TECHNION - ISRAEL INSTITUTE OF TECHNOLOGY DEPARTMENT OF COMPUTER SCIENCE HAIFA 32000, ISRAEL

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הטכניון - מכון טכנולוגי לישראל הפקולטה למדעי המחשב חיפה 22000 פרופ' אלפרד מ. ברוקשטיין קתדרת אולנדורף למדעים טל': 1872-4-8294361 קרס': 1972-4-8293900 freddy@cs.technion.ac.il

THIRTEEN WAYS TO IMPROVE LIFE AT THE TECHNION

TECHNION ACADEMIC STANDING AND PUBLIC IMAGE

- 1. Admission to the various Technion Departments should be via our own admission exams, in view of the total failure of the schooling system. The admission exams should be in Math, Physics, Chemistry, and in some special skills required for Architecture and Medicine. We should publish the required knowledge for passing the exams and disregard all prior performance in high school and various dubious psychometric examinations.
- 2. The default Technion degree should be, in all disciplines, a 5 years Courses-Based Masters Degree, with a break-point at 4 years, where a student would be able to either
 - a) join a research-oriented track, leading to a six years MSc research degree, or an eight years PhD degree, or
 - b) to continue his course-oriented 5 years MSc degree, or
 - c) choose to get a BSc (which will be a "failure-mode" graduation).
- 3. The total number of Technion students should be reduced to about 10000, half of them being in the Undergraduate program (up to 4 years), and half of them in all the Graduate programs (i.e fifth year of study, or the research oriented track, of which about 2000 should be in the PhD track). The Graduate School must continue its efforts to actively encourage enrollment from abroad, and to establish relations with top universities in the world, with full support from the Management.
- 4. The Technion would gain via these measures a truly elitist image of the highclass University it (still) is, and can only remain so in my opinion, by implementing such measures. The External Studies School, both as a service to Industry and as a way to get into our graduate program, should be greatly enhanced. The Technion's public image could also be further enhanced by adopting a unified graphical language in all its publications in the press, and faculties should create their own "corporate images" within this unified graphic language.

The Technion's image as a very strict and selective University will, in my opinion, ensure an increase in demand for studies here due to the challenge of getting admitted.

TECHNION FACULTY DEVELOPMENT

5. Young faculty must receive generous start-up grants and should be free and in full control of the way they select to spend these grants, having the responsibility to report on their expenses and fully justify them as part of their

Technion-related academic pursuits. Technion must be most caring and supportive of the young faculty, and all the management and administration team (including the President and the VP's) must be indoctrinated that they exist to serve and help the faculty.

6. Outstanding academic performances should meet immediate internal rewards and recognitions, like prize funds for large grants received, and faster promotions. The normal time to Full Professorship should be between 10 to 15 years from the PhD, while outstanding performers should be promoted faster. The President should have an option to initiate and oversee such promotions, and cut through complicated local politics, if he sees necessary. The promotions committees should see as their job to promote those worthy of promotion, not to impede promotions. On the other hand, no promotions should occur at all after 30 years passed from the PhD degree (not to reward long-lasting mediocrity).

TECHNION MANAGEMENT AND ADMINISTRATIVE ORGANIZATION

- 7. The Management of the Technion should comprise the President and a total Four VPs, each having one academic (faculty) Deputy.
- 8. The Technion should immediately return to having a Senate of all full professors, and the senate should be responsible for approving laws that were already discussed and approved by a "small senate" of about 20 professors. The management team should give periodic reports to the senate on all areas of activity.
- 9. There should be complete transparency in managerial affairs, i.e. all statistical data, and all fund allocations and all academic development decisions, all infrastructure development decisions, and all funding and Technion Societies gifts and economic data should be reported to the members of the senate.
- 10. The Deans of the Graduate School and of Undergraduate studies should be elected by the Senate in an all-senate voting process following a presentation in writing by the candidates about their ideas on how to do the job. They should report to the President and the Senate, and should become members of the Management Team.

TECHNION CAMPUS LIFE

- 11. The Technion, a leading technological university, should have a real, comprehensive and high quality Bookstore on its campus, a bookstore holding a comprehensive collection of technical books, but also an outstanding general bookstore, with literature, art, architecture and general interest books in a variety of fields.
- 12. The Technion should exploit its nice printing facilities, and establish a "Technion Press" publishing house, where our faculty would have the possibility to readily publish lecture notes, books and research monographs, that would be distributed widely in the academic world.
- 13. The Technion should have on Campus a small but nice Shopping and Entertainment area to serve its students, and visitors on campus, and to make it a lively and pleasant place to be and live. This could create a lively campus environment, where students might want to remain for weekends and vacations, rather than leaving behind a "ghost town" during these times.