Information Technology Program Proposal for Enhancing Support Staff (IT Wizards)

The Chemistry Department, like many other units on campus, is looking towards the IT funds as a means of hiring faculty who will have a dramatic impact on our productivity and impact. However, faculty of the caliber that we wish to hire will require infrastructure and staffing that is commensurate with their expertise, and this memo raises the issue of high-level support staff. This memo suggests that the University should hire a support person that we will refer to as the "Super IT Wizard," and he or she will have expertise and responsibility for web-based outreach, database management, networking, and high-level interfacing. We anticipate that this hiring could be done relatively quickly compared to the time required to hire faculty, so it will be possible to achieve "deliverables" with the IT funds very quickly using such a strategy. We propose that a central super-wizard be located in the permanent IT technology office. The super-wizard would advise the entire campus on the areas described above as well as coordinate the efforts of "distributed IT wizards" in individual departments.

At the departmental level, we propose to hire a high-level electrical engineer who will have expertise in the hardware and software issues pertinent to the tasks described above. Moreover, such a person will need managerial expertise, as well, as we suggest that this "distributed IT wizard" become the supervisor for departmental electronics and computer staff personnel. Integration of these efforts should facilitate bringing the existing staff up to a level of expertise commensurate with the needs of the IT-intensive faculty we will hire. It is likely that many units can utilize IT wizards similar to that described here, so this position description can be a template for other units on campus. The IT wizard will contribute to teaching enterprise as well as our research efforts. Electronic presentation technologies and web-based instructional support are already becoming prevalent in our classes, and expanded efforts will blossom under the guidance of the IT wizard.

In order to give you a sense of our goals, it is useful to lists some specific tasks that will be associated with a distributed IT wizard position. Duties include, but are not limited to, the following.

- development of parallel computing and distributing scientific computing resources (including but not limited to Beowulf clusters)
- development and maintenance of local networks and wireless networking resources
- design and implementation of scientific interfaces for departmental instrumentation (including GPIB, National Instruments LabView products, VMEbus products, and related laboratory based automation)
- manage support staff in computer and electronics areas of the department
- development of web-based resources for tracking IT objectives, such as student and faculty progress
- assist in the training of office and technical support staff

We suggest that the level of the hire be commensurate with this expertise, i.e. compensation at a rate of approximately \$65/K per year will be required. It is anticipated that we be competing with business and industry to hire such an individual, and their salaries are considerably higher than that proposed here. In reality, such individuals will be in high demand and the positions will experience high turnovers. Thus, employment of IT wizards is yet another educational opportunity, where IT funds will be used to train employees for Louisiana IT industries.

The responsibilities of a super IT wizard will include high level planning and coordination of the logistics of the IT initiative. It is obvious that we are talking about a very senior person with considerable technical and personal strengths, so we must be willing to compete with individuals at the industrial management level.

We believe that upgrading the support staffs of departments participating in the IT initiative is vital to their success. Hiring "IT-Wizards" is a rapid means for achieving staff enhancement. We hope the University will take advantage of this opportunity.