

## Opinion

In a recent Editorial published in *Nature*,<sup>1</sup> the endeavors of the 57-member Organization of the Islamic Conference (OIC) through its committee of science ministers (COMSTECH) to promote science and technology (S&T) in the region in a ten-year plan for modernization is discussed. There, several problems in achieving this goal were mentioned. One of the most important obstacles stated is the promises made by members but completely ignored later—the broken promises. In this issue of *AIM*, we have the *Opinion* of Dr. Mansouri, an eminent Iranian astrophysicist and a member of *TWAS* from the Department of Physics, *Sharif University of Technology*, Tehran, Iran, about this important issue. What's your opinion?

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### Broken Promises or Promises in Vacuum?

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The statement “Efforts to boost science in the Islamic world need financial commitment from the nations themselves” recently published in an Editorial in *Nature*<sup>1</sup> is a simple and acceptable phrase. The complexity of the issue, however, is lost in the Editorial. Readers get the impression that the politicians of Organization of the Islamic Conference (OIC) countries responsible for such commitments now that committee of science ministers (COMSTECH) is an official agency of OIC, and after implementing of the OIC's ten-year plan for modernization, may be able to hold on the promises and provide the much needed money to shake up the science and technology in the member states. To be honest, I doubt this happens, because:

1. Some of the OIC countries (such as Iran) have tried hard to increase their research and development (R&D) budgets in the last decades in vein. Nonetheless, the mere approval by their governments or parliaments seems not to be enough.

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Although there is no study to be sure what the reason for such a failure is, it seems obvious that the R&D infrastructure is not ripe for such an increase. This not only includes the number of researcher, but also the nonexistence of an experienced and respectable S&T policy body. The result is that the promise of the science minister is not to be taken seriously, even in the case of Iran which has one of the highest R&D expenditures as a percentage of GDP within the OIC countries.

2. A big shake-up in the S&T governance through a cosmetic restructuring of the bodies with the same administrators having shown not much capability in the last decades, is hardly to realize.

3. There is always a divide between words and actions. This divide, however, in the mind of Moslem politicians is huge relative to those of industrialized countries. It is not easy to differentiate between wishes and decisions of Moslem politicians. The absence of necessary infrastructures to implement decisions related to modern concepts of S&T, as defined for example in Frascati Manual,<sup>2</sup> makes it difficult for them to foresee the complexity of implementing decisions like the increase of R&D budget, a new network of center of excel-

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lences, or having 20 universities joining the world's top 500. A university is more or less considered to be a building complex—having enough money you can have the best one!

4. Words like “science” and “technology” do not necessarily associate the same concept in the mind of Moslems as in the mind of those in the industrialized nations. As a consequence of this divide and the concept anomaly, one never knows what will happen after such a decision of OIC.

The biggest potential danger in implementing such decisions related to the links between the Moslem and Western scientific communities is potential misunderstanding over basic vocabulary and the underlying concepts and world-views they represent. Poorly constructed translations have led to misunderstandings of the most basic nature. Western concepts of research, science, and scientists do not map directly or easily into terms familiar in Moslem countries. Moslems do not recognize the extent of the scientific revolution that has taken place in the West. The scientific breakthroughs that were set in motion by Newton or Einstein, also marked the beginning of an ever-growing gap between Western and Moslem understanding of science. Modern scientists of Islamic countries have failed to educate leaders and citizens about the advancements in science at every level, ranging from failing to introduce new terms and concepts so fundamental to understand science, to accurately portraying the evolution of the human thought in the last three centuries. Contrary to what Western politicians believe, those in the Moslem world most susceptible to modern thoughts are not the so-called secular scholars who

fail to grasp the essence of modernity, but those who have absorbed the indigenous culture and the Islamic way of thought, and are willing to incorporate positive changes that they deem essential to their cultural evolution. The so-called secular scholars in the Moslem world asking for more rationality and complaining about the “increasingly intolerant social milieu”<sup>3</sup> do not realize that the same “self-appointed guardians of religious correctness” are part of a “scientific community (Olama)” based on a traditional “rationality.” I would like to stress that there is yet “no” proper scientific community in the Moslem world based on the modern concept of science, which could “fight for the values of science and to reject obscurantism, fanaticism, and xenophobia.” The fact that no Moslem country has yet been successful to pass the critical mass threshold of scientific production may be a sign of difficulties Moslem countries have to embrace modernity and modern S&T. It must have to do with the cultural heritage of those countries: the Moslem world has not yet grasped the concept of modern science.

Given these circumstances, I am more inclined to believe the OIC decisions to shake-up S&T in the member countries are words in vacuum, not promises.

## References

- 1 Broken promise. *Nature*. 2008; **452**:782.
- 2 Frascati Manual: Proposed standard practice for surveys of research and experimental development. 6th ed. OECD; 2002.
- 3 Serageldin I. Science in Muslim countries. *Science*. 2008; **321**:745.