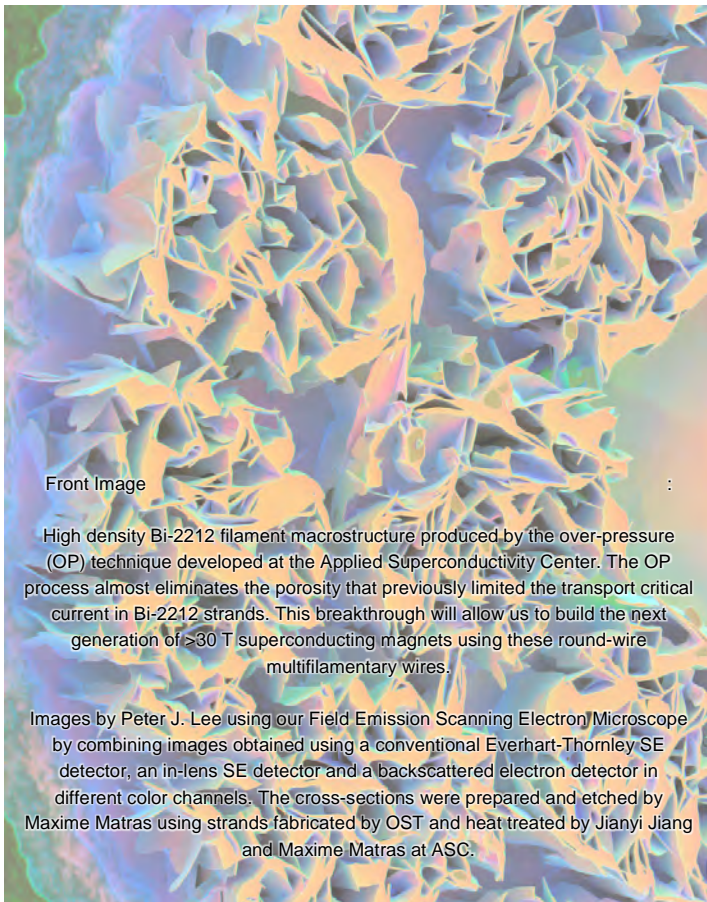


FROM ALL AT
THE APPLIED SUPERCONDUCTIVITY CENTER
NATIONAL HIGH MAGNETIC FIELD LABORATORY
FLORIDA STATE UNIVERSITY

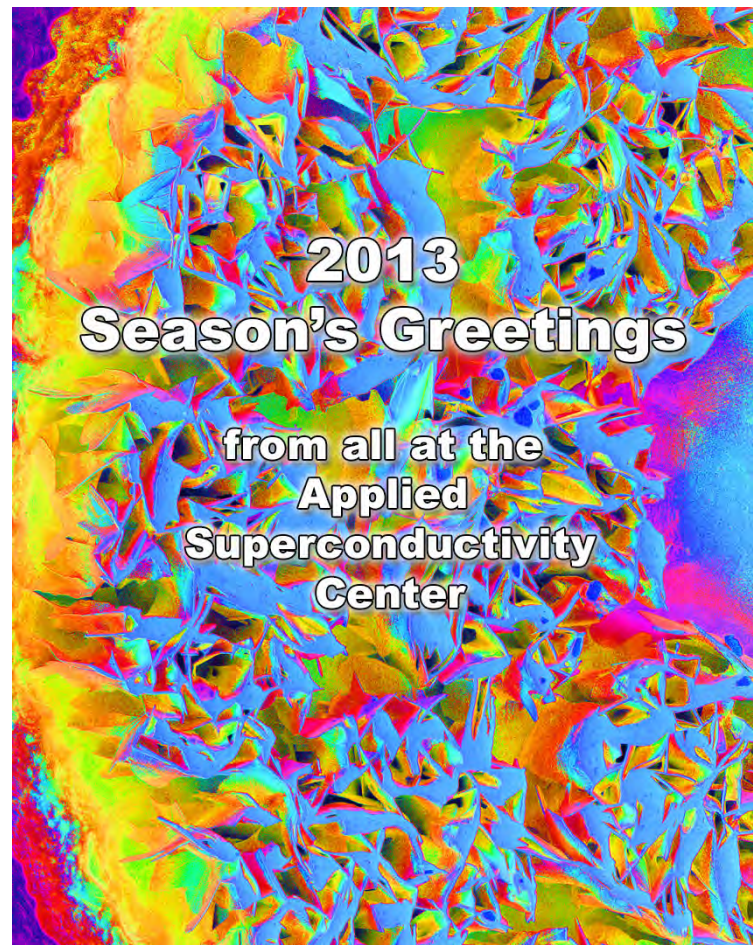
SEASON'S GREETINGS



Front Image :

High density Bi-2212 filament macrostructure produced by the over-pressure (OP) technique developed at the Applied Superconductivity Center. The OP process almost eliminates the porosity that previously limited the transport critical current in Bi-2212 strands. This breakthrough will allow us to build the next generation of >30 T superconducting magnets using these round-wire multifilamentary wires.

Images by Peter J. Lee using our Field Emission Scanning Electron Microscope by combining images obtained using a conventional Everhart-Thornley SE detector, an in-lens SE detector and a backscattered electron detector in different color channels. The cross-sections were prepared and etched by Maxime Matras using strands fabricated by OST and heat treated by Jianyi Jiang and Maxime Matras at ASC.



2013
Season's Greetings
from all at the
Applied
Superconductivity
Center