

# ROLANDE HODEL

In Africa, chemist's **NONPROFIT ORGANIZATION** hopes to increase access to life-saving drugs

LINDA WANG, C&EN WASHINGTON

**ROLANDE R. HODEL** wants to win a Nobel Prize—not in chemistry—but in peace.

Over the past five years, Hodel has transformed herself from a quiet bench chemist to an outspoken humanitarian, shedding her white lab coat for colorful free-flowing African garments.

The German-born, U.S.-trained Hodel now resides in the West African country of Cameroon. Several times a year, she returns to her garden apartment in Ossining, N.Y., to raise money for and awareness of her nonprofit organization, AIDSfreeAFRICA ([www.aidsfreeafrica.org](http://www.aidsfreeafrica.org)), which she founded in 2003.

“Our mission is to empower Africans to become self-sufficient in producing pharmaceuticals,” Hodel says. Among AIDSfreeAFRICA’s first projects is support for the development of Diamond Pharmaceuticals, located in the coastal city of Buea, Cameroon. The company, founded by three Cameroonian pharmacists, aims to reduce the cost of drugs in the country by packaging bulk generic drugs rather than importing the finished product.

By doing the packaging themselves, Diamond cofounder Wilson Nebafu estimates that they can reduce the cost of drugs by 10 to 25%. He says the company plans to move into formulations, which he estimates will reduce the cost by 25 to 40%.

**IN CAMEROON**, like in many Sub-Saharan African countries, drugs are imported, and the supply is severely limited. “Africa has a desperate need to get medicines,” says Joseph M. Fortunak, an associate professor in the department of pharmaceutical sciences at Howard University, in Washington, D.C., whose research frequently takes him to Africa. “It’s very difficult, outside of the largest cities, to buy medicines in Africa. They’re not even offered for sale. Foreign companies will come in and they’ll try to sell the drugs, but if they can’t make a profit they won’t bother.”

He says that, to make drugs accessible and to keep costs down, African countries need to “take up the burden” of producing their own drugs, and companies like Diamond are necessary to push the country forward.

Hodel has been intimately involved with the start-up of Diamond, from helping to raise money, to researching the types of equipment they will need, to making sure the company complies with current Good Manufacturing Practices. Nebafu says that if Hodel hadn’t stepped in to support his company, he doubts it would have gotten as far as it has.

Diamond has purchased a piece of land and is finishing construction on a 10,000-sq-ft building. It has also purchased some equipment and is raising additional funds to purchase a blister-packing machine. Drugs for HIV/AIDS are just one of many types of generic drugs the company will package. The company also plans



**Hodel in Cameroon.** to package malaria drugs, painkillers, and antibiotics.

Blister-packing drugs sounds simple, but it is no easy feat in Cameroon. The extreme heat and humidity can easily destroy drugs, and the electric voltage is not consistent, which can wreak havoc on a blister-packing machine. What’s more, trivial tasks can turn into huge ordeals. Hodel recalls traveling 16 hours round trip just to purchase distilled water from a government-run hospital.

Hodel doesn’t claim to be an expert on drug production. Rather, she says she is an expert at finding experts. Elliott Bay, who sits on the board of directors of AIDSfreeAFRICA and is a senior director of process chemistry at biopharmaceutical company Mannkind, says Hodel consults with him frequently about technical issues.

What Hodel lacks in expertise, she more than makes up for in enthusiasm. She “does not have any pharmaceutical industry experience, but what she’s decided to do is stand up with a lot of guts and stick a banner in the sand and say, ‘Damn it, I’m going to make these drugs available in Cameroon,’” Fortunak says.

Born in Potsdam, Germany, Hodel came to the U.S. in 1989. She has a master’s degree in inorganic chemistry from the University of Kansas and a Ph.D. in organic chemistry from the City University of New York, Queens College. She has worked for Emisphere Technologies, Pharmaceutical Discovery, Nanocrystals Technology, and BASF in Germany.

Hodel, who also sits on the board of directors of the nonprofit humanitarian organization Chemists Without Borders, says she got the idea to form AIDSfreeAFRICA after hearing about Brazil’s successful strategy to produce more affordable generic HIV/AIDS drugs. Hodel believed that she could do the same for Africa. “I wanted something in my life that makes it worth it for me to get up in the morning and say, ‘This is who I am. This is the purpose, the sense, and the meaning in my life. This is why I get up every morning and keep going.’”

Hodel says that the experience has changed her life. “I’m not who I was three years ago,” she says. “I used to be utterly impatient. Of course, I still want production to start yesterday, but I have a God-given trust that this is going to happen. I don’t know what it’s going to look like or exactly how to get there, but I know that we will get there, and I will do anything that it takes to get there.”

Meanwhile, Hodel plans to support other fledgling efforts in Cameroon. Once those are up and running, she’ll move to other African countries, such as Ghana and Rwanda.

Asked whether AIDSfreeAFRICA is her work or her life, Hodel responds: “It is both. It is my life, and my life is my work.” ■