



# CRew HIGHLIGHTS

CENTER FOR RESEARCH IN WIND | 2022 YEAR-IN-REVIEW

## In the News



January 2022

### New CRew Director Announced

Unidel Howard Cosgrove Career Development Chair in Environment Prof. Cristina Archer appointed new director of CRew.



April 2022

### Marshaling Ports Shortfall

Researchers Sara Parkison and Prof. Willett Kempton shed light on the infrastructure required to meet targets for power generation.



May 2022

### Weather Radar Key to Bird-Friendly Wind Energy

Prof. Jeff Buler's new analysis provides basis for recommendations on placement of wind turbines to protect migrating birds.



July 2022

### Surface Impacts of Offshore Turbines

New research by Maryam Golbazi and Prof. Cristina Archer provides assurance for coastal communities worried about wind farm impacts.

## NAWEA/WindTech 2022

*CRew hosts international wind energy conference*



In partnership with the North American Wind Energy Academy (NAWEA) Scientific and Conference Committees and the National Renewable Energy Laboratory, CRew welcomed experts in wind energy and grid integration as it hosted the 2022 NAWEA/WindTech Conference from September 20-22, 2022 at Clayton Hall.

Over 240 students, faculty members, researchers, and industry, government and non-governmental representatives from around the world attended the conference. Attendees collaborated and progressed their shared commitment to advancing offshore wind technologies, research, and education.

Areas of focus explored at the conference included: electrical grid integration; the social/environmental aspects of wind energy; offshore wind design solution and modeling analysis; wind turbines and wind plants; atmospheric and ocean science for wind energy; and the application of and education in wind energy.

## Offshore Wind Skills Academy Sessions



**Participants**  
over three sessions

CRew hosted OWSA courses in June, August, and November of 2022. Fifty-five energy industry professionals and associates attended the development courses. Participants engaged in virtual presentations and interactive discussions with wind industry experts. OWSA continues to fill an important gap in the path to develop and rapidly expand this new industry in North America.

## KidWind Offshore Wind Academy

*In-residence wind energy camp*

John Madsen served as co-leader at the KidWind Offshore Wind Academy sponsored by the Massachusetts Clean Energy Center. The in-residence camp was held July 25-29, 2022 and was hosted at the Massachusetts Maritime Academy. High school students and teachers participated in field trips and classroom activities providing foundational knowledge of wind energy, design and drafting principles, materials sciences and blade testing.



## Awards & Grants

### 1 Offshore Wind Training Center Grant

CRew's Cristina Archer was awarded \$1,060,000 from the Department of Labor to launch an offshore wind pilot training program. The Lewes-based center will provide specialized training and certification to workers in the wind industry, including wind technicians, who install and later maintain wind turbines in the ocean, suppliers, port workers, and sea survival and rescue personnel.

### 2 Northeast Sea Grant Consortium Research

CRew's Jeremy Firestone is serving as a Co-Principal with David Bidwell of the University of Rhode Island for the DOE-funded Regional Community Attitudes Regarding Procedural and Distributive Justice Dimensions of Southern New England Offshore Wind Development project. They will assess community concerns and research questions regarding procedural, distributive, and recognition justice dimensions of offshore wind projects in southern New England, and work to address barriers within and among communities to ensure equity and well-being for a just energy transition.

## Academic Travel

*Wind energy education on location*

### Almaty, Kazakhstan Oskemen, Kazakhstan

CRew's Cristina Archer traveled to Kazakhstan in June 2022 to develop an M.S. course on wind energy for the Eastern Kazakhstan Technical University (EKTU) as part of a green energy curriculum development grant led by Dr. Shah of the Department of Materials Science and Engineering.

### St. Gallen, Switzerland

Jeremy Firestone was an invited panelist at the international MISTRAL conference "Managing the dynamics of social acceptance", hosted by the University of St. Gallen in Switzerland in June 2022.

### Manchester, England

Jeremy Firestone traveled to Manchester, UK, in June 2022 to give a talk based on the paper by former MS student Samantha Birgaman at the 3rd International Energy Research and Social Science Conference.

### Rehoboth Beach, Delaware

The Commissioners of Rehoboth Beach held a special meeting on offshore wind energy that was organized and facilitated by Bonnie Ram with Mayor Mills. Drs. Kempton and Firestone also presented to the Board at the event.

**13** number of  
**Research Publications**  
visit [crew.udel.edu/all-publications](http://crew.udel.edu/all-publications) to view the full list

