

EVA STOFFELS-ADAMOWICZ: CURRICULUM VITAE

VITAL STATISTICS

Born – October 17th 1968 in Warsaw, Poland. Married, no children.

EDUCATION

- **1983 – 1987:** High school education, Warsaw, Poland. **Activities:** part time study at the Department of Chemistry (Univ. Warsaw), research projects in organic chemistry. National & International Chemistry Olympiad (Leiden, the Netherlands, 1986, Veszprem, Hungary, 1987).
- **1987 – 1990:** Physics and chemistry studies (in parallel) at the University of Warsaw towards a bachelor level. **Activities:** 1989 – external project in mathematical physics (non-linear wave phenomena, modelling), Weizmann Institute of Science, Israel.
- **1990 – 1991:** Study at the Department of Physics, Eindhoven University of Technology (TUE), the Netherlands. 1990: external project, Philips Research Laboratories, Eindhoven. 1991: MSc (ir) thesis *cum laude* in physics.
- **1991 – 1994:** PhD project, Department of Applied Physics, TUE, the Netherlands. 1994: PhD thesis: "Electrons, ions and dust in a radio-frequency discharge".
- **2009 – 2011:** Education at the Faculty of Pharmaceutical, Biomedical and Veterinary Sciences, Antwerp University, Belgium. 2011: Bachelor in Veterinary Medicine with great honours.
- **2011 – 2014:** Education at the Faculty of Veterinary Medicine, Ghent University, Belgium. 2014: MSc in Veterinary Medicine with great honours.

JOB POSITIONS

- **1995 – 1997:** EU – Japanese Society for the Promotion of Science fellow, Kyoto University, Japan.
- **1997 – 1999:** Postdoctoral researcher, Department of Applied Physics, TUE, the Netherlands. 1998: sabbatical leave to EU-JRC Ispra, Italy.
- **1999 – 2002:** Royal Dutch Academy of Science (KNAW) fellow, Department of Applied Physics, TUE, the Netherlands.
- **2002 – 2009:** Tenured staff member, Department of Biomedical Engineering, TUE, the Netherlands.
- **2009 -...:** Co-director Marmelot – Maru-vet Ltd.
- **2014 -...:** Veterinarian running an independent practice (Marumoto Veterinary Practice for exotic companion animals).
- **2015 -...:** Instructor in microsurgery and laboratory animal science at René Remie Surgical Skills Centre.

EXPERTISE

- Thorough knowledge of anatomy and physiology of domestic animals, with focus on specific aspects in small exotic companion mammals.
- Extensive knowledge of nutrition of rodents and rabbits, with focus on emergency feeding of hospitalized animals. Vast experience in developing and commercialising veterinary diets.
- Thorough knowledge of dentistry of rabbits and rodents, with extensive practical skills.
- Thorough knowledge of pathology of domestic animals, including epidemiology, disease monitoring and prevention as well as conducting autopsies and collecting samples for laboratory analyses. Extensive skills in microscopy; ability to fully interpret histological findings.
- Thorough knowledge of bacteriology, virology and parasitology. Practical skills in laboratory techniques, including standard (bacterial culturing and identification) and molecular methods (immunohistochemistry, immunofluorescent assays, polymerase chain reaction and other DNA techniques).
- Extensive practical skills in biomedical research techniques: fluorescence and confocal microscopy, flow cytometry, cell and tissue culturing.
- Thorough knowledge of clinical diagnostic and medical imaging techniques, such as haematology and serum biochemistry, ultrasound, radiography, CT and MRI. Legal qualifications to operate medical equipment that involves ionizing radiation. Ability to fully interpret medical imaging data.
- FELASA C certificate enabling to conduct laboratory animal experiments, experience with animal tests.
- Extensive practical skills in micro-surgery, certificates of completing two modules at René Remie Surgical Skills Centre (www.rrssc.eu): blood vessel and nerve surgery, abdominal surgery in laboratory animals (March-September 2014). Learning micro-surgery techniques at the Plastic Surgery Clinic, Ghent Academic Hospital (October – December 2014).
- Wide experience in anaesthesiology, certificate of completing the Paul Flecknell workshop on anaesthesia in laboratory animals, Newcastle University, September 2014.
- Extensive practical skills in electrical engineering and ICT.
- Academic qualities: ability to independently conduct scientific research, profound critical approach to problems, problem solving-oriented way of thinking, ability to establish networks, sustain collaborations and supervise younger colleagues in academic research, much experience with fund raising, teaching and scientific communication.

ACADEMIC TEACHING

PhD thesis promotor: 9 PhD students.
MSc supervisor: more than 20 students.
Student project supervisor (*stage*): more than 20 students.

Teaching tasks: physics:
1998-2002: lecturer Optics

1999-2002: supervisor of Multi-disciplinary Projects (MDP) in engineering

Teaching tasks: biomedical engineering:

2003-....: lecturer Electromagnetism

2002-....: supervisor of Inter-faculty projects (IFP)

Teaching tasks, international:

1998: summer school on plasma physics, Eindhoven.

2002: GEC tutorial, Minneapolis (USA).

2003: summer school, Bad Honnef, Germany.

2004: ICOPS mini-course (Baltimore, USA) on biomedical plasma applications.

2004: summer school, Bad Honnef, Germany.

2004: "Development of a plasma catheter": Inter-faculty project with participation of Vanderbilt University (USA).

2005-2008: Abdus Salam International School (Trieste, Italy), various courses.

2007-2008: MSc curriculum in Plasma Technology, various lectures, University of Padova, Italy.

GRANTS AND AWARDS

2006: Dutch Burn Foundation Grant "Cold plasma for burn wound treatment", 200 k€

2005: STW-Valorisation Grant: "Plasma needle for dentistry", 30 k€

2004: Cluster-Stimulus Grant for collaboration of academia with SME: "Fluorescence photography for dental diagnostics", 30 k€

2004: NWO Dutch-Russian Collaboration grant "UV and plasma sterilisation", 100 k€

2001: NWO Vernieuwingsimpuls grant "Micro-plasmas for human health", 810 k€

1999: Royal Dutch Academy of Science (KNAW) fellowship "Surface impact on the plasma", 300 k€

1999: NATO-Science for Peace grant "Excimer laser", 1200 k€

1997: Plasma Chemistry Prize (IUPAC) for the invention: Electron Attachment Mass Spectrometry.

1996: VBL (Joint Venture Laboratory) research grant in Kyoto, Japan, 25 k€

1995: EU – JSPS fellowship for research at the Kyoto University, Japan, 400 k€

SCIENTIFIC RECORDS

Peer-reviewed publications: 90, H-index 40.

Conference proceedings: more than 400.

Invited lectures: 50.

Other presentations: more than 50.

KEY PUBLICATIONS

Stoffels E, Flikweert AJ, Stoffels WW, Kroesen GMW. 2002. Plasma needle: a non-destructive atmospheric plasma source for fine surface treatment of (bio)materials, *Plasma Sources Sci. Technol.* 11 383

Stoffels E, Kieft IE, Sladek REJ, Van den Bedem LJM, Van der Laan EP, Steinbuch M. 2006. Plasma needle for *in vivo* medical treatment: recent developments and perspectives, *Plasma Sources Sci. Technol.* 15 S169

Sladek REJ, Stoffels E. 2005. Deactivation of *E. coli* by the plasma needle, *J. Phys. D: Appl. Phys.* 38 1716

Goree J, Bin Liu, Drake D, Stoffels E. 2006. Killing of *S. mutans* Bacteria Using a Plasma Needle at Atmospheric Pressure, *IEEE Trans. Plasma Sci.* 34: 1317
Stoffels E, Stoffels WW, Vender D, Kando M, Kroesen GMW, De Hoog FJ. 1995. Negative ions in a radio-frequency oxygen plasma, *Phys. Rev. E* 51, 2425

PATENTS

E. Stoffels, M. Franken M. Steinbuch, E.P. van der Laan, "Device for creating local plasma at the location of an object", 2004.
R. Vetjens, E. Stoffels, "Orthoscope: Dental Support System" 2006.
J.-W. van Bree, G. Peemen, E. Stoffels, "Electromagnetic cell stimulation to increase proliferation in a cell culture", 2008.

REVIEWER/EDITOR

Guest editor: Special Issue on Medical Applications of Gas Discharges, *Journal of Physics D: Applied Physics* :

<http://herald.iop.org/plasma/m55/rsm/196748/link/375>.

Editorial Board member: *Plasma Chemistry Plasma Processing* (from 2007), *Plasma Physics and Controlled Fusion*.

Journal article reviewer: *Plasma Sources Science & Technology*, *New Journal of Physics*, *Journal of Physics D: Applied Physics*, *IEEE Transactions on Plasma Science*, *Plasma Proc. & Polymers*, *J. Vac. Sci. Technol. A.*, *Surface and Coating Technology*, *Plasma Chem. Plasma Proc.*

Grant reviewer: FOM Projectruimte, Stichting Technische Wetenschappen (STW), Czech Science Foundation, ISTC, NRSRC (Canadian granting agencies), EPSRC (British granting agency).

LANGUAGES

Fluent in English, Dutch, Russian and Polish. Working knowledge of Japanese. Basic/passive knowledge of French and German.

HOBBIES

Taking care of rabbits, rodents and cats. Behaviourism of companion animals. Asian cultures, religions, languages and history.