EC Cert Form Guidance:

- 1. Somewhere on the form, there must be a description of what the foreign national will be doing. If there is not at least a sentence or two describing what their duties will be while they are here, it will not be possible to determine whether any export controls apply to their activities. This is true whether they are coming here for research, academic exchange, or for any other reason.
- 2. Be specific about what the research is about, and what practical application it may have. For instance, if you are using computers to simulate the flow of air across an object, what is the object itself? Is it a plane, train, or automobile? A rocket or missile? If it is a plane, what kind of plane? Military or civilian?
- 3. Be specific about what equipment will be used in the research. For instance, if a computer is being used in the research, how powerful is the computer (if its performance is measured in TeraFLOPS, this is especially important)? Will any specialized software be used in the research?
- 4. Try to describe the research in a way a layman might understand. Focus on what sort of product the research might apply to, and what equipment is being used to conduct the research. The specific mathematical and scientific techniques being used are somewhat less important in determining whether the research will be controlled.

Here's an example of two different ways of describing the same hypothetical research:

Wrong:

Research into computational models based on the Reynolds-averaged Navier-Stokes (RANS) equations to model turbulent flows.

Right:

Research involving computer models of turbulence in high pressure turbines, for use in design of turbofan engines for supersonic aircraft, including military aircraft. The computer being used to run the simulations is a Dell Precision T3610 Tower Workstation, running commercial CFD software including ANSYS CFX and STAR-CCM+.