

Foreword

Almost a year ago, on August 16, 2000, Professor Vera Johanides passed away. For a long period of time she was running the Biochemical Engineering Department at the Faculty of Food Technology and Biotechnology, University of Zagreb. Professor Armin Fiechter from ETH, Zuerich, being informed on her death wrote to us: "Besides being an excellent scientist and academic, she was an outstanding woman and personality. She had developed her Chair at Zagreb University up to an impressive level and became highly respected in her country and abroad."

Therefore, no wonder that all of her former students, collaborators, friends and admirers from Croatia and abroad were proud and happy they had an opportunity to have known her, learned from her and worked with her. Many of them willingly accepted the idea of the Food Technology and Biotechnology Editorial Board to publish a Special Issue of this Journal in her honour and memory.

Our task, as Guest Editors, was not an easy one, bearing in mind high academic standards that Professor Johanides had taught us to go for. After reviewing a number of received papers we made a selection for this special occasion. However, the number of the accepted articles exceeded the size of one issue. Therefore, a few more papers will be published in the next issue of this journal. This selection shows that admirers of Professor Johanides live and work in various countries dealing with many scientific topics. In short, this selection shows a typical pattern of her broad interest for science and scientists. Namely, she initiated the organisation of biotechnology courses not only at the University of Zagreb, but also at the Universities of Ljubljana, Osijek and Skoplje, where her Ph.D. students became initiators and founders of new biotechnology departments. Besides, she collaborated with well-known centers of biotechnology worldwide and she took active part in boards and committees of several important international projects and initiatives like International Committees at IUMS (Committee for Economic and Applied Microbiology, Committee for Microbiology of Streptomyces), EFB Committee of IUPAC, Editorial Advisory Board of European Journal of Applied Microbiology and Biotechnology, Editorial Advisory Board of the 8th volume of Rehm and Reed's Biotechnology edition (Verlag Chemie, 1988). As a representative of the Association of Microbiological Societies of former Yugoslavia she signed the Foundation Document of European Federation of Biotechnology in Interlaken on September 25, 1978.

Being her collaborators for quite some time, we were honoured to work with her since our undergraduate days to the scientific maturity. Obtaining this honourable duty of being Guest Editors of this Special Issue was for us a reminiscence of many special moments. We will always remember her sharp comments and enlightening ideas and thoughts. We hope that with this issue of Food Technology and Biotechnology we will share our memories with many of those who had the privilege of knowing her.

Guest Editors:

Vladimir Marić and Srđan Novak

In Commemoration of
Marta Blinc (1904-2000) and Vera Johanides (1917-2000)
Pioneers of Biotechnology and Industrial Microbiology

Two well-known female scientists of extremely strong personalities, Marta Blinc and Vera Johanides, who both had an important impact on Slovene and Croatian Biotechnology, left us unexpectedly in August 2000.

Dr. Marta Blinc finished her studies of chemistry at the University of Ljubljana in 1928 and continued working in the laboratory of the renowned chemist Professor Maks Samec in the field of starch chemistry. She obtained her Ph.D. degree in chemistry in 1930, being the third Slovene woman with this title after the foundation of the University of Ljubljana. Until the Second World War she worked as a teacher in a high school and as an assistant to Professor Samec. After the war, the Chemical Institute of the Slovene Academy of Sciences was established and she was appointed the chief of the Department of Biochemistry and Industrial Microbiology and retained this position until her retirement. In those early days of the development of biotechnology or, as it was called at the time, fermentation technology, she introduced new research programmes such as production of fat and biomass from waste materials, production of feed by chemical hydrolysis, biotechnological production of butanol-aceton, etc. She started the microbial culture collection of the Chemical Institute that is still a renowned source of industrially important fungi. Interesting studies were made using different microorganisms, such as propionic acid bacteria, aspergilli for the production of citric acid, different fungi for the production of riboflavine, vitamins and enzymes.

Together with Professor Vera Johanides from Zagreb and Professor Bogoje Stevic from Belgrade, Dr. Marta Blinc founded the Yugoslav Microbiological Society which soon outgrew into three independent national societies.

Professor Vera Johanides, born in Vukovar, Croatia, studied chemistry, physics, and mathematics at the University of Ljubljana and finished her studies in 1940. After working in the laboratory of the Zagreb Brewery, she started her scientific career at the University of Zagreb. In 1955 she obtained her Ph.D. degree at the Slovene Academy of Sciences in the field of antibiotic production of aspergilli, Dr. Blinc being her advisor. Her work was primarily devoted to the education of numerous students in biotechnology, industrial microbiology and biochemistry. She did much research in different fields of current biotechnological problems from antibiotic and enzyme production to the development of biotechnological procedures for many industrial applications. She founded the Study of Biotechnology, which was one of the first studies of this type in Europe.

From 1964 she was a professor of industrial microbiology and biochemical engineering at the University of Zagreb.

All these years both women were connected by their scientific interests, their students, who fruitfully exchanged scientific experiences, and finally by their common efforts for the development and prosperity of the Yugoslav Microbiological Society by organizing lectures, congresses and encouraging contacts between Slovene and Croatian microbiologists, chemists and engineers in academic and industrial laboratories. They became real friends. Being an honorary member of the National Institute of Chemistry in Ljubljana, Prof. Johanides was also an honoured guest at the celebration of Dr. Blinc's 80th birthday in Ljubljana in 1984. Connections were always kept up between Croatian and Slovene microbiologists and biotechnologists, students and coworkers, as a consequence of their collaboration and friendship. This also lasted during the past years when Professor Johanides was bound to her home by illness.

Many fruitful ideas, collaborations and friendships were born at these meetings and visits, many warm links arose between the ladies and their younger coworkers. Dr. Blinc and Professor Johanides were ideals to many of us, younger workers, with their scientific demands, intellectual honesty, persistence and never failing optimism.

Both ladies left us unexpectedly in the span of few days in August 2000. May our memories of them be shown in our always continuing intellectual efforts.

Aleksa Cimerman