SPECIAL SEMINAR

Self-Assembled Porphyrin Nanoparticles -
Emerging Biomedical Applications

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Robert Sindelar Seminar Room 3340
Faculty of Pharmaceutical Sciences, UBC, 2405 Wesbrook Mall

Porphyrs have played numerous historic roles in development of approaches to diagnosis and treat of diseases. This lecture will cover some of our own recent efforts to develop new self-assembled materials from porphyrins and related molecules, and how these nanomaterials might have potentially advantageous properties for disease diagnosis and therapy. In particular we will discuss several lines of research from our lab including
1) Light-triggered drug release from liposomes containing small amounts of porphyrin-phospholipids;
2) Seamless decoration of liposomes containing cobalt-porphyrin-phospholipid with his-tagged proteins for vaccine purposes;
3) High-density porphyrin nanostructures for biomedical contrast imaging based on a surfactant stripping approach