

**Jasna Kniewald, rođ. Novak pl. Rogulić
(Zagreb, 24. lipnja 1938. - Zagreb, 7. veljače 2018.)**



Odlaskom dragih ljudi ostaje bol, tuga, praznina, ali ostaju i tragovi – tragovi u vremenu, u sjećanjima koje svaki pojedinac svojom osobnošću i djelima ostavlja budućim naraštajima. Malo je pak pojedinaca koji su tako značajno pridonijeli razvoju struke, kao što je to učinila prof. dr. sc. Jasna Kniewald u povijesti i djelokrugu toksikologije u Republici Hrvatskoj i šire.

Jasna Kniewald rođena je 24. lipnja 1938. u Zagrebu gdje se školovala i završila III. realnu gimnaziju te upisala Tehnološki fakultet Sveučilišta u Zagrebu na kojem je diplomirala 1962., a na istom - doktorirala iz područja kemijskih znanosti 1969. Postdoktorsko usavršavanje (1969.-1970.) provela je na *Institute of Pharmacology "Mario Negri"*, Milano, Italija.

Od 1975. zaposlena je na Tehnološkom fakultetu, a od 1980. - od samog osnutka fakulteta, na Prehrambeno-biotehnoškom fakultetu (PBF) Sveučilišta u Zagrebu. Do 1987. radi u Laboratoriju za biokemiju Zavoda za kemiju i biokemiju PBF-a, a izborom u zvanje redovita profesorica 1988. osniva novu ustrojbenu jedinicu - Laboratorij za toksikologiju. U zvanje redoviti profesor u trajnom zvanju izabire se 1995. Profesorica Jasna Kniewald je tijekom svoga dugogodišnjeg rada pokazala što znači angažiranost, stručnost, srčanost i etika u profesiji te kako jedan neumoran duh posvećen znanosti može pridonijeti boljitku društva u cjelini.

Temelj njezina znanstveno-istraživačkoga i nastavnog rada vezan je uz sveobuhvatno poznavanje toksikologije, ekotoksikologije i toksikologije hrane, a djelokrug znanstvenih istraživanja specifično je usmjeren na toksikološke učinke pesticida *in vivo* i *in vitro* u procesu reprodukcije, toksikokinetiku i toksikodinamiku postojećih organskih spojeva, toksične učinke endokrino moduliranih spojeva te na intracelularne/biokemijske mehanizme odgovorne za manifestaciju toksičnih učinaka općenito. Objavila je više od 70 znanstvenih radova i ostalih publikacija, od kojih je preko 40 indeksirano u *CC* ili u drugim bazama dostupnim putem *WOS*-a, koji su citirani više od 500 puta prema *SCI* klasifikaciji. Sudjelovala je na nizu međunarodnih i domaćih kongresa, a kao ekspert bila je pozvana 1997. na konferenciju o atrazinu u SAD. Prof. dr. sc. Jasna Kniewald je od 1972. vodila i koordinirala niz nacionalnih znanstvenih projekata kao i projekata u suradnji s gospodarstvom, a od 1985. - 1994. bila je voditeljica dva međunarodna projekta u suradnji s *US Department of Agriculture* za čiju je uspješnu realizaciju dobila posebna priznanja od USDA.

U znanstvenoj i stručnoj aktivnosti treba naglasiti njezine osobite aktivnosti i zasluge:

- Članica Predsjedništva Hrvatskog toksikološkog društva od osnivanja 1992. do 2007.;
- Predsjednica Znanstvenog programskog odbora CROTOX na tri kongresa: Zagreb 1996., Pula 2000. i Plitvice 2004.;
- Članica Programskog i Organizacijskog odbora na četiri održana kongresa u organizaciji Hrvatskog društva za biotehnologiju, 1999., 2001., 2003. i 2005., koja su rezultirala izdavanjem edicije *Current Studies in Biotechnology Vol. 1, 2, 3 i 4*, koji su po vrsnosti ušli u baze podataka dostupne putem *WOS* sučelja (članica uredničkog odbora za sva 4 volumena);
- Od 1988.-1993. predstavnica bivše SFRJ i RH u *European Science Foundation* u odboru *Scientific Advisory Committee for Environmental Toxicology*;
- Od 2002. – 2005. članica *EUROTOX Education Sub-Committee*, aktivno sudjeluje u organizaciji edukativnih radionica za jugoistočnu Europu i za zemlje u tranziciji;
- Organizatorica i voditeljica *EUROTOX „Basic Toxicology course“* održanog na Plitvicama, 2004.;
- Članica *Scientific Programme Committee* za kongres *EUROTOX 2005*, Krakov;
- Članica *Local Organizing Committee* i *International Scientific Programme Committee* te predsjednica *Local Scientific Programme Committee* za međunarodni kongres *EUROTOX 2006/6CTDC* održanog u Cavtatu;
- Članica *New York Academy of Sciences* od 2002.;
- Od 1994.god. članica emerita Akademije tehničkih znanosti Hrvatske (HATZ) gdje je obnašala funkcije tajnice Odbora za bioprocesno inženjerstvo (1993.-1997.), predsjedateljice Odbora za međunarodnu suradnju (2005.-2009.), članice Znanstvenog vijeća HATZ-a (2010.-2013. i 2013.-2017.). Za poseban dugogodišnji doprinos radu Akademije, Predsjedništvo HATZ-a dodijelio joj je medalju i diplomu na godišnjoj skupštini 2016.;
- Od 1992.-2018.god. članica je *International Editorial Board* časopisa *Central European Journal of Public Health* indeksiranog u *WOS*, koji se izdaje u Pragu, Češka Republika;
- Registrirani ekspert pri EU za vrednovanje projekata u okviru FP6 programa. 2003. na poziv *European Commission Directorate E - Biotechnology, Agriculture and Food* sudjelovala je u Bruxellesu kao ekspert u vrednovanju projekata predloženih u okviru FP6 *Priority 5 „Food Quality and Safety“*. Tri godine kasnije ponovno je pozvana i sudjelovala je u Bruxellesu u vrednovanju projekata FP6 *Priority „Biotechnology and Applied Genomics“*;
- 2004. imenovana je za članicu Povjerenstva pri Ministarstvu zdravstva i socijalne skrbi RH, sa zadatkom izrade novih Pravilnika o dozvoljivim količinama kontaminanata koji se mogu nalaziti u namirnicama;

- Odlukom Ministra znanosti 2004. imenovana je u Savjetodavni odbor za visoko obrazovanje Ministarstva znanosti, obrazovanja i športa;
- Odlukom predsjednika Hrvatskog sabora RH i predsjednika Odbora za podjelu državnih nagrada za znanost, imenovana 15. srpnja 2004. za članicu Stručnog povjerenstva za područje tehničkih znanosti. Aktivno je sudjelovala u radu za dodjelu nagrada za 2004. i 2005.

Uz izraziti znanstveni doprinos u području toksikologije i općedruštveni značaj njezina dugogodišnjeg rada, važno je još istaknuti nastavnu djelatnost prof. dr. sc. Jasne Kniewald. Bila je nositeljica predmeta „Toksikologija hrane“, „Osnove toksikologije“, „Toksikološki aspekti pripreme hrane“, „Metodika znanstvenog rada i zaštita intelektualnog vlasništva“ i niza drugih na preddiplomskom i diplomskim studijima PBF-a, a od 1980. sudjelovala je u poslijediplomskoj nastavi na Sveučilištu u Zagrebu kao nositeljica kolegija na matičnom fakultetu, Prirodoslovno-matematičkom fakultetu, Farmaceutsko-biokemijskom fakultetu, Rudarsko-geološko-naftnom fakultetu, Fakultetu kemijskog inženjerstva i tehnologije te na Sveučilištu u Rijeci - Medicinskom fakultetu.

Također, bila je voditelj stručne skupine koja je pripremala poslijediplomski studij iz Nutricionizma na PBF-u od 1993.-1995. i član stručne skupine u pripremi poslijediplomskog studija iz Toksikologije (a u okviru djelatnosti Hrvatskog toksikološkog društva) od 1993.-

1994. Od 1997. aktivno je sudjelovala u pripremi novog interdisciplinarnog poslijediplomskog znanstvenog studija Ekoinženjerstvo, u čiju izvedbu je bilo uključeno 13 fakulteta zagrebačkog sveučilišta iz područja tehničkih i biotehničkih znanosti. Autorica je sveučilišnog udžbenika „Metodika znanstvenog rada“ i koautorica dvaju skripata. Tijekom dugogodišnjeg nastavnog rada bila je vrsni mentor 12 magistarskih radova i 4 doktorska rada te preko 45 diplomskih radova.

Ono što je još značajnije od navedenih faktografskih podataka (kojih u svojoj brojnosti ima daleko više), je da je profesorica Kniewald, bila u pravom smislu te riječi – sveučilišna *profesorica*, dostojanstvena, posebno cijenjena od studenata, izuzetno širokog znanja, visokog morala i etike te da je svoj posao radila s velikom ljubavlju i entuzijazmom kako prema znanosti, tako i prema nastavi i u konačnici prema studentima. Uz znanje, prenijela je studentima vrijednosti i načela u znanosti i znanstveno-istraživačkom radu s ciljem razvoja društvene odgovornosti pripadnika akademske zajednice i jednoga dana mladih radnih ljudi.

Mnoge generacije studenata zasigurno će zadržati uspomenu na vrhunsku profesoricu i znanstvenicu.

Drago je našoj profesorici Jasni Kniewald neka je vječna slava i hvala.

izv. prof. dr. sc. Ivana Kmetič

Jasna Kniewald née Novak pl. Rogulić, PhD, Full Professor (Zagreb, 24 June, 1938 – Zagreb, 7 February, 2018)



When we lose someone dear, there is pain, sadness, emptiness, but also - traces in time - in the memories that each person leaves to future generations. Professor Jasna Kniewald was one of those exceptional individuals who have left such significant traces, mainly in the scope and development of toxicology in Republic of Croatia but also worldwide.

Jasna Kniewald was born on 24 June 1938 in Zagreb. After completing high school, she enrolled at the Technical Faculty of the University of Zagreb where she graduated in 1962. At the same faculty she obtained her doctorate degree in the field of chemical sciences in 1969. From 1969-1970 she spent a time at the Institute of Pharmacology “Mario Negri” Milano, Italy as a postdoctoral fellow.

In 1975, she began her academic career at the Technical Faculty and since 1980 she continued working at the Faculty of Food Technology and Biotechnology (FFTB) University of Zagreb – the same year the FFTB was founded. Until 1987 she worked in the Laboratory for Biochemistry at the Department of Chemistry and Biochemistry and in 1988 she founded a new organizational unit - Laboratory for Toxicology. She received the title Full Professor, in recognition of achievement in academic career, in 1988. For many years, Professor Jasna Kniewald demonstrated

what engagement, expertise and high ethical standards in the profession means, and how commitment to science can contribute to the improvement of society as a whole.

Based on comprehensive knowledge, Professor Jasna Kniewald made a great contribution to the field of toxicology. Her research has been focused on the toxicological effects of pesticides *in vivo* and *in vitro* - especially in the reproduction process, toxicokinetics, and toxicodynamics of persistent organic compounds, action of endocrine-disrupting chemicals and on intracellular/biochemical mechanisms responsible for the manifestation of toxic effects in general. She is the author of more than 70 scientific papers and other types of publications – more than 40 are indexed in *WOS* databases, cited over 500 times according to SCI classification. Many of them have been published in top-ranked journals. Also, she participated in a number of international and national congresses, and as an expert she was invited in USA (1997) to a conference about atrazine showing that her work with atrazine achieved full international recognition.

Since 1972 Professor Jasna Kniewald coordinated a number of national scientific projects, but also projects in cooperation with industry and from 1985 to 1994 she was the leader of two international projects in collaboration with the US Department of Agriculture for whose successful realization she received special acknowledgements from the USDA. The following activities should be emphasized:

- Member of the Board of the Croatian Society of Toxicology (1992-2007);
 - President of the Scientific Program Committee of CROTOX at the three congresses: Zagreb 1996, Pula 2000 and Plitvice 2004;
 - Member of the Program and Organization Committee at the four conferences organized by the Croatian Society of Biotechnology in 1999, 2001, 2003, and 2005, which resulted in the publication of Current Studies in Biotechnology vol. 1, 2, 3 and 4 – indexed in WOS databases (member of the editorial board for all 4 volumes);
 - Member of Scientific Advisory Committee on Environmental Toxicology (SACET) at European Science Foundation (1988-1993);
 - Member of the EUROTOX Education Sub-Committee, actively participates in the organization of educational workshops for South-East Europe and for countries in transition (2002–2005);
 - Organizer of EUROTOX “Basic Toxicology course” held in Plitvice, 2004;
 - Member of Scientific Program Committee at EUROTOX 2005, Krakow;
 - Member of Local Organizing Committee and International Scientific Program Committee and Chair of Local Scientific Program Committee at International Congress EUROTOX 2006/6CTDC held in Cavtat;
 - Member of the New York Academy of Sciences since 2002;
 - Emeritus of the Croatian Academy of Engineering (admitted 1994); Secretary of the Department of Bioprocess Engineering of the Academy (1993-1997); Chairwoman of the Committee for International Relations of the Academy (2005-2009); Member of the HATZ Scientific Council (2010-2013 and 2013-2017). For her 20 years extraordinary activity in Academy, Presidency of Croatian Academy of Engineering decided to award her on the General Assembly 2016 with a “Gold medal” and acknowledgement;
 - Member of the International Editorial Board of the Central European Journal of Public Health indexed in WOS databases, published in Prague, Czech Republic;
 - Registered EU expert referee for evaluating projects under the FP6 program. At the invitation of the European Commission Directorate E - Biotechnology, Agriculture and Food, she participated in Brussels (2003) as an expert in evaluating the projects proposed under FP6 Priority 5 “Food Quality and Safety” and in 2006 she was again invited and participated in Brussels in evaluating FP6 Priority “Biotechnology and Applied Genomics”;
 - In 2004 she was appointed as a member of the Commission at the Ministry of Health and Social Welfare of the Republic of Croatia with the task of drafting new guidelines on permissible levels of contaminants that can be found in food;
 - In accordance with the decision of Minister of Science in 2000 she was appointed to the Higher Education Advisory Committee of the Ministry of Science, Education and Sports of the Republic of Croatia.
- In accordance with the decision of President of the Parliament and President of the National Science Awards Committee, in July 2004 she was appointed for a member of the selection committee for the allocation of awards in the field of technical sciences.
- In addition to a remarkable scientific contribution to the field of toxicology and the general social significance of her work, it is important to emphasize the educational activity and outstanding pedagogical skills of Professor Jasna Kniewald. She was course coordinator (Food Toxicology, Basic Toxicology, Toxicological Aspects of Food Processing, Methodology of Scientific Work and Intellectual Property Protection and others), at FFTB (undergraduate and graduate levels), and since 1980 - doctoral course coordinator at FFTB and at several faculties of the University of Zagreb: Faculty of Science; Faculty of Pharmacy and Biochemistry; Faculty of Mining, Geology and Petroleum Engineering; Faculty of Chemical Engineering and Technology. At the University of Rijeka - Faculty of Medicine, she also participated as PhD course coordinator. Professor Kniewald was a leader of an expert group who had been preparing a postgraduate programme in Nutrition at FFTB from 1993 to 1995, and, as well, a member of expert group (1993-1994) in preparing postgraduate Toxicology programme (within the activity of the Croatian Society of Toxicology). Since 1997 she actively participated in the preparation of the new interdisciplinary postgraduate university study programme of Ecoengineering, whose curricula included courses from 13 faculties of the University of Zagreb in the field of technical and biotechnical sciences. Professor Kniewald is the author of the university textbook “Methodology of scientific work” and co-author of two scripts. She was a devoted mentor of 12 master theses and 4 doctoral dissertations and more than 45 graduate theses which illustrates her extraordinary teaching activities.
- Yet, even more important of the presented facts (and only a small part of them are presented) - is that Professor Kniewald was in the true sense of the word - a university *professor*, honoured, especially appreciated by students, with extensive knowledge, high moral values and personal ethics, doing her job with great love and enthusiasm both towards science and teaching, and ultimately towards students. Along with the knowledge, she conveyed to the students values and principles in science and scientific-research work with the aim of developing the social responsibility of members of the academic community and one day of young working people.
- Many generations of students will certainly keep the memory on loving professor and admirable scientist.

Assoc Prof Ivana Kmetič, PhD