| | GROUP NAME | PI | CONTACT EMAIL | DEPARTAMENT | RESEARCH LINES | GROUP WEBSITE |
|------------------|--|--|--|---|--|--|
| ELECTRIC VEHICLE | ELEKTRIKER | Albizu Florez, Igor Fernandez Herrero, Elvira | igor.albizu@ehu.eus elvira.fernandezh@ehu.eus | Electric engineering | Application of the dynamic line rating to the power system congestion management. Dynamic line rating monitoring sytems. Dynamic line rating forecasting. Simulation of the power system operation using DigSILENT PowerFactory | |
| | MATERIALS + TECHNOLOGIES (GMT) | Eceiza Mendiguren, Maria Aranzazu | arantxa.eceiza@ehu.eus | Chemical and Environmental Engineering | 1. New Sustainable Materials for application in eletric vehicle components. | https://www.ehu.eus/en/web/gmt/ |
| | GISEL | Eguía López, Pablo Zamora Belver, Inmaculada (CoPI) | pablo.eguia@ehu.eus inmaculada.zamora@ehu.eus | Electric engineering | 1. Integration of EV in electricity systems. 2. EV battery management. 3. DC circuit breakers for battery systems | https://www.ehu.eus/es/web/gisel/inicio |
| | INTELLIGENT SYSTEMS GROUP | Lozano Alonso, Jose Antonio | ja.lozano@ehu.eus | Computer Science and Artificial Intelligence | The group has experience in several áreas related with the electric car. We mainly develop and apply artificial intelligence technique in problems closely related with the electric car. The group has particularly worked in two problems: 1. Localization of electric car chargers. Given some legal and company constraints and the number of chargers to be deployed, we have developed several methods to optimize the location of the electric chargers maximizing several criteria, particularly the proximity of the clients to these chargers. 2. Energy demand prediction. In collaboration with researchers from BCAM, we have developed a new algorithm to predict the demand of energy of a city. This method could be adapted to predict the demand of energy because of electric cars. | http://www.sc.ehu.es/ccwbayes/index.html |
| | 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 electronics for the traction and charging infrastructure of the Electric Vehicle. This research line studies and develops improvements on the efficiency, control and cooling systems of power inverters and converters used in both, the traction system and the charging infrastructures of the electric vehicle. | https://www.ehu.eus/en/web/apert/start |
| | MATHMODE | Pardo Zubiaur, David | david.pardo@ehu.eus | Math | The efficient mathematical formulation of a multi-objective automatic optimization process for the design of electric motors: 1) increase the efficiency of the e-motor; 2) reduce the costs of the active parts, and 3) reduce the NVH (noise, vibration and hardness). The optimization process requires multi physics simulations, based on advanced numerical schemes for the arising mathematical models. | https://sites.google.com/view/mathmode/members |
| | MATERIALS AND SOLID- STATE CHEMISTRY | Rojo Aparicio, Teófilo | teo.rojo@ehu.eus | Organic and Inorganic Chemistry | 1. High enery density lithium-ion batteries | |