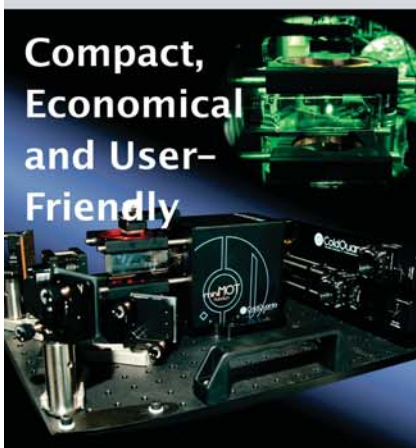




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as “Dr.” Scientists who provide narratives for TV programs should require that their degree appear on screen in conjunction with their name. And a dialog should be initiated with the print media to have the Associated Press naming convention changed.

In our society, titles are used as a sign of respect and credibility. As physicists we must demand the same level of respect other professionals receive; to demand less diminishes our science and demeans our profession.

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Investing in electron-volt physics

I read with great interest in the article “Singapore applies itself to science” (PHYSICS TODAY, June 2011, page 20) that Singapore has deliberately established policies to ensure economic growth through the application of science and technology. The sole purpose of Singapore’s support of R&D is to generate new products and industries and with them new permanent jobs.

The support of physics research described in the article is heavily biased toward electron-volt physics, which I termed “the science of what happens on Earth” in earlier letters (see, for example, PHYSICS TODAY, July 1991, page 84). As I noted in those letters, it is electron-volt physics that will generate new products, industries, and permanent jobs. Absent from the Singapore research portfolio is high-energy particle physics, which had not in 1988—and still has not—ever produced permanent jobs for anyone except high-energy physicists and their acolytes and assistants. The scale of energy exchanges in high-energy physics is simply too large to be useful on Earth.

An article in a recent issue of *Science* points out that the US is ranked only sixth among 40 nations in research-based competitiveness and calls for renewed investment in innovation to restore the US to its former position as number one.¹

I believe that we have much to learn from Singapore’s investment in such innovation. We must learn, first, to couple research and development much more closely than we have in the past and, second, to focus the research on electron-volt physics, because that’s where innovation and economic growth will come from.

Reference

1. *Science* **332**, 1048 (2011).

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Endnotes on Israel–Iran relations

As a child of an Iranian immigrant, I read John Hauptman’s letter titled “On Iran–Israel relations” in the April 2011 issue of PHYSICS TODAY (page 10) with sadness and concern. Hauptman takes issue with an earlier letter by William Katz and uses the opportunity to attack critics of the government of the Islamic Republic of Iran. He advances several claims, the most egregious of which must be challenged.

History has shown that governments of men lie like men. Japanese diplomats were negotiating peace with the US at the time of the Pearl Harbor attacks. Nazi Germany reneged on its nonaggression pact with the Soviet Union when it attacked that nation in 1941. So let us examine Hauptman’s claims, looking not at official statements from the government of Iran but at its actions.

Hauptman says Iran has no stated goal of annihilating Israel. Yet the military engagements Israel has faced since 1979 bear the stamp of Iran’s direct influence through its support of Hezbollah in Lebanon and of Syrian aggression. The decision to send warships through the Suez Canal into the Mediterranean Sea following the fall of the Mubarak government in Egypt this year, an act that serves no vital Iranian defense interest, further indicates Iran’s intention of expanding its military reach to threaten Israel. Iran has been developing missile technology with weapons capable of delivering a biological or nuclear weapon to Israeli territory.¹

The Iranian government does not clamor for or threaten nuclear war, says Hauptman. Actually, Iran is aggressively pursuing a nuclear program that it claims is intended only for peaceful energy production. However, given the existing oil and gas resources in tectonically active Iran, a desire to increase its energy independence should lead it to be developing its tremendous solar and wind energy potentials and its domestic fossil-fuel sources rather than risk building nuclear power plants sensitive to seismic activity. Recent revelations of

secret Iranian nuclear facilities at Qom are further evidence that the Iranian government is insincere regarding the purpose of its nuclear program.

A third point Hauptman makes is that the Iranian Jewish community of some 30 000 is not at risk from anti-Semitic government discrimination. Anyone with friends or relatives who lived in Iran through the Islamic Revolution can speak to the murder of adherents to minority religions by those forces that became the government of the Islamic Republic of Iran. By definition, sharia law, to which the nation currently adheres, makes non-Muslims second-class citizens. In a totalitarian state where people are stoned to death for merely being *accused* of adultery, how can statements of fair treatment from members of minority communities trapped there truly be taken at face value?

Hauptman claims that the recent murders of Iranian nuclear physicists featured on the Iran Watch website suggest some clandestine plot to kill scientists who might support the Iranian nuclear program. Here's another possible scenario: Scientists such as Masoud Alimohammadi, who Hauptman says had friends and collaborators around the world, might have been murdered by the Iranian government, simply for having such contacts. Anyone with family in Iran can state with confidence the fear that people there face for even being perceived as disagreeing with the government. Iranians' postal, telephone, and email communications with the outside world are in no way free of monitoring by the state. Should we believe that the Iranian government collects all that information and doesn't act on it?

The motivations for Hauptman's bizarre statements become clear at the end of his letter, when he attacks American foreign policy in the Middle East. Unfortunately, disliking American policy is not a valid reason to portray the Iranian government as something it is not. My Iranian relatives were very unhappy with the Bush policy and the invasion of Iraq in 2003—not because of American aggression, but because America stopped there and did not liberate them as well! They cannot understand how citizens blessed to live in free societies cannot recognize hostile governments in places like Iran and call them what they are. US government silence during the demonstrations following the stolen Iranian elections of 2009 is as clear an example as Haupt-

man's letter is of the US government's lack of clarity and objective assessment of the situation in the Middle East.

Science exists in the world that is, not the world of ideological fantasy. As scientists, we have an obligation to speak out when members of our community cross the line between promoting truth and engaging in propaganda. Hauptman's statements undermine the efforts of people in Iran and elsewhere who are fighting for the day when Iranian citizens can exercise freedom of conscience and can freely and peacefully engage in the broadest spectra of inquiry and research.

Reference

1. See, for example, http://www.missilethreat.com/missiles/theworld/id.107/missile_detail.asp.

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John Hauptman's rambling and emotive response to my brief comments (PHYSICS TODAY, December 2010, page 8) about Iran-Israel relations in light of Toni Feder's news item (August 2010, page 22) underscores my original point: PHYSICS TODAY should steer clear of politics, since such discussions can easily lead to unsubstantiated opinions on topics far beyond its purview.

In his letter, Hauptman makes several serious and even bizarre claims that need to be addressed.

► Hauptman claims that Iran has not stated as a goal the annihilation of Israel, nor has it clamored for war. As "proof," he translates a sentence from the Ayatollah Ruhollah Khomeini's 2005 anti-Israel speech. However, his one worn example is superseded almost daily by combative, linguistically unambiguous threats. Mahmoud Ahmadinejad has stated that Israel is a "stinking corpse" that must be "annihilated,"¹ and his regime hosts conferences on Holocaust denial. Banners saying "Death to Israel" in Farsi are hung in public places,² and Iran has stated its aim to build a nuclear arsenal and missile delivery system.

► Hauptman is "not aware of 'thousands of American deaths for which Iran is directly responsible.' " He must not be trying very hard. The US State Department lists Iran as the world's leading state sponsor of terrorism.³ Iran provides weapons, training, and intelligence for Hezbollah. The regime also partners with Sunni terror organizations, including Al Qaeda in the Sudan.

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