

1.5 Summary

After nearly a decade of work, a new conductive materials science has begun to emerge. This science is interdisciplinary requiring close interaction from chemistry, physics, applications research, and theory. The frontiers of the field are expanding rapidly. Novel materials and design methods are emerging, new and sophisticated analytical methods are being applied, a broad spectrum of physical properties are being studied, both of the simpler model compounds and the more complicated microscopic materials formulations, and a broad range of theoretical concepts is being developed. A significant investment in this materials science is being carried out in other places including Japan and Europe. It is essential that there be an adequate level of support for manpower, as well as for the necessary equipment in the United States. In light of the breadth and depth of conductive material science, collaborative interdisciplinary and interinstitutional programs need to be encouraged. Cognizance needs to be taken of the increased cost for communication under these circumstances including extensive travel expenses.