

# Nanotechnologists Are Targets of Unabomber Copycat, Alarming Universities

Marion Lloyd and Jeffrey R. Young

August 21, 2011

# Contents

Nanotechnologists as Targets . . . . .	4
Watching Their Mailboxes . . . . .	5



A police officer stands guard after a mail bomb injured two professors at the Monterrey Institute of Technology and Higher Education, near Mexico City.

Arnulfo Franco, AP Images

A package bomb that injured two professors at a university here this month is the latest in a string of attacks by a new terror group inspired by the Unabomber. Its violent actions have put campuses across Mexico on alert and caused nanotechnology researchers worldwide to take precautions with their mail.

Nanotechnology was singled out as a target for the attacks in manifestos posted on the Web by the group behind the bombs, which calls itself “Individualities Tending Toward Savagery.” It has been linked to attacks in France, Spain, and Chile, and to a bomb sent earlier this year to a scientist at another Mexican university who specializes in nanotech. An analyst who helped identify the Unabomber—who turned out to be a former professor—says the posts show signs of someone well-educated who could be affiliated with a college.

The online rants credit the Unabomber as an inspiration. The Unabomber, a former professor of mathematics at the University of California at Berkeley named Theodore Kaczynski, spread fear in academe for nearly 20 years with his mail-bombing campaign, which killed three professors and wounded 23 others until he was arrested, in 1996. Today he sits in a federal prison in Colorado with no chance of parole, but he continues

to write articles calling for a revolution to achieve his dream of an end of technology and a return to hunter-gatherer societies.

The new group's latest package exploded in an office on the campus of the Monterrey Institute of Technology and Higher Education, outside of Mexico City, in early August. The blast wounded its intended target, Armando Herrera Corral, director of a technology-transfer center, which the group's manifesto said is key to the university's plan to promote research projects that "are relevant for the progress of nanobioindustry within the country."

The explosion also wounded a nearby colleague, Alejandro Aceves López, director of the university's graduate school of engineering and science. Both men are expected to recover from their injuries.

Officials closed the campus for a day and have added new security procedures, which include the use of metal detectors at all campus entrances, random sweeps of campus areas with metal detectors, and searching the cars of some students, according to a statement.

The university also sent e-mails to parents of its students (in English translation to the parents of its approximately 100 foreign students) explaining the new security measures, according to a university public-relations official who asked not to be named, because he was not authorized to discuss the incident. The official said all of the foreign students decided to remain on campus.

## Nanotechnologists as Targets

In the group's online post (written in Spanish) claiming credit for the latest bombing, the terrorists complained about the growing number of nanotechnology experts in Mexico, which it estimated at 650. "The ever more rapid acceleration of this technology will lead to the creation of nanocyborgs that can self-replicate automatically without the help of a human," it said.

Such a scenario was popularized in Michael Crichton's 2002 novel, *Prey* (though the post did not cite the work), in which microscopic robots escape from a lab and take over people's bodies. The manifesto argues that nanoscientists "have given their lives for years in the name of human self-destruction." Scientists say the notion is pure science fiction.

The same group sent a parcel bomb to a nanotechnology researcher at the Polytechnic University of the Valley of Mexico in April. That package was addressed to "Oscar Camacho" but apparently was intended for the head of the nanotech department, Carlos Alberto Camacho Olguín. The bomb detonated and wounded a security guard; the professor was unharmed.

In early May the group sent another bomb to the same university, but the package was intercepted, and no one was injured.

In an online manifesto published soon after those attacks, the group threatened more violence. “Last month we made an attempt against Oscar Camacho, today against the institution, tomorrow who knows?” it said. “Fire to the development of nanotechnology, together with those who support it.”

Mexican law-enforcement officials have called on universities around the country to beef up their security.

The University of the Americas-Puebla, said to be the first institution in the country to set up a nanotechnology major, sent an e-mail message to all students, professors, and staff members alerting them not to open suspicious packages, and held a meeting to discuss other security measures.

“When I heard the news about what happened at Monterrey Tech, I was very worried, because of the large number of students that we have in the program here,” says Miguel Ángel Méndez Rojas, coordinator of the university’s nanotechnology program, in an e-mail message. “Because we were the first undergraduate program in Mexico, we felt we could be a target.”

It was “devastating” to read the group’s online manifestos, he says. “I’m convinced that the group’s phobia of science (and nanotechnology and its risks) comes mostly from ignorance and misinformation.”

Many people in the region are skeptical of science, he adds. “In our country, and in the whole Latin American region, we put more faith in the supernatural than in reason. This poses fatal consequences, making people view researchers in science and technology with suspicion and hate, as inhuman individuals, who work against society and as the exploiters and destroyers of natural resources.”

Alfredo Castillo, attorney general in the State of Mexico, where Monterrey Tech is located, said in a news conference that the terrorist group has ties to acts of violence in other countries, although he did not provide details and did not respond to requests for an interview.

Last month members of a group called the ELF Switzerland Earth Liberation Front were sentenced to prison for plotting to bomb an IBM laboratory that does nanotechnology research in Switzerland. It is not clear whether that group has any ties to the Mexican terror group.

## Watching Their Mailboxes

Though most nanotechnology researchers in the United States are not as nervous as their Mexican colleagues, some are watching the situation—and their mailboxes—closely.

“We’ve warned our faculty and staff and students to be wary of packages, but we’re not too concerned at this moment,” says Wade Adams, director of Rice University’s Richard E. Smalley Institute for Nanoscale Science and Technology.

Some U.S. nanotechnology researchers have not yet heard of the bombings, though, or say they feel that risks to their own labs are minuscule.

Among the latter is Ian T. Ferguson, chairman of the department of electrical and computer engineering at the University of North Carolina at Charlotte, who works on nanotech projects. “Driving on the road is problematic,” he says, putting the risk in perspective. “Today I was driving behind a truck and its tire blew out,” which almost caused a crash. “Do I stop driving? No way.”

Jack Levin, a professor of sociology and criminology at Northeastern University, says he is not surprised to see others follow the Unabomber’s pattern of mail bombings followed by antitechnology screeds. “I don’t think we should be surprised that killers are inspired by other killers,” he says. For such criminals, the main goal of producing manifestos is to justify their violent actions and portray themselves as heroes rather than villains, he argues. “The terrorists are motivated as much from personal pathology as they are from politics or science or antiscience.”

Some experts wonder whether the bombs in Mexico are the work of a group or the actions of a lone attacker presenting himself as a group in his writings.

“Much of it is written in the plural possessive pronoun ‘we,’ but there are occasions where the singular personal pronoun was used by the author,” says Randall G. Rogan, a professor of communication at Wake Forest University. He is an expert on author identification and served on the team of analysts that helped identify the Unabomber, who signed his own manifesto as the work of a group, which he called the Freedom Club.

Based on initial readings of two of the manifestos, Mr. Rogan guesses that the writer has some sort of college education and could even be affiliated with a college. “The author is drawing on data and drawing on references and quoting a variety of scientists”—all of which suggests academic training, he says.

Mr. Méndez, at the University of the Americas, agrees. He notes that the manifestos are full of references to American texts and suggest that the author, or authors, have a solid command of English. They also know how to use computer networks and technology, and how to build and handle explosives.

Such skills suggest a key contradiction in the group’s antitechnology position, says Mauricio Terrones, a leading Mexican researcher in nanotechnology, who has worked outside the country since 2010. “They don’t want technology, but they use it to make bombs with gunpowder, a battery, et cetera, and they also use the Internet to make themselves known,” wrote Mr. Terrones, who is now a professor of physics at Pennsylvania State University, in an e-mail interview with *The Chronicle*. “If it weren’t for science and technological development, they could never have gone public.”

In the “endnotes” to its May manifesto, the group anticipates such criticisms. But it denies that its use of the Internet undermines its antiscience stance.

“Only in this way can we disseminate our ideas,” the manifesto says. “Are you really stupid enough to think that we who criticize the Techno-industrial System would carve this manifesto in stone?”

For now, the bomber or bombers who struck Mexican campuses remain at large, acting, as they put it, “without compassion and without mercy.”

---

Jeffrey R. Young was a senior editor and writer focused on the impact of technology on society, the future of education, and journalism innovation. He led a team at *The Chronicle of Higher Education* that explored new story formats. He is currently managing editor of EdSurge.

The Ted K Archive

Marion Lloyd and Jeffrey R. Young

Nanotechnologists Are Targets of Unabomber Copycat, Alarming Universities

August 21, 2011

<[chronicle.com/article/nanotechnologists-are-targets-of-unabomber-copycat-alarming-universities/](http://chronicle.com/article/nanotechnologists-are-targets-of-unabomber-copycat-alarming-universities/)>

**[www.thetedkarchive.com](http://www.thetedkarchive.com)**