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SERIES 93
&
CMBRI Seminar Series FY2024-03
Dr. P. K. Hashim
2024-06-26

Series - 93

Date and Time - 26 June 2024 (15:30 JST | 12:00 IST)

Venue - Zoom

Speaker - P. K. Hashim

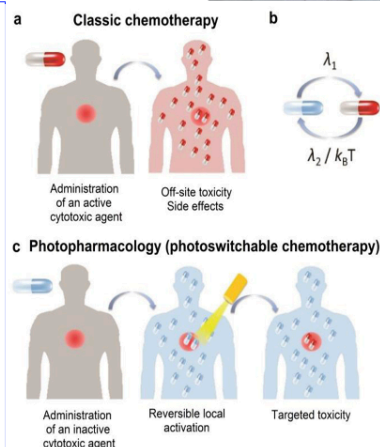
Affiliation - Assistant Professor, Hokkaido University, Japan

Email: hashim@es.hokudai.ac.jp



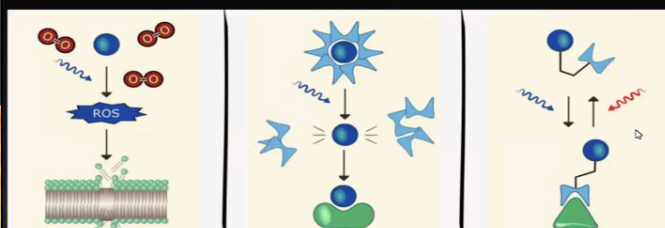
Fundamentals and Applications of Photopharmacology

Over 85% of the small molecule drugs in clinical trials are discarded solely due to insufficient selectivity and associated side effects. One plausible method to increase the drug selectivity is "photopharmacology" where a drug containing light-responsive motif (photoswitch) is activated/deactivated by light stimuli. Photoswitches are molecules that undergo reversible change between their structural isomers (isomerization) by light irradiation however most of the photoswitches require UV light for isomerization. But the UV light is harmful to the living beings as it damages biological cells. For "photopharmacology" application, the wavelength of the light is very important, and the light should be non-toxic and penetrate deep into the tissues for ensuring efficient switching of the target drug. This talk will discuss the development of visible-light active photoswitches for photopharmacology applications.



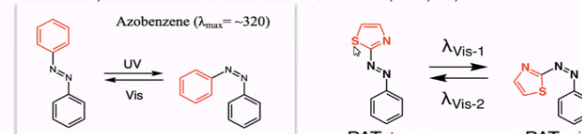
- RW Renu WADHWA (Host, me)
- Hashim PK
- SK Sunil KAUL
- AK Ajaikumar Kunnumakkara
- Anjana@ IIT Guwahati
- AS Ardhra S
- A Ashwin T Shaji
- AK Aviral Kumar
- e BRC-INBIO_IDN_Erlin
- B BRC-INBIO_IDN_Febrina_Marg
- BN BRC-INBIO_IDN_Muhammad N
- BQ BRC-INBIO_IDN_1048Qairinash
- FM Fayaz Malik
- GK Gopika Km
- Hu Hanyang university
- h https://us06st1.zoom.us/web_c
- M IT029_Muhammad Ilham F
- IG IT045_Rena Galby A
- MM M Mukesh Kumar
- N Nurul Dinza Jenia
- P Parama
- sp shruptha padival
- YO Y Ohmiya (AIST)
- A Ansila
- BN BRC-INBIO_IDN_Muhammad N
- BC BRC-INBIO_IDN_Mutiara Char
- N BRC-INBIO_IDN_Nurul Dinza J
- BRC_INBIO_IDN_Leony Priank
- BQ BRC_INBIO_IDN_Qairinasherin

Photodynamic therapy Photo-uncaging Photo-switching

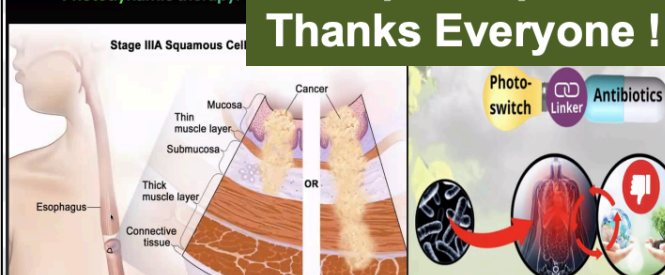


PhenylAzo Thiazole (PAT) photoswitches

Lin, Hashim et al. J. Am. Chem. Soc. 2023, 145, 16, 9072-9080



Photodynamic therapy:



~55 participants
Thanks Everyone !