| | GROUP NAME | PI | CONTACT EMAIL | DEPARTMENT | RESEARCH LINES | GROUP WEBSITE |
|---|---|---|---|---|---|---|
| **WIND ENERGY** | ELEKTRIKER | Albizu Florez, Igor<br><br>Fernandez Herrero, Elvira | igor.albizu@ehu.eus<br><br>elvira.fernandezh@ehu.eus | Electric engineering | 1. Application of the dynamic line rating to the wind power curtailment.<br>2. Application of the dynamic line rating to the power system congestion management.<br>3. Dynamic line rating monitoring sytems.<br>4. Dynamic line rating forecasting.<br>5. Simulation of the power system operation using DIgSILENT PowerFactory | ----------------- |
| | ADVANCED CONTROL GROUP | Barambones Caramazana, Oscar | oscar.barambones@ehu.eus | Systems Engineering and Automation | 1. Design and implementation of advanced control schemes.<br>2. Real time validation of the new control schemes.<br>3. Teal time control test bench design and implementation. | https://www.ehu.eus/es/web/gca/aurkezpena |
| | EKOPOL | Barcena Hynojal, Iñaki Bizente | inaki.barcena@ehu.eus | Political Science and Administration | 1. Ecological-energy transition and circular economy | https://ekopol.eus/ |
| | E-CLEDER | Blanco Ilzarbe, Jesus Maria | jesusmaria.blanco@ehu.eus | Energy Engineering | 1. Integración de las energías renovables en el entorno urbano (solar térmica y offshore, marina y eólica). | https://www.ehu.eus/en/web/e-cleder/hasiera |
| | MATERIALS + TECHNOLOGIES (GMT) | Eceiza Mendiguren, Maria Aranzazu | arantxa.eceiza@ehu.eus | Chemical and Environmental Engineering | 1.New Sustainable Materials for application in wind energy components. | https://www.ehu.eus/en/web/gmt/ |
| | AUTOMATIC CONTROL GROUP | Garrido Hernandez, Aitor Josu | aitor.garrido@ehu.es | Systems Engineering and Automation | 1. Floating wind energy control<br>2. Hybrid wind-wave energy control | https://www.ehu.eus/web/acg |
| | GROUP OF SIGNAL AND COMMUNICATIONS | Gutierrez Ruiz, Jose Julio | josejulio.gutierrez@ehu.eus | Communications Engineering | 1. Measurement and assessment of the quality of the electric power supply of wind turbines. | https://www.ehu.eus/en/web/gsc/home |
| | APPLIED ELECTRONIC RESEARCH TEAM (APERT) | Martín González, Jose Luis | joseluis.martin@ehu.eus | Electronic Technology | 1. Power and control circuits for Energy Converters: This research line is oriented to the design and study of power converters for electric power generation, conversion, storage and transmission. In this line, we work on power electronics and control of the power converters for different applications. We have worked on matrix converters and various aspects of power converters for renewable energy generation such as microwind generators. | https://www.ehu.eus/en/web/apert/start |
| | MATHMODE | Pardo Zubiaur, David | david.pardo@ehu.eus | Maths | 1. Design and implementation of Deep Neural Networks DNNs for Structural Health Monitoring of Floating Offshore Wind Turbines (FOWTs) and Components (projects VIVIR; MATHEO; DEEPINVERSE): the optimal selection of the loss function to train a DNN when dealing with simulation and inversion problems like those appearing in structural health monitoring of offshore wind energy platforms; Designing a real-time conceptual alert system based on a DNN architecture when the anchors of a FOWT (project MATHEO); solving the classification problem for the identification of several failure modes in the mooring systems of a FOWT (project VIVIR)<br><br>2. Physics-informed machine learning techniques for accelerating Computational Fluid Dynamics, for the design of components of FOWT and harnessing of wind energy (project ExpertIA). | https://sites.google.com/view/mathmode/members |
| | APPLIED PHOTONICS GROUP | Zubia Zaballa, Joseba Andoni | joseba.zubia@ehu.es | Communications Engineering | 1. Structural health monitoring (SHM) of wind turbines, wind blades, etc. For this purpose, we have used optical means, primarily fiber optic sensors and other equipment based on Raman and Brillouin light scattering. | https://www.ehu.eus/en/web/appliedphotonicsbilbao/home |