

Writing Scientific Papers in English Successfully: A Complete Roadmap

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Scientific writing is a key ingredient in science and technology because of the need to share ideas and findings. Effective scientific writing requires proficiency in the specific academic genre and mastering the English language, and yet students rarely receive any training on such issues. In this lecture a strategy will be presented to tackle the problems faced by writers who are new to the scientific writing genre and style, particularly the non-native speakers of English. The strategy implements a learning-by-example procedure and is based on corpus linguistics, which is an approach that uses text collections (corpus)¹. That is to say, the students are trained to identify textual patterns that are prevalent in each section and subsections of a paper, which they can then adapt to their own needs. Also discussed will be the models for scientific writing and software tools designed to assist authors in producing a draft version of their paper.

¹Schuster, E.; Levkowitz, H.; Oliveira Jr., O.N., Writing Scientific Papers in English Successfully: Your Complete Roadmap, 2014 ([amazon.com/dp/8588533979/](https://www.amazon.com/dp/8588533979/))

RESUMÉ

OSVALDO N. OLIVEIRA JR.

Full Professor in Physics, Universidade de São Paulo, at São Carlos, Brazil

Date and Place of Birth: August 13, 1960, Barretos (Brazil)

Member of the Academy of Sciences of the State of São Paulo

President of the Brazilian Materials Research Society

Coordinator of the area of physics at the FAPESP research foundation

Next President of the Brazilian Materials Research Society, starting in 2016.

Associate Editor of the Journal of Nanoscience and Nanotechnology, and Display and Imaging.

Academic Background

1982 B.Sc. Physics (São Carlos, Brazil)

1984 M.Sc. Applied Physics (São Carlos, Brazil)

1990 Ph.D. Electrical Engineering (Bangor, U.K.)

Academic Career

1985-1990 - Assistant Lecturer at Universidade de São Paulo, USP (Brazil)

1990-1993 - Lecturer at USP (Brazil)

1993- 2008 - Associate Professor at USP (Brazil)

2008-present - Full Professor at USP (Brazil)

Visiting scholar at University of Massachusetts Lowell (USA), 2000-2001

Visiting professor at the Universidade de Aveiro, Portugal, 2006.

Research

(i) areas of research: electrical properties of polymers, nanostructured films, sensing and biosensing, and Natural Language Processing (Computational Linguistics)

(ii) publications: ca. 460 papers, published in refereed, international journals, 13 book chapters, 3 books and 7 filed patents.

(iii) supervision: 40 M.Sc. and PhD dissertations successfully completed from 1992-2015.

Awards

1. Distinguished paper in the I International Conference on Case-Based Reasoning, Portugal, 1995.
2. Technological Innovation Award, 1998, by Fundação Parque de Alta Tecnologia de São Carlos.
3. National Alcatel Award for Technological Innovation, 1999.
4. Scopus Prize 2006 – awarded by Elsevier to 16 Brazilian scientists considered most productive in terms of number of papers and citations.

Major Research Endeavors

Osvaldo N. Oliveira Jr. has led research into the fabrication of novel materials in the form of ultrathin films obtained with the Langmuir-Blodgett and self-assembly techniques. Most of this work has been associated with fundamental properties of ultrathin films with molecular control, but technological aspects have also been addressed in specific projects. This is the case of an electronic tongue, whose response to a number of tastants is considerably more sensitive than the human gustatory system and the use of chitosan nanostructured films for covering textiles. Prof. Oliveira has helped establish the Núcleo Interinstitucional de Linguística Computacional (NILC), which is a leading institute for natural language processing of Portuguese. Research and development activities at NILC include the development of a grammar checker for Brazilian Portuguese, which received two prizes for innovation, made available worldwide through Microsoft Word. Through NILC, Prof. Oliveira took part in the Universal Networking Language (UNL) Project, sponsored by the United Nations University. In recent years, Prof. Oliveira has pioneered the combined use of methods from distinct fields of science, with the merge of methods of statistical physics and computer science to process text, and use of information visualization to enhance the performance of sensing and biosensing.