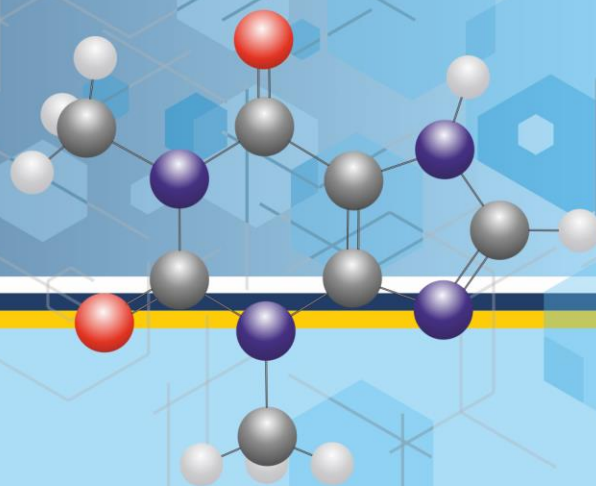




БЪЛГАРСКО НАУЧНО ДРУЖЕСТВО ПО ФАРМАЦИЯ
BULGARIAN SCIENTIFIC PHARMACEUTICAL SOCIETY



VII^{-МИ}

КОНГРЕС ПО ФАРМАЦИЯ
С МЕЖДУНАРОДНО УЧАСТИЕ
21-24 ноември 2019 г.

хотел „Рила“, к.к. Боровец

С подкрепата на: Български Фармацевтичен Съюз
Supported by: Bulgarian Pharmaceutical Union

7th

CONGRESS OF PHARMACY
WITH INTERNATIONAL PARTICIPATION
November 21-24, 2019

Rila Hotel, Borovets

Pharmaceutical
Altitudes





7th CONGRESS OF PHARMACY WITH INTERNATIONAL PARTICIPATION

November 21-24, 2019, Rila Hotel, Borovets



Dear Colleagues,

On behalf of the Executive Council of the Bulgarian Scientific Pharmaceutical Society and of the Organizing Committee I am pleased to cordially welcome You at the 7th Congress of Pharmacy with International Participation "Pharmaceutical Altitudes" in the lovely resort of Borovetz (Rila Hotel), Bulgaria (21-24 November 2019).

We are organizing the Congress as an exciting venue, whereby leading internationally acknowledged experts in the fields of pharmacy and allied sciences will meet to debate the state-of-the-art scientific advances, and to face the evolving challenges and opportunities in the fast-changing world of Pharmacy, as an integral part of healthcare. Special emphasis is focused on drug design, phytopharmaceuticals, biotechnological drugs and biosimilars, pharmaceutical nanotechnologies and biopharmaceutics, pharmaco-economics and health technology assessment.

Esteemed colleagues, we welcome You to present your own research, to learn from prominent experts, network with key-opinion leaders, enjoy hearing high level lecturers reporting their latest scientific projects or sharing their vision over the evolving challenges in the pharmaceutical science and practice. The agenda of the Congress also includes specialized expert panels with prominent Bulgarian clinical key-opinion leaders, intended to discuss the state-of-the-art advances and the challenges of modern pharmacotherapy.

Cordially Yours,
Prof. Georgi Ts. Momekov, PhD
President of the Bulgarian Scientific Pharmaceutical Society



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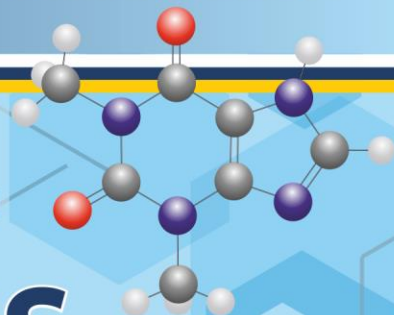
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ABSTRACTS

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The abstracts are published as presented by the authors



ANALYTICAL STUDY OF ACTIVE INGREDIENTS IN MODEL MIXTURES CONTAINING EXTRACTS FROM MEDICINAL PLANTS <i>CRATAEGUS SP.</i>, <i>TRIBULUS TERRESTRIS L.</i> AND <i>SIDERITIS SCARDICA GRIZEB</i>	
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DEVELOPMENT AND OPTIMISATION OF THE PROCESS OF DECARBOXYLATION OF TETRAHYDROCANNABINOIC ACID, FOLLOWED BY FTIR DETECTION OF TETRAHYDROCANNABINOL IN MEDICINAL CANNABIS

Cocovska I.^{1,2}, Demirovski Kockova K.¹, Trajanovska Faizova V.¹, Maksimova V.².

¹Oaza Alakaloidi, Shtip, Gladno pole, bb, Tarinci, POB 2000, Shtip, Republic of North Macedonia,

²"Gotse Delchev" University, Krste Misirkov, bb, POB 2000, Shtip, Republic of North Macedonia

Aim of the study: Conversion of tetrahydrocannabinolic acid (THCA) to tetrahydrocannabinol (THC), is the main reaction essential for the use of cannabis, *Cannabis indica* L. buds in medicinal purposes. Therefore, the aim of this study was to develop and optimize the thermal treatment of Cannabis buds, required for the reaction of decarboxylation of THCA to THC followed by FTIR technique.

Materials and methods: Cannabis buds were heated on aluminum shelves, programmed by heating oven POL EKO SL 400. Temperature program was strictly monitored and changes were recorded on every 5 minutes. Mid Infrared spectra were collected for each sample and temperature, respectively, using Perkin Elmer Spectrum Two™ coupled to an UATR accessory in spectral range of 400-4000 cm⁻¹.

Results: Changes in the infrared spectra indicated that the required elimination of water and appropriate conversion of THCA to THC were established, as the reaction progressed. Reaction of decarboxylation has occurred in temperature range from 85-120° C. Conversion of THCA to THC contributed for obtaining of high concentrations of THC which ranged 38-80% w/w. The progress of the decarboxylation enhanced the obtaining of THC.

Conclusion: Monitoring of the process of decarboxylation with FTIR technique presents a fast and plausible method for controlling the conversion of acidic forms of cannabinoids to their neutral forms. The thermal treatment has shown a high yield of THC up to 80% w/w. It should be stressed out that these two methods could be ideally suited to everyday analysis because of their high performances.

Key words: cannabinoids, *Cannabis indica*, decarboxylation, FTIR

TECHNOLOGICAL APPROACHES FOR EXTEMPORANEOUS PREPARATION OF ORAL PEDIATRIC FORMULATIONS WITH SILDENAFIL CITRATE

Dimitrov M., Borinarova M.

Faculty of Pharmacy, Medical University, Sofia

e-mail: mdimitrov@pharmfac.mu-sofia.bg, tel. +35929236526

The aim of the study: The aim of the study is to analyze and critically evaluate potential technological approaches for extemporaneous preparation of pediatric oral formulations containing sildenafil citrate for pediatric personalized therapy.