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## IFOP Arica Inaugurates Gas Chromatography Laboratory

THE LABORATORY IMPLEMENTATION, TOGETHER WITH ENHANCING REGIONAL HEAD-QUARTERS EQUIPMENT, WILL MAKE IT POSSIBLE TO RESPOND TO ANTIOXIDANT BUTYLHYDROXYTOLUENE (BHT) FOR FISHMEAL SAMPLES ANALYSIS DEMAND.

IFOP Arica, inaugurated its Gas Chromatography Laboratory, which will be headed by Guillermo Aramayo Tapia, from Pre-shipment Department.

In the ceremony organized by Regional Headquarters, participated IFOP Executive Director Luis Parot, Jorge Miranda, IFOP's Administration and Finance Division head, National Fisheries and Aquaculture Service, Corpesca Arica and Maritime Government of Arica representatives.

It should be noted that BHT is a widely used antioxidant used in fishmeal stabilization, because the latter is classified by International Maritime Organization as dangerous merchandise for maritime transport. This classification of dangerous goods is assigned to fishmeal, because it has a unsaturated fatty acids high content that make it susceptible to undergoing auto-oxidation processes with heat generation. Those that can trigger the product, spontaneous heating



with fire consequence in extreme case. For this reason, it must comply with IMDG Code (International Maritime Dangerous Code) defined specifications.

The chromatography laboratory's authorization in the area will allow IFOP Pre-shipment Department, in coordination with Maritime Authority (DIREC-TEMAR), to continue to control in a timely manner compliance with IMDG Code specifications in fishmeal destined for maritime transport.



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## Israel's Ambassador in Chile meets with IFOP Director

Marina Rosenberg, Israeli Ambassador to Chile, met with Fisheries Development Institute Executive Director and with researchers, with the aim of establishing a collaboration agreement in different mutual interest areas; one of them is IFOP professional internships to specialize in Israel and also to bring professionals and experts from Israel in order to exchange and deepen knowledge.

The issue of fish production with Israel's technology was discussed, that is, in reservoirs, micro-reservoirs, ponds, outside the sea fish production that they have developed over the years.

Jaime Letelier Pino, Oceanography and the Environment Department head, referred to the Ambassador's visit as a great opportunity to establish networks with private and public research and education institutions in Israel, as well as to publicize the national importance of the work from high school.

The Israeli Ambassador visited the renovated IFOP Valparaíso facilities and the new laboratories.

This is one of the most important cruises carried out by Abate, where it evaluates common hake stock in the area between Coquimbo Region northern limit and the Los Ríos Region, through the hydroacoustic method, Luis Parot IFOP Executive Director, declared "the ship has been in uninterrupted sailing for 30 years, dedicated to fisheries and oceanographic research, to assess the state of marine resources subject to commercial exploitation. Due to its years of operation as well as the intensity of use, it has a record of 259 days sailed in a year, the ship is already beginning to show recurring problems, putting at risk the execution of the research program and being already its replacement urgently.



In 2019 we managed to get President Piñera's government to allocate funds for a new Scientific Vessel (BC) to replace Abate Molina, but they were reassigned due to pandemic emergencies. As reported by IFOP Director, given that this is a State issue and should concern whoever is in charge of governing, they will make efforts to reinstate the initiative in the 2022 budget, and that the order for its construction be extended to FOP.

Meanwhile and once repairs are completed, Abate will resume Common Hake stock assessment cruise, then will execute Daily Egg Production Method (MPDH) cruise between Arica and Parinacota and Antofagasta regions, and then enter the shipyard for repairs and remodeling aimed at improving living conditions on board. These improvements will allow Abate Molina B / C to last another 5 years serving Chile, while its replacement is incorporated.

## IFOP Abate Molina Scientific Vessel, suspended its hake cruise due to hydraulic problems in one of its winches, and returned to Valparaíso

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## Chilean Delegation participates on 2021 APEC meeting

During 2021 Asia Pacific Economic Cooperation Forum (APEC) where this time host country is New Zealand, the first Webinar that invited participating member countries to present their experiences on mitigating the incidental capture of seabirds in fishing operations was developed. (New Zealand Seabird Conservation Initiative, Webinar 1: Seabird Bycatch Mitigation Seabird Bycatch Mitigation)

The meeting main objectives were work and research results sharing, in addition to presenting plans, programs, and future challenges regarding incidental seabirds capture mitigation.

Representing the Chilean delegation, Mr. Luis Adasme from (IFOP) Fishing Development Institute SBWG from ACAP official member, Mr. Luis Cocas in charge of research programs and discards and incidental fishing reduction programs (Subpesca) and Mr. Marcelo García also from Fisheries and Aquaculture Undersecretariat who is Chile's ACAP focal point.

Members of the NMFS West Coast Region (USA), NMFS Northwest Fisheries Science Center (USA), Department of Conservation (N. Zeland), NMFS Pacific Islands Regional Office (USA) and the WPRFMC (USA) participated in the meeting.

The agenda had a large participation through Teams platform and with attractive presentations where advances and initiatives made by the different countries were exposed, which were part of an interesting debate in the questions round.

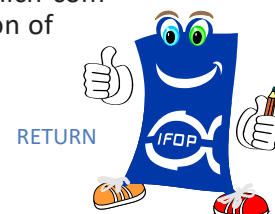
Luis Adasme, IFOP Fisheries Assessment Department professional, pointed out that during this APEC 2021 version, New Zealand host country seeks cooperation with Asia Pacific Economic Cooperation member economies in order to promote greater marine bird conservation and bycatch threat awareness. Participating in these instances are valuable for Chile and for the Institute in particular, as they allow to expose research work and technical advice carried out by the ins-



titute for fishing authority decision-making, all of this in direct harmony with the ecosystemic approach promoted by current Fisheries Law (LGP). Likewise, it allows scientific-technical knowledge exchange with other researchers in the area.

For his part, Luis Cocas from Fisheries and Aquaculture Undersecretary, indicated that this instance was an important platform for exchanging experiences with international experts and disseminating the extensive work that has been carried out in Chile since 2013 in conjunction with the other management agencies national fishery, which has allowed significant progress in bycatch diagnosis, reduction and control in national fisheries, making the country a global benchmark in the matter. The foregoing has been framed in the implementation of Law No. 20625 (known as Discards and Incidental fishing Law) which provided legal and working framework that allowed improving scientific observation programs, new control tools incorporation. (such as industrial fleet on board cameras) and a significant ecosystemic approach advance in fisheries management implementation.

Finally, to say that Chilean waters are part of this Pacific Ocean great migratory corridor for these magnificent seabirds, the Humboldt current being one of the most productive marine ecosystems in the world and an important assiduous feeding area for 15 species of albatrosses and petrels, many of them visitors. Likewise, our country has under its jurisdiction several globally relevant breeding sites, which comprise 20% of the world population of the black-browed albatross.





## River shrimp workshop is held by IFOP

IFOP organized “*Cryphiops caementarius* river shrimp resource Regulation and Management Experiences : Chile and Peru fishery sustainability learned lessons and perspectives” workshop; activity developed within the framework of Coquimbo Region GORE project called: “Aquaculture Fishery Strategy (EPA) for northern river shrimp (*Cryphiops caementarius*) Consolidation Program in Choapa River watershed”.

IFOP Professionals, Instituto del Mar de Peru (IMARPE) and Arequipa Regional Production Management participated. The activity objective focused on resource and its fishery research and management sharing of knowledge and experiences.

Workshop topics were: Habitat characterization and resource’s associated relevant environmental factors. Fishery population assessments and monitoring. Regulatory framework and governance.

Dr. Francisco Cárcamo Vargas Repopulation and Culture Department Head explained “River shrimp is a southern Peru and northern Chile rivers endemic species. Although Peru extraction volumes are significantly higher than in our country, in rivers such as Choapa, the extraction of this resource constitutes an important source of economic income for local communities, in addition to being an activity with a strong cultural component. It is important to highlight that IMARPE carries out population and environmental monitoring for this resource for more than 20 years, which has allowed to organize its fishery and users, and to define management actions based on scientific knowledge. Sharing knowledge and experiences with researchers from Peru allows us to specify future strategies and actions to order and manage this fishery in Chile, in addition to facing pressures derived from drought, climate change, and anthropic activities”.



Álvaro Wilson, IFOP Researcher, added “the Institute, in its role as State adviser on these issues, responded to Coquimbo Regional Government request to execute FNDR project, which included proposing a Fishery Management Plan. This led us to prepare an associated Legal Modification Proposal since, without it, the Management Plan proposal would not have the possibility of being implemented. All with the purpose of contributing to both the resource and its fishery sustainability. The latter was already delivered and formally presented at a work-



shop last April to Fisheries and Aquaculture Undersecretariat , who promised to study it and advance on the issue as far as possible.

Last Monday’s workshop held with IMARPE and Arequipa Regional Government Regional Production Management (regulatory and supervisory body), helped us to know first-hand how some of proposals, both in Fisheries Management Plan , as in its associated regulatory framework proposal which have been in force for more than a decade for this same resource in Peru, they have been implemented and received by users”.