

# THE NEXT STEP

## AN INTERVIEW WITH: Professor Joshua Jortner

*Prof. Joshua Jortner, one of Israel's most distinguished scientists, has served as President of the Israel Academy of Sciences and Humanities (1986-1995), Chairman of the U.S.-Israel Binational Science Foundation (1992-93), Vice-President and President-Elect of the International Union of Pure and Applied Chemistry (IUPAC, 1996 to present) and Chairman of the American Foundation for Basic Research in Israel (AFBRI). He is generally credited with revitalizing Israel's support structures for, and commitment to, basic research.*



### Forum

What gave you the most satisfaction as Academy President?

**JORTNER:** When we arrived, Israeli basic research was in crisis. High-tech industry and applied research were booming, while their critical foundation, basic research, was relatively neglected. The total budget of the predecessor of the Israel Science Foundation (ISF) was only \$4 million a year. Together with the Revson Foundation and the Planning and Budgeting Committee (VATAT) of the Council for Higher Education, we catalyzed a revolution, not only in funding (the ISF's budget should exceed \$37 million in 3 years) but in Israel's commitment to excellence in basic research. We, in effect, served notice that Israel intends to remain a research leader.

### Forum

What are your current plans?

**JORTNER:** Well, although I never totally left research, it is nice to spend somewhat more time in the laboratory. However, I am still highly involved in many important national and international scientific organizations and initiatives. For example, I currently serve as the Chairman of the AFBRI which publishes this newsletter. Perhaps our most exciting current challenge is to serve as the first Chairman of FIRST, the Israel Academy's attempt to provide Israel a national channel for proactive research funding to complement its existing, highly successful, reactive one (ISF).

### Forum

What is FIRST?

**JORTNER:** FIRST is an acronym for Focal Initiatives for Research in Science and Technology. Israel's reactive programs select the strongest proposals in areas in which Israel is already strong. FIRST searches for areas of current or potential weakness, "research gaps," and proactively stimulates researcher interest in filling them. Although the Academy has occasionally done this on an ad hoc basis, FIRST is Israel's first attempt to do this in a systematic way. The Revson Foundation has already committed \$1 million to testing this concept; and the ISF has promised long-term support.

### Forum

How can FIRST accomplish its goal?

**JORTNER:** The first step is identifying Israel's strengths and weaknesses ("gaps") in specific critical fields. Similar studies have been recently undertaken by the U.K., Germany and the Netherlands, using "foresight" techniques and by the European Science and Technology Assembly (ESTA) and USA/OSTP (for "critical technologies" only), using more conventional expert panels. This is something totally new for Israel; and would itself be a major contribution. Next, through a longer than usual commitment to integrated training and research opportunities, FIRST would seek to create stable, self-sustaining initiatives in the required new or neglected fields. This would, of course, all be done through open, reviewed competition within the framework of the specific proactively determined targets.

### Forum

What else can FIRST do?

**JORTNER:** It could also act as a channel for new innovative ideas which do not yet have a constituency or proven track record in Israel. While similar in concept to FIRST's primary task (above), the methods employed for implementation would be quite different: short-term "seed money" funding to permit investigators to prove the worth of their ideas and to seek conventional funding. We have already convened the FIRST Executive Committee twice and are seeking to embody these concepts in concrete programs.