

Foreword

As Chemistry and Physics at one borderline and Chemistry and Biology at the other become indistinguishable so crossdisciplinary research is leading to the fascinating “new” overarching field of Nanoscience and Nanotechnology (N&N). Ingenious strategies for the creation of molecules and extended atomic structures with complex exactly-specified infrastructures and function are being developed – basically nanoscale devices that “do things” are now being created. New experimental approaches which focus on how atoms assemble are leading to the production of novel nanostructures and research is focusing on the control of self-assembly processes *ie* the bottom-up approach to the production of materials with advanced function. This new approach is leading to novel advanced materials with exciting new applications. Fascinating fundamental insights into formation mechanisms are being revealed and nanoscale devices, which parallel devices in standard engineering are now being created. This new journal, *Journal of Nano Research*, has been born at the ideal moment and is set to become a leading source of N&N research, essentially the “*Frontier Chemistry of the 21st Century*”. Breakthroughs are presently being realised which are generating a paradigm shift in synthetic chemical assembly techniques. On the horizon are applications ranging from civil engineering to advanced molecular electronics so promising to transform our everyday technology as well as basic economics.

Professor Sir H. W. Kroto

Nobel Laureate
Department of Chemistry and Biochemistry
The Florida State University, Tallahassee
Florida 32306-4390 USA