

**ANILDO BRISTOTI, A PIONEER IN SCIENCE
IN
RIO GRANDE DO SUL, BRAZIL**

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ABSTRACT

Anildo Bristoti was born in São Francisco de Paula, Rio Grande do Sul, Brazil in 1936 and passed away in 2004. He studied chemistry, physics and mathematics and obtained a Doctor of Engineering Degree from UCLA in 1970. His main research interests were renewable energy sources and he was instrumental in the establishment of graduate programs in science and engineering at various universities in Southern Brazil. He trained more than one hundred research scientists presently working in chemistry, physics, engineering and materials science.

KEY WORDS: History of science and engineering, science in Brazil

RESUMO

Anildo Bristoti nasceu em São Francisco de Paula, Rio Grande do Sul, Brasil em 1936 e faleceu em 2004. Estudou química, física e matemática e obteve o grau de Doutor em Engenharia da Universidade da California em Los Angeles (UCLA) em 1970. A sua área principal de pesquisa tratava de fontes renováveis de energia e ele foi responsável pelo estabelecimento de programas de pós-graduação em ciência e engenharia em várias universidades no sul do Brasil. Ele preparou mais de cem pesquisadores, atualmente desempenhando atividades em química, física, engenharia e ciência dos materiais.

PALAVRAS CHAVE: história da ciência e da engenharia, ciência no Brasil

Anildo Bristoti was born on March 28, 1936 in São Francisco de Paula, Rio Grande do Sul (RS), Brazil and passed away in an automobile accident near Três Coroas, RS, on April 24, 2004.

He studied chemistry, physics and mathematics at the Pontifical Catholic University of Rio Grande do Sul (PUCRS), Porto Alegre, and graduated in mathematics from the Federal University of Rio Grande do Sul (UFRGS) in 1960.

He was awarded the Master of Science Degree in Physics from the University of California at Los Angeles (UCLA) in 1967 and the Doctor of Science Degree in Energy Engineering from the same institution in 1970.

Dr. Anildo Bristoti held various administrative positions. Among them, we mention those of Chairman of the Physics Department of the Federal University of Rio Grande do Sul (UFRGS), Director of the Graduate Program in Metallurgical and Materials Science Engineering (UFRGS), Coordinator of the Nucleus of Energy (UFRGS), Secretary of the State Commission on Energy (CENERGS), Scientific Advisor of the Graduate School of the Pontifical Catholic University of Rio Grande do Sul (PUCRS) and Director of the Graduate Program in Engineering (Energy, Environment and Materials) at the Lutheran University of Brazil (ULBRA) in Canoas, RS.

He gave classes at various universities at the undergraduate and graduate levels in physics, materials science, chemistry and engineering.

His main research interests dealt with renewable energy sources, energy use and energy planning, but he also worked in urban and regional planning, organic chemistry, thermodynamics, chemical and electrical engineering.

Prof. Dr. Anildo Bristoti served as research advisor of approximately sixty (60) graduate students for the Master or Doctor Degrees mainly at UFRGS and during the later years at ULBRA. Most of his former students and collaborators are presently working in engineering, physics or chemistry in Brazil or the southern part of continent. A representative list of some of his publications is to be found at the end of this article.

We first met Prof. Dr. Anildo Bristoti soon after our arrival in Porto Alegre in 1983. At the time, he was Director of the Master Degree Program in Metallurgical and Materials Science Engineering (PPGEM) at UFRGS and he invited us to participate as Professor and Research Advisor. Since then, we worked together first in the PPGEM Program, afterwards in the Department of Physical Chemistry at UFRGS, at PUCRS and during the last years at the Lutheran University of Brazil (ULBRA) in Canoas.

At the School of Engineering of the Federal University of Rio Grande do Sul (UFRGS), Anildo Bristoti was instrumental in establishing the Doctoral Program in Metallurgical and Materials Science Engineering (PPGEMM) together with ourselves (LGI, Adão Mautone, Ilton Brochardt, Lourdes Iduwirges Müller, Lírio Schaeffer and Arno Müller and also played an important role in the Graduate Programs in Electrical Mechanical and Civil Engineering.

In the Chemistry Institute of the same university, Prof. Dr. Anildo Bristoti, together with Prof. Dr. José Schifino and our person was a member of the Founding Commission (1965) and the first Coordinating Commission of the Graduate Program in Chemistry (CPGQ). In addition, he was a champion of morality and fought widespread corruption and embezzlement of public funds within the Instituto de Química of the Federal University of Rio Grande do Sul (UFRGS).

Anildo Bristoti was the first scientist to use extraction with supercritical fluids in Rio Grande do Sul and the only person that we know in Brazil to teach and advanced course in irreversible thermodynamics.



PROF. DR. ANILDO BRISTOTI (1936-2004)

From 1997 to 2004, he participated mainly in various graduate programs at the Lutheran University of Brazil (ULBRA) in Canoas. Among them, we mention the Graduate Program in Science, and the Graduate Program in Engineering, Energy, Environment and Materials. He died near Três Coroas and Igrejinha, on a Saturday morning, on his way to ULBRA in Canoas, where he was going to teach a class, part of the Graduate Program in Engineering (PPGEAM).

He was a member of the Editorial Board of the *Brazilian Journal of Materials Science and Engineering* and of *Technología*,



Cachoeira do Vellino



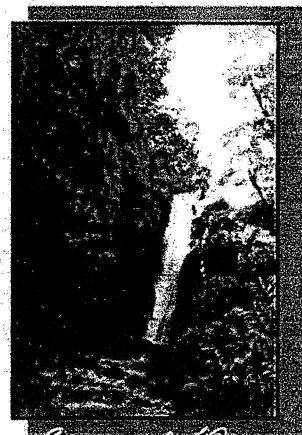
Cachoeira do Rodo



Cachoeira do Romanos



Cachoeira Escondida



Cachoeira da Roxinha



Cachoeira do Quatrilho

Partial view of the Ecological Park (Parque das Cachoeiras – Park of the Waterfalls) near São Francisco de Paula established by Dr. Anildo Bristoti,

The major preoccupation during his entire life was the divulgation of scientific knowledge, not only among the more educated, but also among the common people. He participated in and supervised in many extension programs and gave lectures throughout the whole state. Anildo Bristoti was a descendant of Italian immigrants that settled in the mountain region of Rio Grande do Sul. He often used to say that it was by a strike of luck that he obtained a higher education.

A few years before his death, he opted for the Italian citizenship and in homage to his ancestors changed his name from Bristoti to the original Bristot.

The guidelines of his life were renewable energy sources, sustainable development and preservation of nature. He helped establish and build many alcohol microdistilleries using sugar cane as raw material and was responsible for many projects involving generation and distribution of electricity. Prof. Dr. Anildo Bristoti spent his life savings to purchase and establish the *Parque das Cachoeiras – Park of the Waterfalls*, an ecological reserve area near his native town of São Francisco de Paula.

Those of us who had the privilege to know and collaborate with Prof. Dr. Anildo Bristoti will remember him as a good person, morally correct, always ready to help, full of enthusiasm and positive thinking.

Anildo Bristoti was a pioneer in science and a dreamer. For him everything was possible. The precarious, primitive and poor laboratory conditions were no impediment to do research. He was a good and efficient leader, a first class motivator and a specialist in group dynamics. He definitely left his marks on the development of science and engineering in the State of Rio Grande do Sul.

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