Dr Miroslav Ryska: Biographical notes

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Our colleague and friend of many years, Miroslav Ryska, was born on 2 February 1938, in a small village in mid-western Bohemia and received his pre-university schooling in the town of Rakovník.

Perhaps we may insert here a personal reminiscence of one of us: In June 1956, two young students came for an informative visit to a new little radiochemistry laboratory for diploma students run by Professor Běhounek in the Department of Physical Chemistry of the Chemical Institutes of Charles University, Albertov, Prague. They were just about to start their university studies and they were picked out by Charles University to study the rather new area of radiochemistry abroad, at the Moscow State University. One of them was Miroslav Ryska. One of the first three of Běhounek’s Prague radiochemistry diploma students was me (Z.H.) and this was my first encounter with Mirek Ryska, now fifty-two years ago, when mass spectrometry was way beyond the horizon for both of us.

Mirek Ryska then disappeared for several years to Moscow, only coming to see us occasionally during his vacations at home. He did his undergraduate studies at the Faculty of Chemistry of the Moscow University between 1956 and 1961. His diploma thesis, carried out in the chemical kinetics group of the Nobel Prize Winner, N.N. Semenov, concerned hydrogenation and self-hydrogenation of cycloalkenes (namely cyclohexene) on palladium. Partially deuterated products were analyzed by means of a mass spectrometer and this meant for him the first contact with this method. He finished his diploma in Moscow in 1961 and returned to Prague to join, as a graduate student, the Institute of Macromolecular Chemistry of the Czechoslovak Academy of Sciences, where he worked with Professor Otto Wichterle on the kinetics of heterogeneous hydrogenation of vinylchloride. He defended his PhD thesis in 1966 and left the country for a post-doctoral position with Professor D. Hummel in the Department of Physical Chemistry of the University of Cologne, Germany [Universität Köln]. He worked there on the mass spectrometry of pyrolytic products of styrene–vinylchloride co-polymers. In his studies, the field ionization method was used and this brought him into contact with Dr Schüdenmaage and Professor Beckey in Bonn.

In 1969 he returned to the Prague Institute and there founded the laboratory of mass spectrometry, equipped with a high-resolution AEI MS 902 instrument. The studies concerned applications of mass spectrometry to the analysis of oligomers, field ionization of alkanes, alkenes and cycloalkenes and pyrolysis mass spectrometry. However, there were other applications, too. In the early ’70s, Ryska’s mass spectrometer was, for several years, the only double-focusing instrument in the country. He kept it in perfect order and absolute readiness, as with any other instrument that he would later work with. One of us (V.H.) recalls several cases of poisoning of people, when a quick elemental analysis (which only Ryska’s machine could
provide at that time), complementing other mass spectro-
metric data within a few hours, was a matter of life and death.
Mirek’s reaction was always the same: “Come over with the
samples, we will do it right away”.

For almost ten years he worked in the field of macro-
molecules and then, in 1978, he was asked to lay the foun-
dations of a mass spectrometry laboratory at the Research
Institute of Pharmacy and Biochemistry in Prague. The lab-
boratory used mass spectrometry mostly to analyze drug metab-
olites both in vivo and in vitro, using gas chromatography/mass
spectrometry [GC/MS] techniques and to study drug phar-
macokinetics. Here, Mirek Ryska established his career as a
research scientist of international renown in this area.

We believe that Mirek’s finest hour came in 1997. For purely
administrative reasons, to say the least, the fine, internation-
ally well known institution was suddenly closed down, leaving
the researchers without jobs. Pressed by circumstances,
Mirek Ryska changed from a research scientist to an admir-
ably successful entrepreneur and founded a private company
Quinta-Analytica, starting with 20 employees, mostly colleagues
from the institute. Under his leadership, the company grew up
into a flourishing analytical firm with customers all over the
world and a present staff of 115 employees.

A personal note here again: a few years ago one of us (Z.H.)
was returning from a meeting in the USA. His neighbor on
the plane, New York–Prague, was a pretty young lady who
told him that she was going to Prague for the first time, to
sign for an American pharmaceutical company a sizeable
contract with the director of an analytical firm in Prague
and... “the name is Dr Ryska and the firm is Quinta Analytica”,
I interrupted her. “How would you ever know?” asked the lady
astonished. Well, I seemed to have known pretty well where
an American pharma company would direct their samples to
for analysis in Prague.

The company deals mostly with the analysis of drugs and
their metabolites, quantitative mass spectrometry of biologi-
cal materials, occupies its own new building and has solid
instrumental equipment consisting of GC/MS/MS, LC/MS/MS
systems, ion traps etc. In 2006, Dr Ryska resigned as head of
the company, but he continues working full speed, being in
charge of its bioanalytical division.

Mirek Ryska has been active in other areas, too. Since the
’70s, we used to meet him as an active member of the Mass
Spectrometry Group of the J. Marcus Marci Czechoslovak
Spectroscopic Society. In the period between 1977 and 1992, he
was in charge of the Group, in this capacity also representing
Czech science internationally as a member of the International
served as the European Editor on international mass spectrom-
yety journals: Biological Mass Spectrometry [1993–1995], Journal
in Mass Spectrometry [1995–1997]. For many years he partici-
pated in university education: for eight years he held advanced
courses on mass spectrometry in the Department of Analytical
Chemistry, Institute of Chemical Technology in Prague.

It is always a pleasure to see a colleague fully active way
past the usual retirement age. On the occasion of his 70th
birthday, we wish to express our respect and admiration to
our friend and colleague Mirek Ryska, who has been, for most
of his life, an excellent research scientist and then—being
almost 60 and reaching the age when most people think of
their retirement—put all his efforts into establishing a private
enterprise and successfully developing it into a flourishing
analytical company. We wish him many years of active life in
the name of his many friends and colleagues at home and
abroad and in the name of the two of us.