

# Curriculum Vitae

## PERSONAL INFORMATION

Name and surname **Nadica Maltar Strmečki**  
Academic title assistant professor  
Year and institution 2005., University of Zagreb, Faculty of science, Physics Department  
of PhD obtained  
Address Ruđer Bošković Institute Bijenička cesta 54, HR-10000 Zagreb,  
Croatia  
Phone +385 (0)1 4561 127  
Fax --  
E-mail nstrm@irb.hr  
Personal web page -  
Citizenship Croatian  
Date and place of birth 21. siječanj 1972., Zagreb, Croatia

## WORK EXPERIENCE<sup>1</sup> (CHRONOLOGICALLY)

Date (from – until) 01.03.2011.- today  
Institution Ruđer Bošković Institute Bijenička cesta 54, HR-10000 Zagreb,  
Croatia  
Position Scientific associate, Department of Physical Chemistry  
Work field Application of Advanced Paramagnetic Resonance Methods in  
Molecular Biophysics, Physical Chemistry and Dosimetry

Date (from – until) 22.04.2008.-28.02.2011  
Institution University of Zagreb, Faculty of Veterinary Medicine, Heinzelova 55,  
Zagreb  
Position Assistant Professor, Department of Physics  
Work field Lectures and Laboratory Exercises in Physics, Biophysics and Medical  
physics on the graduate and doctoral studies of veterinary medicine

Date (from – until) 17.12.2005.-23.04.2008.  
Institution University of Zagreb, Faculty of Veterinary Medicine, Heinzelova 55,  
Zagreb  
Position Senior Assistant, Department of Physics  
Work field Teaching in practical part of the courses in physics, medical physics and  
biophysics; Scientific and research work in the field of advanced  
paramagnetic resonance methods in molecular biophysics, physical  
chemistry and medical physics

Date (from – until) 19.12.2002.-16.12.2005.  
Institution University of Zagreb, Faculty of Veterinary Medicine, Heinzelova 55,  
Zagreb  
Position Assistant, Department of Physics  
Work field Teaching in practical part of the courses in physics, medical physics and  
biophysics; Scientific and research work in the field of advanced  
paramagnetic resonance methods in molecular biophysics, dosimetry

<sup>1 2 3</sup> Please add rows to enter all required information

\* all information in the document should be entered chronologically – from the most recent to the oldest

and medical physics

Date (from – until) 01.07.1998.-18.12.2002  
Institution University of Zagreb, Faculty of Veterinary Medicine, Heinzelova 55, Zagreb  
Position Yang assistant, Department of Physics  
Work field Teaching in practical part of the courses in physics, medical physics and biophysics; Scientific and research work in the field of advanced paramagnetic resonance methods in biophysics, dosimetry and medical physics

Date (from – until) 01.01.1998.-30.06.1998.  
Institution MORANA-ZAGREB Centar za strane jezike, poduku, obrazovanje odraslih i ostalo obrazovanje d.d., 10002 Zagreb  
Position teacher  
Work field Teaching physics, adult education

**EDUCATION<sup>2</sup>**  
(CHRONOLOGICALLY)

Date 16. 12. 2005.  
Place Zagreb  
Institution Faculty of Science, Physics Department, University of Zagreb  
Title of qualification awarded Ph. D. of Natural Science

Date 27.03. 2002.  
Place Zagreb  
Institution Faculty of Science, Physics Department, University of Zagreb  
Title of qualification awarded Master of Natural Science, Field: Medical Physics

Date 1990.-1997.  
Place Zagreb  
Institution Faculty of Science, Physics Department, University of Zagreb  
Title of qualification awarded B.Sc.

Date 1986.-1990.  
Place Zagreb  
Institution Centre for Education in culture, Zagreb  
Title of qualification awarded Associate in Information and Communications Documentation activities

Date 1978-1986.  
Place Zagreb  
Institution Primary school „Veljko Vlahović“, Zagreb  
Title of qualification awarded

**TRAINING**  
(CHRONOLOGICALLY)

Year 2008  
Place Rheinstetten, Njemačka  
Institution COST P15 „Spin Echo Workshop“, Bruker  
Subject and skills covered Advanced pulsed EPR methods

Year 2008.  
 Place St. Andrews, United Kingdom  
 Institution University of St. Andrews  
 Subject and skills covered 4<sup>th</sup> EF EPR Summer School, COST P15 Training School and SUSSP 64

Year 2007.  
 Place Tarragona, Spain  
 Institution COST P15  
 Subject and skills covered COST P15 Workshop «Electron-Nuclear Spin Interactions»

Year 2003.  
 Place Retie, Belgium  
 Institution European Federation of EPR Groups  
 Subject and skills covered EURO Summer School "Modern EPR Spectroscopy- Metodology and Applications in Physics, Chemistry and Biology"

Year 2000.  
 Place Neptun, Rumania  
 Institution Romanian Society of Pure and applied Biophysics  
 Subject and skills covered International Workshop on "New Biophysical Methods in Biology and Medicine"

Year 2000  
 Place Zagreb, Croatia  
 Institution Faculty of Electrical Engineering and Computing, University of Zagreb, Croatia  
 Subject and skills covered 8th International Summer School on Image Processing

#### LANGUAGES

**MOTHER TONGUE** Croatian  
**ENGLISH LANGUAGE**  
 Speaking Active  
 Writing Active  
 Reading Active

#### OTHER FOREIGN LANGUAGES<sup>3</sup>

Language German  
 Speaking Passive  
 Writing Passive  
 Reading Passive

#### RESEARCH AND OTHER PROJECTS

(CHRONOLOGICALLY; LEADER AND ASSOCIATES; FUNDING SOURCE)

- 1998-2002 associate  
 project "Magnetske rezonancije feroelektrika i supravodiča" in MZOS Program: "Struktura i dinamika sintetičkih i bioloških tvari" (00980610), leader: dr. sc. Boris Rakvin
- 1999-2001 associate  
 Bilateral Cooperation with Slovenia, "Studija relaksacijskih procesa u feroelektricima s vodikovom vezom", leader: dr. sc. Boris Rakvin
- 2002-2006 associate  
 MZOS Project "Elektronska spinska rezonancija u sustavima s paramagnetskim česticama"

(0098038), voditelj: dr. sc. Boris Rakvin

- 2006- 2009 associate međunarodnom projektu u okviru bilateralne suradnje sa Slovenijom, Primjena novih impulsnih EPR tehnika u istraživanju novih materijala na bazi fularena: Strukturna svojstva  $\text{Li}_4\text{C}_{60}$
- 
- 2006-2010 associate  
Bilateral Cooperation with Slovenia Austrija: Primjene novih ESR tehnika u kemiji.
- 2005-2010 associate  
project COST P-15 "Advanced Paramagnetic Resonance Methods in Molecular Biophysics"
- 2006-.... associate  
MZOS projekt "Molekulska struktura i dinamika sustava s paramagnetskim česticama" (098-0982915-2939) in Program: "Molekulska struktura, dinamika i reaktivnost", leader: dr. sc. Boris Rakvin

#### TEACHING

(CHRONOLOGICALLY; UNDERGRADUATE, GRADUATE , POSTGRADUATE STUDY PROGRAMMES

- 2009-..... subject leader "Physics and Biophysics", "Basics of physics for diagnostical methods" and "Selected chapters of biomedical physics for veterinarians ", University Integrated Undergraduate And Graduate Study, faculty of Veterinary medicine, University of Zagreb, Zagreb, Croatia
- 2009-..... subject leader "Biophysics and Instrumental Technics", University PostGraduate Study, Faculty of Veterinary medicine, University of Zagreb, Zagreb, Croatia
- 2009-..... subject leader „Physical methods in preservation and analasys of food of animal origin" University Doctoral Study, Faculty of Veterinary medicine, University of Zagreb, Zagreb, Croatia
- 2005-2008 asistant "Medical Physics", University Integrated Undergraduate And Graduate Study, faculty of Veterinary medicine, University of Zagreb, Zagreb, Croatia
- 1998.-2005. asistant "Physics and Biophysics", University Integrated Undergraduate And Graduate Study, faculty of Veterinary medicine, University of Zagreb, Zagreb, Croatia
- od 1999- assistant"Basics of physics for diagnostical methods", University Integrated Undergraduate And Graduate Study, faculty of Veterinary medicine, University of Zagreb, Zagreb, Croatia
- 2005-2008 assistant"Selected chapters of biomedical physics for veterinarians ", University Integrated Undergraduate And Graduate Study, faculty of Veterinary medicine, University of Zagreb, Zagreb, Croatia

#### MENTORSHIP OF DEFENDED DOCTORAL AND MASTER DISSERTATIONS AND TRAINING OF YOUNG RESEARCHERS AND SCIENTISTS

(CHRONOLOGICALLY)

#### GRADUATE WORKS

1. BIJELIC, ZORAN.

APPLICATION OF ESR SPECTROSCOPY IN IDENTIFICATION OF THE CHICKEN MEAT PRESERVED BY GAMA IRRADIATION / GRADUATE THESIS.

ZAGREB : FACULTY OF VETERINARY MEDICINE, 08.07. 2008., MENTOR: RAKVIN, BORIS ; MALTAR-STRMECKI, NADICA.

2. MUTAK, TANJA.

APPLICATION OF ESR DOSIMETRY IN VETERINARY MEDICINE / GRADUATE THESIS.  
ZAGREB : FACULTY OF VETERINARY MEDICINE, 03.05. 2007., MENTOR: RAKVIN, BORIS ; MALTAR-STRMECKI, NADICA.

3. SEMREN, IVAN:

FEEDSTOCK CHARACTERISTIC AND PRESERVATION IN SALT OF COW-SKIN/ GRADUATE THESIS.  
ZAGREB : FACULTY OF VETERINARY MEDICINE, 20.02. 2009. MENTOR: DŽAJA, PETAR ; MALTAR-STRMECKI, NADICA.

4. ŠAMARIJA, KRISTIJAN:

INFLUENCE OF AD3E VITAMINES APPLICATION ON SOME HEMATOLOGICAL PARAMETERS IN PIGS 24 HOURS BEFORE TRANSPORT/ GRADUATE THESIS. ZAGREB : FACULTY OF VETERINARY MEDICINE, 17.02. 2010. MENTOR: DŽAJA, PETAR ; MALTAR-STRMECKI, NADICA.

### **STUDENT WORKS**

1. Dzaja, Petar; Maltar-Strmecki, Nadica; Plazanic, Anita; Mrljak, Vladimir; Baric-Rafaj, Renata; Vujevic, Ivica; Radic, Premil; Kisicek, Franjo; Vujic, Martin; Plazanic, Zdravko. **Influence of AD3E vitamins application on some biochemical parameters in pigs 24 hours before transport**// *IV Hrvatski veterinarski kongres, Sibenik, 2008.* / Ivica Harapin, editor(s). Zagreb : Hrvatska veterinarska komora, 2008. 115-124

2. Dzaja, Petar; Maltar-Strmecki, Nadica; Plazanic, Anita; Mrljak, Vladimir; Baric-Rafaj, Renata; Vujevic, Ivica; Radic, Premil; Samarija, Kristijan; Bagaric, Jozo; Radacic, Mirko. **Influence of AD3E vitamins application on some hematological parameters in pigs 24 hours before transport** // *IV Hrvatski veterinarski kongres, Sibenik, 2008.* / Ivica Harapin, editor(s). Zagreb, 2008. 105-113

3. Maltar-Strmecki, Nadica; Bijelic, Zoran; Rakvin, Boris.

**Detection and identification of chicken pasteurized with gamma irradiation by ESR spectroscopy** // *Znanstveno-strucni sastanak "Veterinarska znanost i struka"* ; *Zbornik sazetaka / Cvrtila, Zeljka ; Konjevic Dean, editor(s).* Zagreb : Veterinarski fakultet, 2007. 66-67

4. Maltar-Strmecki, Nadica; Mutak, Tanja; Rakvin, Boris.

**Electron spin resonance (ESR) in biodosimetry**// *Hrvatski Veterinarski Vjesnik.* **30** (2007) , 2-3; 113-120

5. Maltar-Strmecki, Nadica; Jesic, Sinisa; Rakvin, Boris.

**Identification of the Norway lobster (Nephrops norvegicus) preserved with ionizing radiation and testing of prescribed dose with electron paramagnetic resonance spectroscopy**// *Meso.* **6** (2005) ; 35-39.

### **VISITS TO FOREIGN RESEARCH AND EDUCATION INSTITUTIONS**

(CHRONOLOGICALLY; ONLY VISITS LONGER THAN 3 MONTHS)

### **AWARDS AND RECOGNITIONS**

(CHRONOLOGICALLY)

## ORGANIZATIONAL SKILLS AND COMPETENCES

(CHRONOLOGICALLY; ORGANIZATION OF HOME AND INTERNATIONAL SCIENCE EVENTS )

2010-.... Evaluator in PHY panel of FP7 Program, Research Executive Agency, Brussel, Belgium

2009-2010 Head of Physics Department, Faculty of Veterinary Medicine, Universtity of Zagreb

2005-...Organising comitee member of the scientific meeting "Veterinary science and practice"

2003-2006 Board member of Veterinary Faculty assistants Association

2003 One of founders of Veterinary Faculty assistants association

## MEMBERSHIP IN SCIENCE ORGANIZATIONS AND BODIES

(CHRONOLOGICALLY; HOME AND INTERNATIONAL ORGANIZATIONS AND BODIES)

Croatian Physical Society

Croatian Biophysical Society

## COMMISSIONS, COMMITTEES, BOARDS AND WORK GROUPS

(CHRONOLOGICALLY; HOME AND INTERNATIONAL)

member of Committees of Faculty of veterinary medicine, University of Zagreb

## PAPERS

(CHRONOLOGICALLY; RESEARCH BOOKS, HOME AND INTERNATIONAL RESEARCH JOURNALS, HOME AND INTERNATIONAL CONFERENCE PROCEEDINGS; PLEASE WRITE THEIR IMPACT FACTOR)

### Journal articles and review articles in CC journals

- [1] Rakvin B., Maltar-Strmečki N., (2000) Study of relaxation rates of stable paramagnetic centers in  $\gamma$ -irradiated L-alanine. *Spectrochimica Acta Part A – Molecular Spectroscopy* 56 (2): 399-408.
- [2] Rakvin B., Maltar-Strmečki N., Cevc P., Arčon D., (2001) A Pulse EPR Study of Longitudinal Relaxation of the Stable Radical in  $\gamma$ -irradiated L-alanine. *Journal of Magnetic Resonance* 152 (1): 149-155.
- [3] Maltar-Strmečki N., Rakvin B., Cevc P., Arčon D., (2002) Relaxation Mechanism in  $\gamma$ -irradiated L-alanine Studied by Transfer Saturation EPR and Pulse EPR. *Applied Magnetic Resonance* 22: 551-560.
- [4] Rakvin B., Maltar-Strmečki N., Ramsey C. M., Dalal N. S., (2004) Heat capacity and electron spin echo evidence for low frequency vibrational modes and lattice disorder in L-alanine at cryogenic temperatures. *Journal of Chemical Physics* 120 (14): 6665-6673.
- [5] Maltar-Strmečki, N., Rakvin B., (2005) Thermal stability of radiation-induced free radicals in gamma-irradiated L-alanine single crystals. *Applied Radiation and Isotopes* 63(3): 375-380.
- [6] Katušin-Ražem B., Hamitouche K., Maltar-Strmečki N., Kos K., Pucić I., Britvić-Budicin S., Ražem D., (2005) Radiation sterilization of ketoprofen. *Radiation Physics and Chemistry*. 73(2): 111-116.
- [7] Rakvin B., Maltar-Strmečki N., (2005) Study of the first stable L-alanine paramagnetic center by 2D-HYSCORE spectroscopy: Detection of  $^{14}\text{N}$  hyperfine and quadrupole splitting. *Chemical Physics Letters*, 145: 161-164.
- [8] Maltar-Strmečki, N., Rakvin B., (2006) Evidence for disorder in L-alanine lattice detected by Pulsed-EPR spectroscopy at cryogenic temperatures. *Spectrochimica Acta Part A – Molecular Spectroscopy*, 63: 784-787.
- [9] Rakvin B., Maltar-Strmečki N., Nakagawa. K., (2007) Pulsed EPR study of low-dose irradiation effects in L-alanine crystals irradiated with  $\gamma$ -rays, Ne and Si ion beams, *Radiation Measurements*, 42 (9): 1469-1474.

- [10] Rakvin B., Maltar-Strmečki N., Kattinig D., Günter G., (2007) ENDOR study on the dynamic properties of stable paramagnetic centres in  $\gamma$ -irradiated L-alanine crystals. *Molecular Physics*, 105 (15-16): 2087-2094.
- [11] Rakvin, B., Maltar-Strmečki, N., Kappl, R., Hüttermann, J., (2009) Study of stable L-alanine radicals by W-band EPR spectroscopy. *Applied Magnetic Resonance*. 36, 2-4, 275-284.
- [12] Grabarević, Ž., Bubić Špoljar, J., Gudan Kurilj, A., Šoštaric-Zuckermann, I.-C., Artuković, B., Hohšteter, M., Beck, A., Džaja, P., Maltar-Strmečki, N. (2009): Mast Cell Tumor in Dogs – Incidence and Histopathological Characterization. *Collegium Antropologicum* 1, 253-258.
- [13] Rakvin B., Maltar-Strmečki N., Kattinig D., Günter G. (2010): ENDOR Study on the Dynamic Properties of the First Stable Paramagnetic Center in  $\gamma$  - Irradiated L- Alanine Crystals. *Journal of Physical Chemistry A* 114, 28; 7500-7505.

### **Scientific papers in other journals**

1. Džaja, Petar; Plazonic, Anita; Maltar-Strmečki, Nadica; Mrljak, Vladimir; Baric-Rafaj, Renata; Grabarević, Zeljko; Vujević, Ivica; Radic, Premil; Bagarić, Jozo; Radacić, Mirko. Effects of a 185 km long transport on some biochemical parameters in pigs// *Hrvatski veterinarski vjesnik - Hrvatsko veterinarsko društvo*. 31 (2008) , 1-2; 59-67 (journal article).
2. Maltar-Strmečki, Nadica; Mutak, Tanja; Rakvin, Boris. Electron spin resonance (ESR) in biodosimetry// *Hrvatski Veterinarski Vjesnik*. 30 (2007) , 2-3; 113-120 (review article).
3. Maltar-Strmečki, Nadica; Jesić, Sinisa; Rakvin, Boris. Identification of the Norway lobster (*Nephrops norvegicus*) preserved with ionizing radiation and testing of prescribed dose with electron paramagnetic resonance spectroscopy// *Meso*. 6 (2005) ; 35-39 (preliminary note).

### **Nonscientific papers in other journals**

1. Maltar-Strmečki, Nadica. 65 Years of Teaching, and Scientific Work at Physics Department of the Faculty of Veterinary Medicine, University of Zagreb // *Veterinarska stanica : znanstveno-strucni veterinarski casopis*. 39 (2008) , 4; 239-246 (journal article).
2. Džaja, Petar., Nadica Maltar-Strmečki, Anita Plazonic, Vladimir Mrljak, Renata Baric-Rafaj, Premil Radic, Ivica Vujević, Jozo Bagarić, Bela Njari, Ivanka Milic-Dolic, Mirko Radacić. Effect on some hematological parameters in hogs caused by transport at a distance of 185 kilometers// *Hrvatski veterinarski vjesnik*. 30 (2007.) , 41; 237-244 (journal article)
3. Maltar-Strmečki, Nadica; Rakvin, Boris. Application of EPR spectroscopy in preservation of foodstuff with ionizing radiation. 1. part: Accurate detection of irradiation dose by EPR/alanine dosimetry// *Meso : prvi hrvatski casopis o mesu*. 6 (2004) ; 42-45 (journal article).
4. Maltar-Strmečki, Nadica; Rakvin, Boris. Application of EPR spectroscopy in preservation of foodstuff with ionizing radiation. 2. part: Testing of prescribed dose in foodstuff of animal origin preserved with ionising radiation// *Meso : prvi hrvatski casopis o mesu*. 6 (2004) ; 50-54 (journal article).

## **Editor's books**

1. Book of Abstracts, The International Congress "Veterinary Science and Profession" Zagreb, October 3rd and 4th, 2011 / Maltar Strmečki, Nadica; Severin Krešimir; Slavica Alen, editor(s). Zagreb : Veterinarski fakultet Sveučilišta u Zagrebu, 2011 (proceedings).
2. Zbornik sažetaka Veterinarska znanost i struka / Kozačinski, Lidija; Maltar-Strmečki, Nadica; Štoković, Igor, editor(s). Zagreb : Veterinarski fakultet Sveučilišta u Zagrebu, 2009. (proceedings).
3. Vučevac-Bajt, Vesna; Kos, Josip; Makek, Zdenko; Zdravko, Žvorc: COLLECTION OF VETERINARY INSTRUMENTS FROM THE MUSEUM OF VETERINARY HISTORY/ Maltar-Strmečki, Nadica, editor. Zagreb : Intergrafika TTŽ d.o.o, Zagreb, 2009 (monograph)

## **Home and international proceedings**

1. Maltar-Strmečki, Nadica; Rakvin, Boris; Pavić, Ana: ENDOR STUDY OF JAHN-TELLER EFFECT IN GAMMA-IRRADIATED L-ALANINE CRYSTAL PROBED BY SECOND STABLE RADICAL, Book of Abstracts EUROMAR 2011, Magnetic Resonance Conference, 21-25.08.2011 Frankfurt : Cuvillier Verlag, Gottingen , 2011. p250 (poster,abstract,scientific)
2. Pavić, Ana; Kerhač, Valentina; Maltar-Strmečki, Nadica; Carić, Dejana; Matašin, Željka: Antioxidant activities of several Croatian honeys studied by electrons spin resonance; Book of Abstracts ; The International Congress "Veterinary science and profession", Zagreb, October 3rd and 4th, 2011. / Maltar-Strmečki, Nadica ; Severin, Krešimir ; Slavica, Alen (ur.). - Zagreb: Faculty of Veterinary Medicine, University of Zagreb , 2011. p 60 (lecture,published,scientific).
3. Maltar-Strmečki, Nadica; Rakvin, Boris; Kattnig, Daniel; Grampp, Günter. Dynamic disorder in  $\gamma$  -irradiated L-alanine crystal studied by ENDOR spectroscopy // *Advanced techniques in EPR, Poster abstracts*. St. Andrews, Scotland : COST P15, 2008. 40-40 (poster,abstract,scientific).
4. Dzaja, Petar; Maltar-Strmečki, Nadica; Plazanic, Anita; Mrljak, Vladimir; Baric-Rafaj, Renata; Vujevic, Ivica; Radic, Premil; Kisicek, Franjo; Vujic, Martin; Plazanic, Zdravko. Influence of AD3E vitamins application on some biochemical parameters in pigs 24 hours before transport// *IV Hrvatski veterinarski kongres, Sibenik, 2008*. / Ivica Harapin, editor(s). Zagreb : Hrvatska veterinarska komora, 2008. 115-124 (lecture,published,scientific).
5. Dzaja, Petar; Maltar-Strmečki, Nadica; Plazanic, Anita; Mrljak, Vladimir; Baric-Rafaj, Renata; Vujevic, Ivica; Radic, Premil; Samarija, Kristijan; Bagaric, Jozo; Radacic, Mirko. Influence of AD3E vitamins application on some hematological parameters in pigs 24 hours before transport // *IV Hrvatski veterinarski kongres, Sibenik, 2008*. / Ivica Harapin, editor(s). Zagreb, 2008. 105-113 (lecture,published,scientific).
6. Maltar-Strmečki, Nadica; Bijelic, Zoran; Rakvin, Boris. Detection and identification of chicken pasteurized with gamma irradiation by ESR spectroscopy // *Znanstveno-strucni sastanak "Veterinarska znanost i struka" ; Zbornik sazetaka / Cvrtila, Zeljka ; Konjevic Dean, editor(s)*. Zagreb : Veterinarski fakultet, 2007. 66-67 (poster,abstract,scientific).
7. Maltar-Strmečki, Nadica; Rakvin, Boris. HYSORE study of  $^{14}\text{N}$  splitting for the second stable L-alanine paramagnetic center// *EUROMAR Magnetic Resonance Conference, Programme and Book of Abstracts, Tarragona, Spain / Pons, Miquel, editor(s)*. Tarragona, Spain, 2007. 221-221 (poster,international peer-review,abstract,scientific).
8. Nadica Maltar-Strmečki; Boris Rakvin. Study of  $^{14}\text{N}$  hyperfine splitting on SAR2 center in irradiated L-alanine by pulse EPR// *Peti znanstveni sastanak Hrvatskog fizikalnog društva, Knjiga sazetaka*. Zagreb: HFD, 2007. 110-110 (poster,abstract,scientific).
9. Rakvin, Boris; Maltar-Strmečki, Nadica; Kattnig, Daniel; Grampp, Günter. Temperature Dependence of the structure of the first stable L-alanine radical: An



- ENDOR study // *The 40th Annual International Meeting Electron Spin Resonance Group Royal Society of Chemistry & COST P15 action on " ; Advanced Paramagnetic Resonance Methods in Molecular Biophysics" ; ; Oxford.*  
2007. 118-118 (poster,international peer-review,abstract,scientific).
10. Rakvin, Boris; Maltar-Strmecki, Nadica; Nakagawa, Kouichi.  
Pulse EPR study of low dose irradiation effects for for L-alanine crystal irradiated with gamma-rays, Si and Ne ion beams// *6th European Federation of EPR Groups Meeting-Programme and Book of Abstracts.*  
2006. P33 (poster,international peer-review,abstract,scientific).
  11. Maltar-Strmecki, Nadica; Rakvin, Boris.  
Thermal stability of the stable L-alanine radicals// *Veterinarska znanost i struka / Cvrtila, Zeljka, editor.Zagreb : Veterinarski fakultet, 2005. 67* (lecture,domestic peer-review,abstract,scientific).
  12. Maltar-Strmecki, Nadica; Rakvin, Boris.  
Thermal stability of radicals in gamma-irradiated L-alanine single crystals // *COST P15 Abstracts "1st joint WG meeting and 2 nd MC meeting" / Van Doorslaer, Sabine ; Graham, Smith, editor(s).*  
Budimpesta : COST P15, 2005. 45-45 (poster,abstract,scientific).
  13. Katusin-Razem, Branka; Hamitouche, Katia; Maltar-Strmecki, Nadica; Kos, Karmen; Pucic, Irina; Britvic-Budicin, Smiljana; Razem, Dusan.  
Radiation sterilization of ketoprofen // *2003 International Meeting on Radiation Processing - Conference Program and Abstracts.*  
Chicago : STERIS Isomedix Services, 2003. 291-291 (poster,international peer-review,abstract,scientific).
  14. Maltar-Strmecki, Nadica; Rakvin, Boris; Ramsey, M Chris; Dalal, Naresh S.  
Electron spin echo and heat capacity evidence for low frequency vibrational modes and lattice disorder in L-alanine at cryogenic temperatures// *5th Meeting of EFEPR, Book of abstracts.* Lisabon, Portugal, 2003. 46 (poster,abstract,scientific).
  15. Maltar-Strmecki, Nadica; Rakvin, Boris.  
Motional dynamics of CD<sub>3</sub> group in L-alanine-d7 studied by CW and Pulse // *Modern EPR Spectroscopy.* Retie : European Federation of EPR Groups, 2002.  
(poster,abstract,scientific).
  16. Maltar-Strmecki, Nadica; Rakvin, Boris.  
Study of Relaxation Mechanisms of Stable Paramagnetic Center in L-alanine // *Znanstveni skup hrvatskih biofizicara, Zagreb.*  
2001. 10-10 (lecture,domestic peer-review,abstract,scientific).
  17. Maltar-Strmecki, Nadica; Rakvin, Boris.  
Study of Relaxation Mechanisms of Stable Paramagnetic Center in L-alanine // *Knjiga sazetaka, Treci znanstveni sastanak Hrvatskog fizikalnog drustva, PMF, Zagreb, Hrvatsko fizikalno drustvo.*  
Zagreb, 2001. 90-90 (poster,domestic peer-review,abstract,scientific).
  18. Rakvin, Boris; Maltar-Strmecki, Nadica; Cevc, Pavle; Arcon, Denis.  
Relaxation mechanism of the first stable paramagnetic center in gamma-irradiated alanine; Application on ESR/Alanine Dosimetry// *43th Rocky Mountain Conference on Analytical Chemistry.*  
Denver, Colorado, 2001. 63-63 (poster,abstract,scientific).
  19. Maltar-Strmecki, Nadica; Rakvin, Boris.  
Dynamics of stable paramagnetic centers in L-alanine studied by transfer saturation EPR // *33rd Annual International Meeting ESR Group RSC and 4th Meeting of European federation of EPR Groups (EFEPR) "Prospects for EPR Spectroscopy in the 21st century".*  
Norwich, 2000. (poster,international peer-review,abstract,scientific).
  20. Maltar-Strmecki, Nadica; Rakvin, Boris.  
Relaxation rates of stable paramagnetic centers in L-alanine detected by transfer saturation EPR // *30th Congress AMPERE on magnetic resonance and related phenomena.*  
Lisabon, 2000. 48-48 (lecture,international peer-review,abstract,scientific).

## **Graduation thesis**

1. Bijelic, Zoran.

Application of ESR spectroscopy in identification of the chicken meat preserved by gama irradiation / graduate thesis.

Zagreb : Faculty of Veterinary Medicine, 08.07. 2008., Mentor: Rakvin, Boris ; Maltar-Strmecki, Nadica.

2. Mutak, Tanja. Application of ESR dosimetry in veterinary medicine / graduate thesis.

Zagreb : Faculty of Veterinary Medicine, 03.05. 2007.,Mentor: Rakvin, Boris ; Maltar-Strmecki, Nadica.

3. Semren, Ivan: Feedstock characteristic and preservation in salt of cow-skin/ graduate thesis. Zagreb : Faculty of Veterinary Medicine, 20.02. 2009. Mentor: Džaja, Petar ; Maltar-Strmecki, Nadica.

4. Šamarija, Kristijan: Influence of AD3E vitamins application on some hematological parameters in pigs 24 hours before transport/ graduate thesis. Zagreb : Faculty of Veterinary Medicine, 17.02. 2010. Mentor: Džaja, Petar ; Maltar-Strmecki, Nadica.

4. Kerhač Valentina: Antioxidant potential of several Croatian honeys studied by electrons spin resonance/ graduate thesis. Zagreb : Faculty of Veterinary Medicine, 26.09. 2011. Mentor: Matašin, Željka ; Maltar-Strmecki, Nadica.

### **OTHER RESEARCH ACTIVITIES**

(CHRONOLOGICALLY; CHIEF EDITOR OR EDITOR OF RESEARCH BOOK, HOME AND INTERNATIONAL RESEARCH JOURNALS, HOME AND INTERNATIONAL CONFERENCE PROCEEDINGS AND OTHER)

### **COMPUTER SKILLS**

BASIC and MATLAB programming, making www pages by HTML and Frontpage; using MS OFFICE package and operating system Windows, XSOPHE, EasySpin, software for statistical analyses of data (SAS, Statistica)

### **OTHER IMPORTANT SKILLS AND COMPETENCES**

### **ADDITIONAL INFORMATION AND NOTES**