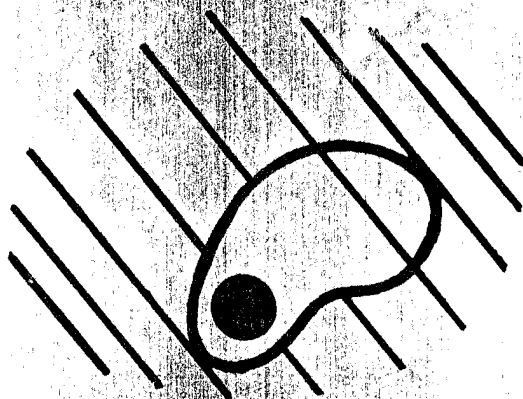


**DRUŠTVO BIOFIZIČARA BOSNE I HERCEGOVINE  
JUGOSLOVENSKO DRUŠTVO ZA BIOFIZIKU**

**BIOPHYSICISTS' SOCIETY OF BOSNIA AND HERZEGOVINA  
YUGOSLAV SOCIETY FOR BIOPHYSICS**

**XIX JUGOSLOVENSKI SIMPOZIJUM IZ BIOFIZIKE I  
SATELITSKI SIMPOZIJUM „MEDICINSKA BIOAKUSTIKA”**

**XIX YUGOSLAV SYMPOSIUM ON BIOPHYSICS and  
SATELLITE SYMPOSIUM „MEDICAL BIOACUSTICS”**



**ZBORNIK SAŽETAKA  
BOOK OF ABSTRACTS**

Sarajevo-Igman, 13 - 17 decembar 1988.

QSAR STUDIES IN ANTIMICROBIAL ACTIVITY OF N-SUBSTITUTED-  
-2-METHYL-3-CARBETHOXY-5-PYRROLINONES AND THEIR C(4)-BEN-  
ZYLIDEN DERIVATIVES

B. Panzova, J. Gaon, F. Lovren, N. Trinajstić

Alkaloid-Skopje; Faculty of Medicine University of  
Sarajevo; Faculty of Pharmacy University of Sarajevo;  
Rugjer Bošković Institute - Zagreb.

A number of topological indices ( the Zagreb Group indi-  
ces, the Randić connectivity index, the Platt's number,  
the Gordon-Scantlebury's index, the Wiener number, the  
Altenburg's polynomial, the Balaban's index, the mean  
square distance indices ) have been used for QSAR  
studies in antimicrobial activity of N-substituted-2-  
methyl-3-carbethoxy-5-pyrrolinones and their C(4)-benzy-  
liden derivatives. The best correlation was found  
between topological indices of these compounds and their  
corresponding antibacterial activity on *Escherichia coli*  
and *Pseudomonas aeruginosa*.