TYPES OF SCIENTIFIC RESEARCH PERSONNEL – A CLASSIFICATION

by Kofi

Category A - Hands on follower variety.

This is the type that generally carries out what another body tells them to do. E.g. "Run this reaction following the procedure given using the recommended starting materials" or " Make the analogues of the structure given using the standard synthesis". This type of research is nowadays often outsourced to developing country scientists.

Category B - Hands on pilot type.

This category is granted the liberty to make choices within limits such as: What reaction to use, the methods to choose, and which analogues to make. Many of these are research students going for Ph.D. The limited decisions though are often subject to the vicissitudes of a supervisor's fancy. These scientists require laboratory skill of a high order, imagination, innovative ability and reliability. They form the nucleus of leadership in the future.

Category C - The Productive lot

This category is above the Category B. They have the liberty to select the structures they synthesize, and they are free to select the methods they use. However their decisions too have to be subject to the views of a supervisor. They are selected from the best performers in the category B and will form the frontrunners for future leadership and would move into Category D.

Category D - Aspirants to Leadership

This category is independent in operation. They are needed to synthesize a targeted active structural entity. They have a broader mandate and are entrusted with a team of scientists. They are expected to exercise leadership and judgment towards goal oriented work.

Category E - Project Leaders

Leadership of research groups and directing research towards the pre-determined goals is the work of project leaders. This involves working across several discipline areas and leading personnel with different specialties. Often the requirement is to direct the work performed by biologists, chemists, analytical personnel, and economists etc. towards a common objective such as the preparation and launching of a new drug. This may involve coordinating work on bio-assays, scale-up pilot plant operations, conducting studies on formulations of drugs, patent applications and a host of others. Skills of leadership, diplomacy, team management, and psychology are paramount in this position of ultimate scientific and technological leadership.