization.

Objective: The objective of the ELIMET project is the valorization of fishery by-products through the development of innovative technologies for the elimination of heavy metals in waste generated by the fishing sector.

Call: pleamar Program 2018.

Partners: ANFACO-CECOPESCA, CIDAF (Functional Food Research and Development Center).





MUSSELECT

Title: New strategies to improve the viability of mussel seed production.

Objective: The MUSSELECT project anticipates future environmental changes that could endanger mussel production in Galicia, developing selection strategies for individuals capable of surviving and developing in suboptimal conditions due to fluctuations in temperature or pH. Thus, it aims to develop low-cost, scalable methods for mussel seed production with improved yield and survival characteristics.

Call: Promotion of technological development, innovation and competitiveness in the aquaculture sector. FEMP 2014-2020.

Partners: ANFACO-CECOPESCA.

ANFACO CECOPESCA UNIÓN EUROPEA

ALTERNFEED II

Title: Substitution of fishmeal and fish oil for products and by-products: Experimental validation.

Objective: The ALTERNFEED II project aims to experimentally validate the effect of sustainable alternative diets, based on feed including insect flour, certain microalgae and by-products of the canning industry, such as tuna cooking water, on growth of rainbow trout and sea bass.

Call: pleamar Program 2019.

Partners: ANFACO-CECOPESCA, IRTA and CARTIF.



Technical Assistance and International Cooperation

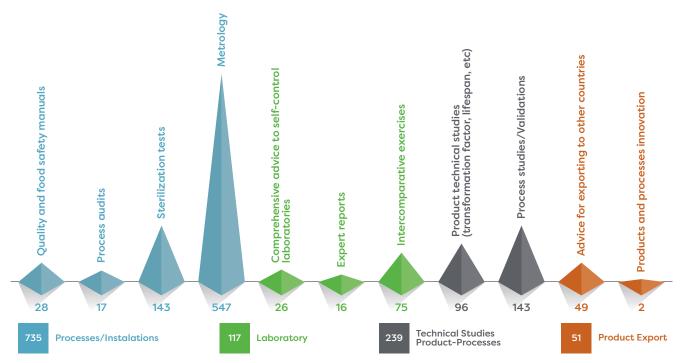
Indicators 2019

1,729 Company inquiries solved.

911 Technical assistance activities managed. 62 Training activities in companies.

Coordination of the Official Master's Degree in Science and Preservation Technology of Fish Products (University of Vigo).

Supporting Activities and Technical Assistance Service





PRODUCTS INNOVATION AND PROCESSES OPTIMIZATION

- Assistance in new technologies.
- Development of new products.
- Design of viability and lifespan studies.
- Process control.
- Installations design.
- · Lean Manufacturing.
- Processes optimization.

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FOOD SAFETY, AUDITS AND ENVIRONMENT

- Support on implementation of HACCP and standards BRC, IFS, GlobalGap, ISO 22000, ISO 14000, EMAS.
- Systems advice.
- Wastewater control.
- · Validation of processes and products
- Factory Environmental Assessment Studies.
- Internal audits and second part audits.



CONSULTANCY AND SPECIALIZED SERVICES

- Processing tests and reports required for registration of companies and products in FDA, Brazil, Vietnam, China and SAE RD 993/2014.
- Penetration- distribution heat tests.
- Market surveys, labelling, transformation factor studies.
- Equipment calibration and metrology advising.
- Expert reports, official control sampling, merchandise conformity assessment.



TRAINING

- Coordination of the Master's Degree in Science and Preservation Technology of Fish Products.
- Management of bonus training (Tripartite Foundation).
- Courses organization and promotion, seminars, conferences and other training events of sectoral interest.
- Management and execution of international European projects in which ANFACO-CECOPESCA participates.
- Management of practices in the laboratories of ANFACO-CECOPESCA for University, master's degrees and job training centers students.

Technical Assistance and International Cooperation

More than **175** Foreign Cooperation actions in more than **40 countries** in the last **21 years**.

10 Foreign Cooperation actions in **5 countries in 2019**. In 2019, the services performed in this Area, related to International Cooperation, include the following topics:

- Advice to the Competent Authority of third countries to comply with the requirements of applicable European regulations.
- Training in aspects related to inspection, sampling and evaluation of conformity of goods.
- Review and establishment of the improvement needs of the National Control Plans for the fulfillment of the objectives established by the EU.
- Advice to companies for compliance with specifications, either from the client or from the EU.
- Establishment of operational guidelines according to the situation of the country and the needs of companies.
- Audits to suppliers (plants, fishing vessels, ports and cold stores, etc.).

PROJECTS AND CONTRACTS

• Acuipesca Perú. Development Cooperation Agreement, co-financed by the Vice Presidency of the Xunta de Galicia with Galician Cooperation funds, whose objective is to increase the competitiveness of the artisanal fishing and aquaculture sector in Sechura Bay (Peru), through strengthening of institutions and organizations, the adoption of technologies and environmental sustainability. In addition to ANFACO-CECOPESCA, the project has the participation of the CETMAR Foundation and HELP IN ACTION Foundation.

• Intermares. For another year, AN-FACO-CECOPESCA through its Technical Assistance and International Cooperation Area, participates in the organization of training courses in North African countries. On this occasion, it was a tender from TRAGSATEC (TRAGSA Group), commissioned by the General Secretariat of Fisheries for training in the INTERMARES Fisheries Cooperation Vessel, under the Ministry of Agriculture, Fisheries and Food. The course "Processing and Quality Control of Fishery Products", with 2-levels, basic and advanced, was held for 5 weeks in the port of Nador. Morocco.





Analytical Technology Area

More than **35,000** samples.

354 laboratory clients.

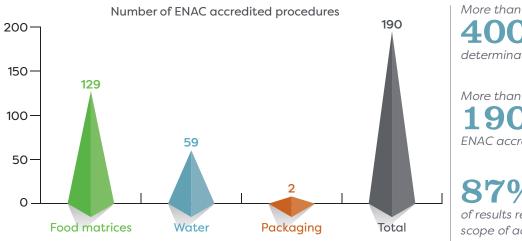
140,000 analyses performed.

17.3% anual increase turnover. The service provided by the Analytical Technology Area, composed of two large Laboratories and several Specialized Units, is characterized by its high scientific-technical level and by maintaining the quality standards and speed appropriate to the demands of our clients and associates. All analytical services offered are subjected to a constant review that makes us a benchmark for physical-chemical, microbiological, toxicological and biomolecular tests on agri-food products, water and packaging.

During 2019, we have continued the improvement of the management system and the services provided to our clients and associated companies, expanding the UNE-EN ISO/IEC 17025 accreditation (n°96/LE230) with new test procedures, among which stand out the determination of elements by inductively coupled plasma mass spectrometry (ICP-MS) in food, feed and raw materials; the extension of the accreditation scope for the analysis of histamine by liquid chromatography with a UV-VIS spectrophotometric detector, in the fish meal matrix, thus providing service to companies in the flour sector and fishery by-products; the enumeration of Enterobacteriaceae by automated MPN in feed and feed materials, according to Regulation (EC) 2073/2005 on microbiological criteria for foodstuffs: the detection and enumeration of Escherichia coli B-glucoronidase positive, in live, raw and cooked bivalve molluscs, echinoderms, tunicates and gastropods, and in shelled or head off cooked crustaceans. Thus, ANFACO-CECO-PESCA completes the range of tests on live bivalve molluscs, covering the needs of both the companies related to the sector and the official control authorities, which need of rapid and robust methodologies to allow the release of batches of products complete safety into the market.

In addition to all of the above, AN-FACO-CECOPESCA continues to be a reference in allergen detection, a





very important issue from the food safety point of view. The laboratory has a flexible scope for the category of allergens detection using real-time PCR techniques, which allows all the allergens indicated in Regulation (EC) 1169/2011 to be available within the scope of accreditation. Proof of this leadership is that in 2019 ANFACO-CECOPESCA conti-

nues its participation on the Euro-

pean Network of Food Allergen Detection Laboratories, coordinated by the Joint Research Center (JRC) of the European Commission. The general objective of this network composed of experts from several European countries, is the search for harmonized methods to assess the presence of allergens in food, as well as the interpretation of results in a coherent way in all member states. 400 determinations offered.

More than **190** ENAC accredited procedures.

87% of results reports covered by the scope of accreditation.

In addition, in June 2019, ANFA-CO-CECOPESCA received the visit of a delegation from the FDA, the Food and Drug Adminstration agency from United States, for an audit of the laboratory's organizational structure and evaluation capabilities of food, both from the microbiological and chemical point of view, giving a very satisfactory result.



