



Lucía Petkovic

Idaho National Laboratory

Programs 15-19

1. TRANSMUTATION OF MATTER

Since ancient times, when man gazed uncertainly upon the world, the transmutation of matter has caused great curiosity.

Today atoms, molecules, protons and neutrons in action are an open book for Lucia Petkovic, a chemical engineer who knows how to decipher the secrets of matter.

Lucia Petkovic

I work in research in an area in applied chemistry called heterogeneous catalysis; it is the phenomena by which chemical reactions accelerate in their speed.

And why is it important that chemical processes be accelerated?

Lucia Petkovic

In industry, the faster you can transform these substances, the cheaper it is going to be and the economic outcome will be higher.

Petkovic is a distinguished researcher at Idaho National Laboratory. Her discoveries are a step forward in the quest for a healthier world, and this Argentine-born engineer simply loves what she does.

Lucia Petkovic

For me my work is an adventure, a challenge.

This information was brought to you with support from the Department of Energy of the United States.

2. A WORLD IN FLUX

Have you ever wondered where plastic, paper and gasoline come from before they reach our hands? We live in a world continually altered by chemical processes, as Lucia Petkovic explains to us:

Lucia Petkovic

Paints result from a chemical process; paper comes from industrial plants and obeys a chemical process; everything made of plastic goes through chemical processes.

The quickness and efficiency with which these processes advance largely determines the industrial development of the nation, and therefore directly impacts our daily lives!

Lucia Petkovic

I feel very satisfied that my research will prove beneficial for people.

Petkovic is part of the team at the Idaho National Laboratory working to optimize processes of heterogeneous catalysis, which cause chemical reactions to accelerate.

This information was brought to you with support from the Department of Energy of the United States.

3. A POLLUTION-FREE WORLD

Have you considered the possibility of living somewhere without pollution, where we can breathe purer air? Lucia Petkovic has! She is an Argentine scientist who believes in the possibility of creating a contamination-free world.

Lucia Petkovic

If we could have vehicles working with hydrogen it would be wonderful, because when hydrogen burns it produces only water vapor.

But, is that possible?

Lucia Petkovic

Yes, in fact, in California there is at least one service station that provide hydrogen.

Hydrogen is the most abundant chemical element in the universe; it is a part of a multitude of substances, among them water, but isolating it isn't easy. At Idaho National Laboratory, Petkovic searches for safe, cost-effective methods to obtain hydrogen.

Lucia Petkovic

The health of the planet requires that this energy source multiplies.

This information was brought to you with support from the Department of Energy of the United States.

4. SPAGHETTI OR POWDERED MILK?

Are you thinking about your future?

Science and engineering are options that can bring you great satisfaction, says Lucia Petkovic, an Argentine chemical engineer. Thanks to her dedication, she has tasted the sweetness of success and today she is a part of the group of distinguished scientists at Idaho National Laboratory.

Lucia Petkovic

The world today depends greatly on chemical engineering.

But, where do chemical engineers ply their trade?

Lucia Petkovic

The field is very broad. Being a chemical engineer you can work in different areas...a powdered milk factory, a spaghetti factory, a beer manufacturing plant or a petroleum refinery; all of them have chemical engineers.

But, don't scientists have to have exceptional minds?

Lucia Petkovic

No! In chemical engineering, just as in any other science, you do not need to be a genius, you just need a lot of perseverance, that's all.

Discover it! Science can also be your challenge.

This information was brought to you with support from the Department of Energy of the United States.

5. IT'S NOT ALWAYS A PARTY

Lucia Petkovic emerged as a young and dedicated chemical engineering student at the University of San Juan, Argentina, to become a key part of the research that the Idaho National Laboratory advances in the field of heterogeneous catalysis.

Her articles have been published in some of the most important publications in the world of science.

Lucia Petkovic

To feel that something has been published, that it is of interest (to the scientific community), pleases me very much.

Lucia Petkovic is a successful woman; she loves what she does and she has known how to make small sacrifices along the way.

Lucia Petkovic

When I was pursuing my undergraduate studies sometimes I had to spend nights studying while my friends were partying.

For Petkovic work is more than an adventure, it's a challenge!

Lucia Petkovic

My work is like putting together a puzzle, and that's why it's a lot of fun.

This information was brought to you with support from the Department of Energy of the United States.