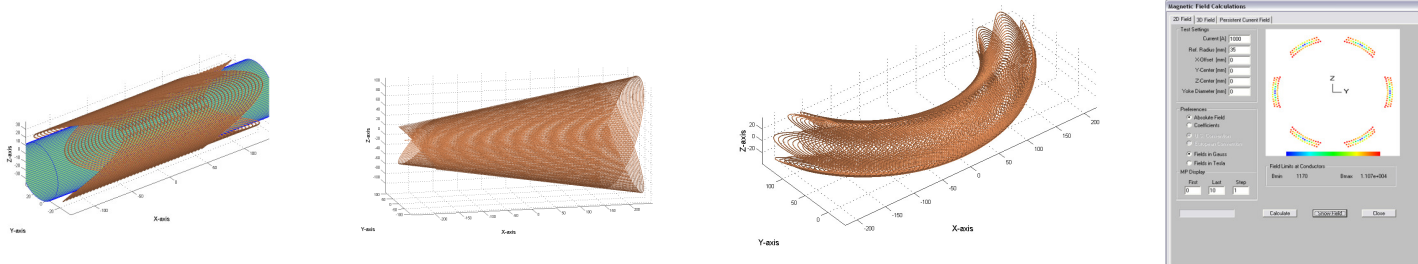


# Enabling Product Design, Technology, Manufacturing & Validation

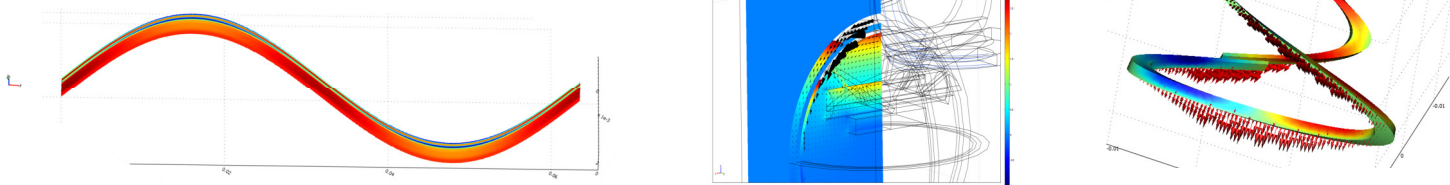


**Advanced Magnet Lab** has over 15 years of experience in designing, optimizing, manufacturing and testing electromagnetic and electromechanical systems. AML analysis capabilities include Multiphysics FEA, multi-objective optimization, dynamic analysis, and proprietary design tools such as CoilCAD®, leading to innovative designs and optimized products.

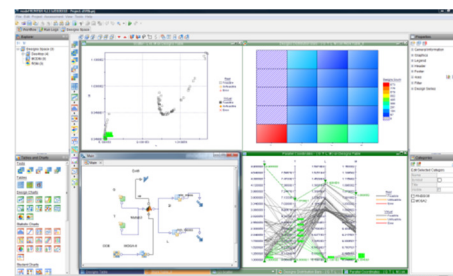
**CoilCAD®** Computer Aided Design tool enables rapid design of even the most complex magnet geometries, field optimization and direct control of precise and highly automated manufacturing processes.



**COMSOL®** Multiphysics software allows for simulation in steady state or transient (1D, 2D and 3D) of any phenomena described by PDEs such as: *electromagnetic, thermal, structural, fluid dynamics* and *general PDEs*. Powerful solvers allow for the simulation of non-linear problems such as induced currents in superconductors involving several “physics” coupled together.



**modeFRONTIER™** Multi-objective optimization and design environment software that couples multi-platform models. Its powerful post-processor allows for complete exploration of the design space and helps design decision making. One example is the design optimization of the drive train for a hybrid vehicle.



**Manufacturing & Validation** In addition to design and analysis, product development can be taken all the way through engineering, automated manufacturing and testing.

**Double-Helix™** family of magnet technology provides unprecedented power density, cooling efficiency, field quality, robustness, reliability and reduced manufacturing costs. Technology has been applied in both normal and superconducting applications for medical, energy and research.

