

Antimicrobial Photodynamic Therapy Efficacy of Zinc (II) Phthalocyanine Complexes on *S. aureus*, *E. coli* and *Candida albicans*

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Photodynamic therapy is usually used for treatment of malignant and non-malignant tumors. As known antibiotic resistance of gram-positive and gram negative bacteria increase in the worldwide. For this reason alternative antimicrobial therapies such as antimicrobial photodynamic therapy (APDT) have been developed. In the present study two different phthalocyanine (Pc) derivatives have been prepared and their potentials in APDT have been investigated. We tested these two Pcs on standard strains of *S. aureus*, *E. coli* and *Candida albicans* as in vitro to compare effectiveness. The light emitting diode (LED) (630 - 700 nm and 15.2 J) were used at different doses and Pc concentrations. Both compounds (Pc1 and Pc2) show approximately same phototoxicity toward bacteria as in vitro. In concluding, the Pcs might be used on APDT for the eradication of fungi, gram-positive and gram-negative bacteria.

Acknowledgements

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2. GTU Photodynamic Day

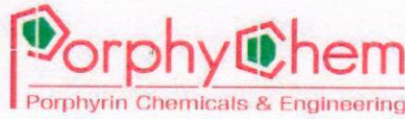
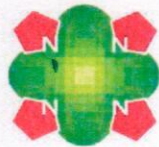


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Second GTÜ Photodynamic Day

16 May 2017 - Gebze Technical University

PROGRAMME

- | | |
|----------------------|---------------------------------------|
| 10:00 - 10:15 | Opening ceremony |
| 10:15 - 10:45 | IL-1 Jean-Olivier Durand |
| 10:45 - 11:15 | IL-2 Cengiz Yatmaz |
| 11:15 - 11:30 | OC-1 E. Doruk Önal |
| 11:30 - 12:00 | IL-3 Hong Boon Lee |
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| 12:00 - 13:15 | Lunch |
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| 13:15 - 13:45 | IL-4 Amparo Faustino |
| 13:45 - 14:00 | OC-2 S.Sibel Erdem |
| 14:00 - 14:15 | OC-3 Esra Tanrıverdi Eçik |
| 14:15 - 14:45 | IL-5 Yavuz Dede |
| 14:45 - 15:15 | IL-6 Francesca Giuntini |
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| 15:15 - 15:55 | Poster session during coffee break |
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| 15:55 - 16:25 | IL-7 Janusz Dabrowski |
| 16:25 - 16:55 | IL-8 Ramazan Altundaş |
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| 16:55 -17:05 | Best poster prizes & Closing ceremony |