

Anniversary of prof. RNDr. Aloisie Pouličková, CSc.

Aloisie Pouličková (*1961) alias Alka has started with microalgal research in 1977 as a student of grammar school (gymnasium) in Zlín. The first person who attracted Alka to the algal world was her teacher of biology RNDr. J. Pásek, although it happened by chance. Dr. Pásek was a mineralogist and leader of the biological student club in the gymnasium. After receiving a letter written by Czech phycologists to support phycology at grammar schools he met Alka on the school corridor and asked her. „In what part of biology are you interested?“ She answered: „Spiders“ He stroked his beard in a short meditation, gave her a letter, and say:“ Try this please, if you will have algae under the microscope, there will be a lot of spiders.“ She applied a proposal of student project „Natura Semper viva“ focused on phytoplankton and her supervisor in this first research project was RNDr. Petr Marvan, CSc. Since that time he became her mentor. Czech phycologists and botanists (J. Komárek, P. Marvan, J. Květ, Rychnovská, S. Kučera) has been organized in 1977-1980 summer phycological school at a botanical field station in Kameničky and in camp in Stráž nad Nežárkou. These activities led to Alka's decision to study Systematic biology and ecology at Palacký University in Olomouc. Although many people including her teachers did not recommend it, because of the possibilities of employment in the Zlín region.



She continued with several student projects in phytoplankton studies and cooperation with Petr Marvan. The only possibility of hydrobiological diploma project at that time in Olomouc was to work with a group of Doc. Otakar Štěrba in underground waters below the active stream (hyporeal). Fortunately, there were found few algae and there was also an occasion for experiments in situ to answer the question of whether and how long can autotrophs survive in hyporeal. During her studies at Palacký University Alka regularly spent her summer holiday as a volunteer in phycology. She visited the Hydrobiological station of Charles University in Blatná working with a hydrobiological group of Doc. Jan Fott, Botanical and Microbiological Institutes in Třeboň working with Dr. J. Komárková, Dr. J. Nečas, Dr. J. Sulek.

After graduating University she started to work in Botanical Institute in Třeboň and her PhD. The project was focused again on phytoplankton. She sampled south bohemian fishponds focussing on the mass development of centric diatoms. She finished her degree in 1990 and obtained a job in Microbiological Institute in Třeboň Opatovický Mlýn in a technological group culturing algae in open-air equipment up to her maternity leave.

She continued with diatoms also during maternity leave co-operating with Muzeum in Brno (Dr. Špačková) on the research of the content of digestive tract of *Lampetra lampreys* Museum collection. First publication in Museum journal led to cooperation with Lubomír Hanel from Czech Society for Nature Protection (ČSOP) Vlašim on phytobentos of streams with the occurrence of *Lampetra*, publications in the bulletin *Lampetra* and publishing of complex methodology of mountain streams research.

The situation in the early 90's years in science was difficult. After evaluation some research institutions were closed, the number of positions in others has been reduced and Czech Academy started with employment based on projects money. The only possibility to have a job in phycology, was to apply for the position of technician in Culture Collection in Třeboň, although Alka already had CSc. degree. The curator of the collection at that time was Dr. J. Lukavský and her coworker in the laboratory was senior technician Marie Takáčová. Alka tried to apply her first project GAČR on Prodrum of cyanobacteria and algae in the Czech Republic with the support of Jiří Komárek.

In 1996 Alka applied position of specialist for cryptogams at Dept. of Botany Palacký University in Olomouc and moved with family from Chlum u Třeboně to Fryšták to her parent's house. Since that time traveling between Fryšták and Olomouc (60 km) was her daily bread. As she received in meantime the Prodrum project, she transferred it from Czech Academy to Palacký University.

In the beginning, Alka belonged to a phytopathological - microbiological group of Prof. Aleš Lebeda and had no facilities. She started step by step to build up phycological lab thanks to several projects of the Grant agency of the Czech Republic and with her first Ph.D. students Petr Hašler and Miloslav Kitner. The phycological laboratory has been officially established in 2006 thanks to a project of the Ministry of Education (FRVŠ) and the most important equipment (Zeiss microscopes, flow box, centrifuge) has been obtained. The laboratory at that time had

2 academics – Alka and Petr Hašler and several Ph.D. students (Jana Štěpánková, Jana Špačková, Darina Dřimalová, and Eva Lelková). The team has not been focused only on diatoms, which were the pet species of her leader, but each student had a chance to select his algal group. Thus, this laboratory produced Ph.D. projects on cyanobacteria, phytoflagellata, desmids, diatoms, and phytohormones in algae. Students had significant support from the laboratory and they had a chance to visit specialists in the Czech Republic and abroad. The best cooperation was with Polish academy of Science in Krakow (Konrad Wolowski, Agata Woital), Slovak academy of Science in Bratislava (František Hindák, Alica Hindáková), and University of Vienna (Michael Schargel). Alka awarded a degree as an associate professor in 1998.

An important milestone in Alka's carrier was study stay at Royal Botanic Garden in Edinburgh in 2004. Before this stay, she was working as 90% of diatomists with dead diatom frustules. But Prof. D.G. Mann has shown her much more exciting research on living diatoms. She learned there epipelon sampling methods, diatom cytology, culturing, and sexual reproduction. The paradoxical situation, because she had a similar occasion much more earlier when she was a student. Jiří Komárek brought from his bookcase two boxes with reprints of Geitler's works on sexual reproduction of diatoms and said: „You should do this, because nobody is studying diatom reproduction recently“. But she was too young and not ready to use this opportunity in the early 80's years of the last century. Anyway, Komarek's intuition that diatom reproduction is Alka's future was correct.

New experiences with facilities available in Edinburgh lead to specification of the required microscopes for new Phycological laboratory in 2006 and significant publications leading to prof. degree in 2009.

Important chapter in her life is represented by Bulletin Czech Phycology and journal Fottea. She was editor in chief and technical editor of Czech Phycology, which was printed „camera-ready“. Fottea editing has been digitalized and Petr Hašler assumed technical editing.

The whole „Fottea“ story started in 1998 when Alka asked Komarek: „Why there are no proceedings from Czech phycological meetings?“ Komarek answered: „You can manage“.

Alka started with Proceedings from meetings of the Czech Phycological Society in 1999. Two proceedings have been followed by Bulletin Czech Phycology in 2001-2006. Czech fishpond was too small for Alka and she



suggested to Czech Phycological Society transformation of the bulletin to international journal Fottea. The first issue under the new journal name, editorial board, and design has been published in 2007, and Thomson Reuters has included this journal in WOS in 2009. Parallely with two issues of Fottea per year were produced also Czech Phycology Supplements and Fottea Supplements. Supplements contained monographs of Vaclav Houk on centric diatoms. Alka was not only editor in chief, she assumed the journal financing (sponsors, project applications), distribution, and propagation. These activities coupled with J. Komarek's revisions of cyanobacterial genera and V. Houk's supplements on centric diatoms caused that Fottea has become known within the community of diatom and cyanobacterial specialists and its WOS impact factor had an increasing tendency from 0.978 to 3.242.

Petr Dvořák and Petr Hašler