



**Dr Goran Bačić**, redovni profesor

### **Biografija:**

Doktorirao je 1985. godine na Fakultetu za fizičku hemiju u Beogradu iz oblasti upotrebe nuklearne magnetne rezonancije u određivanju stanja vode i jona u biološkim sistemima. U toku 1985. godine, kao stipendista British Council-a, u istoj oblasti usavršavao se na Univerzitetu u Oksfordu, Velika Britanija. U periodu 1986-1988. godine boravio je kao gostujući istraživač na Medicinskom fakultetu Univerziteta u Illinoisu, Urbana, USA. Tokom ovog studijskog boravka, sarađivao je sa dr P. C. Lauterburom, dobitnikom Nobelove nagrade za fiziologiju i medicinu 2003. godine.

Goran Bačić je jedan od začetnika tehnika elektron paramagnetne rezonantne (EPR) oksimetrije, *in vivo* EPR merenja, EPR mikroskopije visoke rezolucije bioloških uzoraka, kao i 2D/3D EPR oslikavanja. Jedan je od osnivača svetskog udruženja za EPR spektroskopiju. Od 1989-1992. bio je šef Centra za magnetnu rezonancu Kliničkog centra Srbije gde je radio na edukaciji radiologa Srbije i razvoju MR tehnika, ali i na kliničkim i fundamentalnim istraživanjima iz oblasti MRI. Kao gostujući profesor boravio je na Dartmouth medicinskom fakultetu, Hanover, USA u periodu 1992-1994, gde je nastavio sa razvojem EPR tehnika i fuzijom EPR i MRI tehnika u ispitivanju različitih patologija na eksperimentalnim životinjama. Od 1995-2003. radi kao naučni šef na MRI

u Institutu za onkologiju i radiologiju, prevashodno na razvoju MRI tehnika za detekciju i diferencijaciju različitih tumora. Pored navedenog, radio je na EPR/NMR bioloških sistema *in vitro*, dozimetriji jonizujućeg zračenja u radioterapiji, kao i na razvoju primene neuronskih mreža za ispitivanje radioaktivnosti uzoraka iz životne sredine.

Zadnju dekadu svog života posvetio je istraživanjima vezanim za nove MRI-baziranih biomarkere za dijagnostiku neurodegenerativnih i malignim bolesti, rano utvrđivanje terapijskog odgovora tumora (posebno tumora dojke) na različite vrste hemoterapeutika, ispitivanje novih radioprotektivnih agenasa i unapredjenju primene EPR metode za praćenje slobodnih radikala u biološkim sistemima.

Objavio je preko 130 radova sa SCI liste i ima preko 1200 citata prema Scopus-u. Bio je jedan od osnivača Društva fizikohemičara Srbije, te član Društva biofizičara Srbije i Internacionalnog EPR udruženja. Na Fakultetu za fizičku hemiju bio je zadužen za nastavu iz predmeta Biofizička hemija na osnovnim studijama, Fizičko-hemijske metode u medicini i Radijaciona biologija na doktorskim studijama. Bio je koordinator obaveznog predmeta na master studijama iz Biofizičke hemije i dinamike neravnotežnih procesa.

## Glavna dostignuća:

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