The Cooperative Institute for Marine and Atmospheric Studies (CIMAS) of the University of Miami, Rosenstiel School of Marine, Atmospheric, and Earth Science (Rosenstiel) has an exciting opportunity for a Post-Doctoral researcher ([Apply Here](https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fumiami.wd1.myworkdayjobs.com%2Fen-US%2FUMCareerStaff%2Fjob%2FThe-Rosenstiel-School---Postdoctoral-Associate---CIMAS_R100060797%3Flocations%3D6ecccb2d242d1021c341237f4fd70971&data=05%7C01%7Cmzawoysky%40whoi.onmicrosoft.com%7Ca68e12921c0b4d21860f08da8ad718d8%7Cd44c5cc6d18c46cc8abd4fdf5b6e5944%7C0%7C0%7C637974953699586781%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=GTRJp6H8kIB%2FM33TpZpSUWNXuTrL1TOJR7Exx0e39f4%3D&reserved=0)).

The work will involve close collaboration with scientists at NOAA’s Atlantic Oceanographic and Meteorological Laboratory (AOML), and Geophysical Fluid Dynamics Laboratory (GFDL). The applicant will be physically stationed at AOML in Miami, FL.

The principal objective of the position will be to conduct and analyze a suite of Ocean Alkalinity Enhancement (OAE) model simulations to understand the efficacy, processes and impacts associated with this Carbon Dioxide Removal (CDR) method. The incumbent will leverage GFDL's existing 1/2 degree fully-coupled Earth System Model (ESM4.1) to perform idealized site-specific OAE simulations, as well as ocean alkalinization simulations following the Carbon Dioxide Removal Model Intercomparison Project (CDRMIP) protocols. Analyses will involve interpreting and analyzing large data sets from model simulations to assess and evaluate ocean biogeochemical responses and ecosystem impacts on various ocean and coastal areas, including determining the magnitude and timescales of carbon dioxide uptake and the potential to reduce the rate and impacts of ocean acidification. Personnel will interact with active  
groups at AOML and GFDL studying the carbon cycle, and connections between biogeochemistry, ecosystems, and climate.

Duties include but are not limited to:  
● Conduct and analyze marine alkalinization Earth System Model simulations to investigate underlying mechanisms and processes, and quantify responses.  
● Explore impacts of OAE on climate, oceans, coasts, and marine ecosystems using outputs from numerical simulations.  
● Evaluate model data from GFDL-ESM4.1 CDRMIP OAE simulations against publicly available data from similar CMIP6 CDRMIP simulations.  
● Present findings at scientific meetings and publish results in peer-reviewed journals.  
● Active participation in scientific discussions with colleagues and in CDR related working groups or forums.

Minimum Qualifications  
● Applicants must have a Ph.D. in oceanography or a related field, and a background in ocean biogeochemical research at the post-doctoral level.  
● Necessary skills include experience with climate modeling, the ability to analyze and organize large datasets or model outputs, knowledge of Unix/Linux, and experience with commonly used software and protocols in the oceanographic community including MatLab, Ferret, and/or Python.  
● The incumbent must have a proven publication record, strong scientific writing and computer skills, and the ability to communicate science to diverse audiences and stakeholders.  
● The successful candidate must be able to work collaboratively within a diverse and dynamic team, as well as demonstrate the ability to work independently to complete complex interdisciplinary analyses across fields including climate dynamics, and ocean and coastal biogeochemistry.

Applications should include curriculum vitae, a cover letter stating research interest, experiences and the contact information for three professional references.

The University of Miami is an Equal Opportunity Employer - Females/Minorities/Protected Veterans/Individuals with Disabilities are encouraged to apply. Applicants and employees are protected from discrimination based on certain categories protected by Federal law. Click [here](https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.hr.miami.edu%2Fcareers%2Feo-ada%2Findex.html&data=05%7C01%7Cmzawoysky%40whoi.onmicrosoft.com%7Ca68e12921c0b4d21860f08da8ad718d8%7Cd44c5cc6d18c46cc8abd4fdf5b6e5944%7C0%7C0%7C637974953699586781%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=2NUG90opXdffLzD%2BVrusWQGybzY%2FRLcNE%2B9Hzu78Lys%3D&reserved=0) for additional information.

Job Status:

Full time

Employee Type:

Staff

Pay Grade:

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