

Basic Magnetism Bootcamp

- Welcome
- Background
- Things we already knew
 - Poles
 - Living on a magnet
 - Viewing magnetic fields
- Two simple tests
 - Does it stick to a magnet?
 - Does it remain magnetized?
- Magnetic Theory
 - Hysteresis
 - Units
- Electromagnetism
 - Field from a current
 - Wires and coils
- Ferromagnetism
 - Spin
 - Exchange
 - Anisotropy
 - Curie temperature
- Permanent magnets
 - Processing
 - Thermal Effects
- Wrap-up

Advanced Training Bootcamp

- Welcome
- Review
- Raw Materials
 - Analysis vs. Recovery
 - Role of Dy and Tb
 - Recycling
- Fields, Forces and Faraday
- Magnetizing
- Self-demagnetization
- Measurements
- Case studies
 - Saturated return path
 - Incorrect magnetization
 - Ferrite conversion
 - Twenty Mistakes
- What's on the horizon
 - NdFeB with less Dy
 - Exchange magnets
 - Anisotropic powder
 - FeN
- Wrap-up