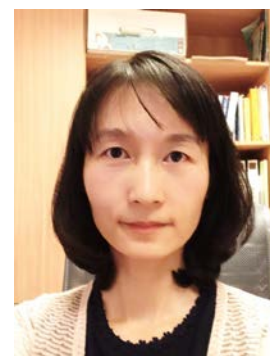




演題: **Bioenergy from microalgae and toxicology
of diesel vs. biodiesel**

講師: **Prof. Yu-Tzu Huang**

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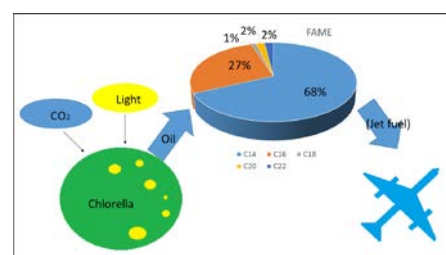
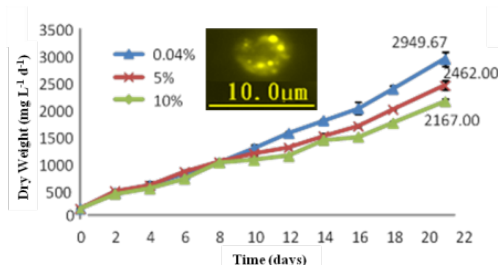


日時: 2017年8月2日(水) 13:00~14:00

場所: フロンティア応用科学研究棟 1F セミナー室1

共催: 物質科学フロンティアを開拓する Ambitious リーダー育成プログラム
要旨:

The bioenergy has become an urgent green energy source and may substitute for petroleum in the near future. Microalgal biomass can be converted into various bioenergy such as bioethanol, biodiesel, and biohydrogen with benefit of carbon dioxide (CO₂) fixation. This study investigated the effects of culturing parameters on productivity of biomass and biodiesel. We aimed to optimize the culturing parameters (light source, CO₂ concentration, etc). Results showed that LED, BGII medium, and CO₂ had positive effect on accumulating of biomass or lipid. The main compositions of algal lipids were C18:2, C18:3, and C16:0, of which the compositions are closed to diesel and jet fuel. We also analyzed the possible toxicity of derived tail gas towards microorganisms through influence on cell surface structure and carbohydrate metabolism.



本講演は、大学院総合化学院『化学研究先端講義/総合化学特別研究第二』の一部として認定されています。

(ただし、8/3(木) 10:30からのProf. Kevin C.-W. Wu講演会もしくは13:00からのProf. Fa-Kuen Shieh講演会どちらかと併せて2件以上の聴講で出席一回とカウントします。)

連絡先: 工学研究院応用化学部門 吉川琢也、中坂佑太、増田隆夫 (内線: 6551)