**Surface roughness and volumetric contraction of a Y-TZP ceramic sintered by microwave energy and by resistive heating**

Rugosidade da superfície e contração volumétrica de uma cerâmica Y-TZP sinterizada por energia de microondas e por aquecimento resistivo

**Nayara N BARCHETTA1**, Larissa G NANNI2, Jean S MIRANDA1, Dolores RR LAZAR3, Valter ASSUI3, Guilherme SFA SAAVEDRA4\*

1 PhD Students in Dental Prosthesis, Department of Dental Materials and Prosthodontics, Institute of Science and Technology, Paulista State University (UNESP), São José dos Campos, São Paulo, Brazil.

2 Dentist graduated in Institute of Science and Technology, Paulista State University (UNESP), São José dos Campos, São Paulo, Brazil.

3 PhD Professor in Institute of Energy and Nuclear Research (IPEN), São Paulo, São Paulo, Brazil.

4PhD in Dental Prosthesis, Department of Dental Materials and Prosthodontics, Institute of Science and Technology, Paulista State University (UNESP), São José dos Campos, São Paulo, Brazil.

Jean Soares Miranda: analysis and interpretation of data; writing of the article.

**Nayara N Barchetta**: conception and study design; acquisition, analysis and interpretation of data; drafting the article.

Larissa G Nanni: analysis and interpretation of data; drafting the article.

Guilherme Ferreira de Siqueira Anzaloni Saavedra: revising the article critically for important intellectual content; final approval of the version to be published.

Dolores RR Lazar: analysis and interpretation of data; drafting the article.

Valter Assui: conception and design; revising the article critically for important intellectual content, final approval of the version to be published.

**\*Corresponding author:**

Guilherme Ferreira de Siqueira Anzaloni Saavedra

Department of Dental Materials and Prosthodontics, Institute of Science and Technology, Paulista State University (UNESP)

Avenida Engenheiro Francisco José Longo, 555, Jardim São Dimas, São José dos Campos/SP, Brasil

(12) 3947 9032

saavedra\_guilherme@hotmail.com

**Potential Reviewers:**

Fabíola Pessôa Pereira Leite

+55(32)991197450; fabiola-leite1@hotmail.com

Federal University of Juiz de Fora (UFJF) - Minas Gerais – Brazil

Estevão Tomomitsu Kimpara

+55(12)39479011; estevão@ict.unesp.br

Institute of Science and Technology, Paulista State University (UNESP), São José dos Campos, São Paulo, Brazil.