

Call for postdoctoral positions in Marine Sciences

The Center of Research and Advanced Studies (CINVESTAV) is a decentralized research center that has as its main objectives to promote the constant improvement of education at the graduate level, and generating original scientific research in different areas to increase the life styles and contribute with the development of Mexico.

Under a National Project "Implementation of oceanographic observations networks (physical, geochemical, ecological) for generating scenarios for possible contingencies related with the exploitation and production of hydrocarbons in the deep-water Gulf of Mexico", **the Marine Resources Department of CINVESTAV Merida is seeking for 3 postdoctoral investigators in specific areas of the Marine Science.** The Postdoctoral researchers will be inserted in an interdisciplinary group and interagency work.

The postdoctoral fellowship will begin from March 1, 2018 for a period of 12 months and may be renewed for an additional 24 months. The salary provided will depend on the skills and experience of the candidate.

Candidates should submit electronically:

- Detailed CV
- Proof of academic degree
- Name and contact details of two references
- Intention letter
- Work proposal (maximum 5 pages)
- Extensive experience in publishing results in peer-reviewed journals (Indispensable requirement).

Documents must be sent by email to Dr. José Q. García-Maldonado (jose.garcia@cinvestav.mx). **Deadline for the reception of documents: February 28, 2018.**

1. Postdoc position in Ecology of Marine Fish Communities

The Marine Resources Department of the Center for Research and Advanced Studies (CINVESTAV) Merida, is looking for a candidate with a strong interest in assessing and understanding the influence of oceanographic variability and coastal chemistry on the distribution and abundance of the marine ichthyofauna. The accepted candidate will collaborate mainly with other researchers from CINVESTAV and with another research institutes (ECOSUR in Campeche, Mexico, CICESE, UNAM and UABC).

The Postdoctoral researcher will be part of a larger interinstitutional research project called "Implementation of oceanographic observations networks (physical, geochemical, ecological) for generating scenarios for possible contingencies related with the exploitation and production of hydrocarbons in the deep-water Gulf of Mexico." The financial support for this grant comes from the SENER-CONACYT hydrocarbons fund.

The position is offered for biologists or related areas with experience in oceanographic campaigns, fish species identification, biological and hydrological databases management, experience on statistical analysis to interpret the spatial and temporal variability of the fish assemblages, fish tropho-dynamics and experience with trophic modelling. The work of the candidate will be related with marine and coastal plankton, benthic marine communities and coastal currents dynamics, connectivity of the nutrients and other contaminants resulted from the use of soil (inland) with their effects in the ecosystems, as well as the presence of hydrocarbons due to their processing and extraction in the Gulf of Mexico. The candidate selected for this position, must be able to determine the functionality of the fish communities in the Gulf of Mexico.

Selection requirements

- Posses a doctoral degree in Ecology, Biology or related areas.
- Have scientific productivity with at least one peer-reviewed article published in an international impact journal (ISI).
- To possess experience for the evaluation of spatial and temporal changes in the biological characteristics of the coastal and oceanic waters.
- Availability for working as part of the research team of the project and to help actively supporting interdisciplinary investigation.

For additional information, please contact Dra. María Eugenia Vega-Cendejas (maruvega@cinvestav.mx).

2. Postdoctoral Position in Ecology of Parasites of Marine Organisms

The Center for Research and Advanced Studies (CINVESTAV) is a public institution leader in scientific research and postgraduate education in Mexico. Our mission is to train scientists and technicians of the highest level that can contribute to solve problems relevant to the country and the society in general. The Marine Resources Department of CINVESTAV Merida is seeking for one postdoctoral investigator in Ecology of Parasites of Marine Organisms.

The Postdoctoral researcher will be inserted in an interdisciplinary group at CINVESTAV and interinstitutional work with the most important Research Centers and Universities in Oceanography in México (e.g. CICESE, UNAM, UABC), and several international collaborators (e.g. TAMU-College Station, Woodshole OI, Universidad de Vigo). The project is part of a larger interinstitutional research project called "Implementation of oceanographic observations networks (physical, geochemical, ecological) for generating scenarios for possible contingencies related with the exploitation and production of hydrocarbons in the deep-water Gulf of Mexico". The financial support for this grant comes from the SENER-CONACyT hydrocarbons fund.

The position will involve taking on one-year project in the Lab of Aquatic Pathology at CINVESTAV-IPN Mérida, Mérida, Yucatán, México. The postdoctoral fellowship will begin from March 1, 2018 and may be extended 24 more months. The overall project brings together elements of oceanography, marine ecology, environmental parasitology, ecotoxicology, geochemistry and omics. This post-doc will determine whether physicochemical variables, polyaromatic hydrocarbons or heavy metals affect the probability of occurrence of the helminth parasites infecting flatfishes and deep-sea fishes in the Mexican Gulf of Mexico. The aim of this research is to determine the suitability of marine helminth parasites of flatfishes and deep-sea fishes as indicators of environmental impact with special reference to polyaromatic hydrocarbons and heavy metals.

The current plan is for the post-doc to undertake statistical analyses of environmental and biological information obtained during oceanographic cruises in both shallow (50-300 m depth) and deep (301-3600 m depth) during the last three years. The post-doc may also be involved with other aspects of the project, such the study of the concentration of contaminants in both helminth parasites and deep-sea fishes, and the last oceanographic cruise of the project in August 2018.

Salary/Stipend Information: CONACyT standard.

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Qualifications and preferred academic background: Candidates should possess some or all of these attributes (some of which, including parasitological skills, can be learned on the job):

1. Have good communication, organizational, collaborative skills.
2. Have solid analytical skills. At least a working knowledge of general linear models (GLM) and general additive models (GAM). Use of R or MatLab skills are a plus, but not required.
3. Proven writing/publication skills as indicated by published papers.
4. Experience in oceanographic cruises, especially in deep-sea would be a plus.

Appointment Length/Period: Appointment will start as early as March 1, 2018 and continue for a period of 12 months and may be renewed for an additional 24 months.

Candidates should submit electronically:

- Detailed CV
- Proof of academic degree
- Name and contact details of two references
- Intention letter

Documents must be sent by email to Dr. Victor Manuel Vidal Martínez (vvidal@cinvestav.mx). **Deadline for the reception of documents: February 28, 2018.**

3. Call for postdoctoral position in Petroleum Hydrocarbons Environmental Geochemistry.

The Center of Research and Advanced Studies (CINVESTAV) is a decentralized research center that has as its main objectives to promote the constant improvement of education at the graduate level, and generating original scientific research in different areas to increase the life styles and contribute with the development of Mexico.

Under a National Project "Implementation of oceanographic observations networks (physical, geochemical, ecological) for generating scenarios for possible contingencies related with the exploitation and production of hydrocarbons in the deep-water Gulf of Mexico", **the Marine Resources Department of CINVESTAV Merida is seeking for 1 postdoctoral investigator in Petroleum Hydrocarbons Environmental Geochemistry.** The Postdoctoral researchers will be inserted in an interdisciplinary group and interagency work.

The postdoctoral fellowship will begin from April 1, 2018 for a period of 12 months and may be renewed for an additional 12 months. The salary provided will depend on the skills and experience of the candidate.

Candidates should submit electronically:

- Detailed CV
- Proof of academic degree
- Name and contact details of two references
- Intention letter
- Work proposal (maximum 5 pages)
- Extensive experience in publishing results in peer-reviewed journals (Indispensable requirement).

Documents must be sent by email to Dr. José Q. García-Maldonado (jose.garcia@cinvestav.mx). **Deadline for the reception of documents: March 10th, 2018.**

We are looking for a candidate with a strong interest in the understanding how the oceanographic changes in the ocean and coastal chemistry can affect the distribution and abundance of petroleum hydrocarbons. The successful candidate will collaborate mainly with other researchers from CINVESTAV and with another research institutes (ECOSUR in Campeche, Mexico, CICESE, UNAM and UABC).

The position is offered for Geochemists, Biogeochemists, Chemical Oceanographers, Environmental Chemists or related areas with experience in oceanographic campaigns, petroleum hydrocarbons determination, chemical and hydrological databases management, experience on statistical analysis to interpret the spatial and temporal variability of the petroleum hydrocarbons distribution and occurrence, petroleum biomarkers occurrence and experience with environmental and/or spatial modeling. The work of the candidate will be related with marine and coastal petroleum hydrocarbons geochemistry, petroleum biomarkers and coastal currents dynamics, connectivity between petroleum hydrocarbons in water, organisms and sediments resulted from the use of soil (inland) with their effects in the water and sediments quality of the system. The candidate selected for this position must be able to determine the processes involved in the distribution and occurrence of petroleum hydrocarbons and its biomarkers in the Gulf of Mexico.

Selection requirements

- Posses a doctoral degree in Geochemistry, biogeochemistry, chemical oceanography, environmental chemistry or related areas.
- Have scientific productivity with at least two peer-reviewed article published in an international impact journal (ISI).
- To possess experience for the evaluation of spatial and temporal changes in the geochemical and chemical characteristics of the coastal and oceanic waters and sediments. Experience creating pollution indexes and managing software to create maps of isoconcentrations.
- Availability for working as part of the research team of the project and to help actively supporting interdisciplinary investigation.

**For additional information, please contact Dr. Flor Arcega Cabrera
(flor.arcega@cinvestav.mx).**