

# 第5回 VBL セミナー (2019 年度)

## 5<sup>th</sup> VBL Seminar, 2019

日時 : 2020 年 2 月 21 日 (金) 13 時 00 分～

場所 : C-TECs 5F ナレッジコモンズ

講師 : Frédéric Mercier 准教授

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### 題目: **Process design for advanced materials in energy applications**

New, high knowledge-content materials, providing new functionalities and improved performances will be critical drivers of innovation in technologies, devices and systems, benefiting sustainable development and competitiveness. In many situations, developing the right materials by taking into account all of these constraints is the bottleneck to industrial innovation. To do so, designing the proper process for desired physical and/or chemical transformation of materials during their synthesis is one of the key points.

The first part of the talk will be dedicated to the Top Seeded Solution Growth of SiC (Silicon Carbide) with an emphasis on the process design based on multiscale modeling. In a second part, I will present recent progress on optimization techniques we use at SIMAP to fulfil the demand of new materials. In particular, I will present how a “Design of Experiments” approach can be applied to multi-variables processes in order to obtain the maximum of relevant information with the minimum of experiments.

問い合わせ先 :

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