SCAN ME

SOUTHERN BRAZILIAN JOURNAL OF CHEMISTRY

Volume 27 Number 27 – 2019 ISSN: 0104-5431; E-ISSN: 2674-6891

International Cataloging Data on Publication (CIP)

SOUTHERN BRAZILIAN JOURNAL OF CHEMISTRY: órgão de divulgação científica e informativa [recurso eletrônico] / SOUTHERN BRAZILIAN JOURNAL OF CHEMISTRY – Vol. 25, n. 25 (Dec. 2017)- . – Porto Alegre: Grupo Tchê Química, 2017 - Anual.
Sistema requerido: Adobe Acrobat Reader.
Modo de acesso: World Wide Web:
<http://www.sbjchem.com>

Descrição baseada em: Vol. 25, n. 25 (Dec. 2017).
ISSN 0104-5431
1. Química. I. SOUTHERN BRAZILIAN JOURNAL OF CHEMISTRY.

CDD 500

Logo design by Up Logos
<https://uplogos.com.br/>

SOUTHERN BRAZILIAN JOURNAL OF CHEMISTRY

Volume 27 Number 27 – 2019 ISSN: 0104-5431; E-ISSN: 2674-6891

SOUTHERN BRAZILIAN JOURNAL OF CHEMISTRY

ISSN - 0104-5431 (Printed)
Eletronic ISSN: 2674-6891

Available at
http://www.sbjchem.com

Mission

The **SOUTHERN BRAZILIAN JOURNAL OF CHEMISTRY** is a double-blind peer review, open access, multidisciplinary journal dedicated to publishing high-quality content and is intended to fill a gap in terms of scientific information for Southern Brazil. We have set high standards for the articles to be published by ensuring strong but fair refereeing by at least two reviewers. The Journal publishes original research articles in all the fields of Engineering, Mathematics, Physics, Chemistry, Biology, Agriculture, Natural resource management, Pharmacy, Medicine, and others.

Occasionally the journal will include review papers, interviews, and other types of communications. It will be published mainly in English, and at present, there are no page charges.

We hope that this journal will provide a forum for the dissemination of high-quality research in Science and are open to any questions and suggestions.

The responsibility for the articles is exclusive to the authors.

Correspondências
Rua Francisco Schneider, 292/302.
Bairro Centro. CEP: 95320-000
Nova Prata – RS. Brasil.
Skype: tchequimica
www.sbjechem.com
southbchem@gmail.com

CONTENTS

INDICATORS OF TRYPSIN-LIKE ACTIVITY OF MIXED SALIVAAFTER INSTALLING THE ENDOSSEOUS IMPLANTS IN THE PRESENCE OF GASTRIC ULCER AND DUODENAL ULCER

KUZNETSOVA, Mariya, NIKONOVA, Anna; KUZNETSOV, Ivan; SEVBITOVA, Mariya; TIMOSHINA, Mariya

[1] Department of Propaedeutic of Dental Diseases of I. M. Sechenov First Moscow State Medical University (Sechenov University)

ABSTRACT

The trypsin-like activity of mixed saliva in orthopedic patients after implant placement was monitored. Proved negative impact on the processes of repair of background somatic pathology (peptic ulcers and 12 duodenal ulcers), justify the application of immunomodulator "Erbisol" as a drug that speeds up the repair processes during implantation. At present, the relevant issues are those related to the development of inflammatory complications at the stage of rehabilitation of patients, especially in the presence of somatic pathology and the study of the tissue complex of the implantation zone. Peptic ulcer disease occupies one of the main places in the structure of lesions of the digestive system. The close interdependence between the pathology of internal organs and the oral cavity is confirmed by numerous observations and studies.Implant placement is accompanied by changes in the enzymatic activity of mixed saliva. The presence of somatic pathology (ulcerative disease of the stomach and 12 duodenal ulcers) often leads to more long-term violations of the enzymatic activity of saliva. The use of the drug "Erbisol" in orthopedic dentistry accelerates the repair process, as evidenced by the earlier periods of normalization of the enzymatic activity of mixed saliva, after the installation of implants.Regular and timely monitoring of the condition of the periarticular tissues, as well as objective diagnosis of early inflammatory complications, are necessary to ensure the reliability and long-term functioning of prosthetic structures installed on implants in the oral cavity.It can be concluded that the purpose of our study was to study the trypsin-like activity (TPA) of mixed saliva after implant placement on the background of somatic pathology..

Page - 13

NIOBIUM ALLOY STEEL APPLIED IN COLD FORMING MANUFACTURE

MAIA, Bruno Inácio[1]; FUTAMI, André Hideto[1]; DE OLIVEIRA, Marco Aurélio[1]; DALLA VALENTINA, Luiz Veriano Oliveira[1]

[1] Centro Universitário SOCIESC - UNISOCIESC, Mestrado em Engenharia de Produção, Departamento de Pesquisa. Brazil

ABSTRACT

Niobium alloy steels are still little known and debated when applied to the metallurgy industry, including cold forming process. It is not much clear about its characteristics and your mechanical performance when compared to traditional steels, which the market already uses. The possibility of input new materials, reducing costs and generating competitiveness is the basis for researches that can generate new opportunities for industries. In this article, we showed the possibility of withdrawing the heat treatment process, which guided the execution of the tests presented here. This paper deals with the performance comparison of SAE 1312 MOD steel compared to ISO 898-1, which deals with mechanical performance for bolts. The tests were correlated with the bolts of 8.8 resistance class, which currently have heat treatment. It is possible to evaluate the positive performance of the niobium-alloyed steel (SAE 1312 MOD), despite the occasional performance limitations in some attributes addressed in ISO 898-1.

Page - 23

PRODUCTION OF BIOPLASTIC FROM POTATO STARCH

CORDEIRO, Paula Novais[1]; CAETANO, Skarllet Toledo[1]; DE CARVALHO, Raquel Moreira Maduro[1]

[1] Departamento de Engenharia Química, União de Ensinos Superiores de Viçosa, Viçosa, MG.Brazil.

ABSTRACT

Due to their diverse properties, plastic materials are used in numerous sectors. It is possible to produce different articles and plastic objects with reduced costs, being more accessible to the population. Conventional plastics are obtained from petroleum-derived raw materials, a non-renewable resource in which their extraction and refining process cause major environmental impacts. The production of plastic reaches a level of approximately one hundred and forty million tons per year, and the disposal of these materials is increasing, generating a high rate of waste and leading to an increase of pollution since the decomposition of these materials lasts about five hundred years old. Conventional plastics can be replaced by bioplastics, a material obtained from renewable raw materials such as potatoes, cassava, maize, and which, when disposed of under favorable conditions, decomposes faster, as during its degradation process at least one step occurs. Through the metabolism of organisms present in the environment. Starch has been widely used in the production of biodegradable packaging, so the objective of this work was to produce a biodegradable bioplastic from the potato starch. Potato starch, glycerin, hydrogen peroxide, distilled water, and commercial agar were used to produce the bioplastic. Bench-scale bioplastics had good organoleptic characteristics, similar in appearance to a conventional plastic obtained from petroleum. The thickness, moisture content, and solubility of the bioplastics were analyzed, as well as their fruit preservation capacity. The samples produced were rigid and with good resistance.

TO AUTHORS