先導物質化学研究所　外国人客員教授講演会

Recent Advances in Free and Controlled Radical Polymerizations of Fluoroalkenes and Applications Therefrom

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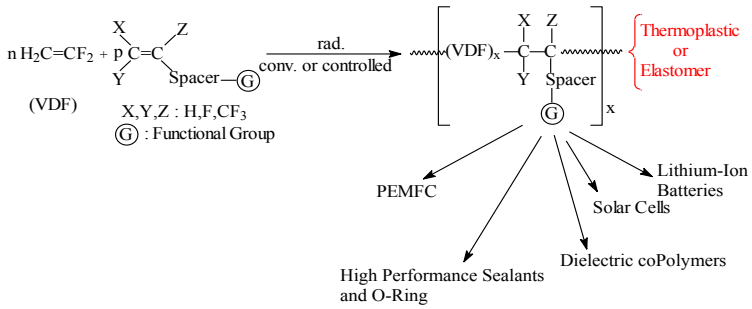
日時：2017 年 9 月 12 日（月）15:00-16:00
場所：九州大学伊都キャンパス CE41 1F セミナー室

主催：九州大学先導物質化学研究所
共催：九州大学高分子機能創造リサーチコア

Ameduri 先生は、先導物質化学研究所の客員教授として来所なさっており、フッ素系高分子の合成分野において世界的に著名な研究者です。皆様の多数のご参加をお待ちしております。

Abstract: Fluorinated polymers are remarkable polymers because of their exceptional making them useful in specific applications such as coatings, O-rings and seals, membranes, items Lithium ion batteries, etc. They are mainly synthesized by radical (co)polymerization of fluoroalkenes. Among fluorinated polymers, poly(vinylidene fluoride) (PVDF) is one the most often used since it can be synthesized according to usual radical pathways, just like VDF containing–copolymers that lead to many applications, as follows:



Various techniques of controlled radical (co)polymerization (or RDRP) of VDF will be presented, especially the iodine transfer polymerization (ITP), RAFT/MADIX. More details on both first strategies will be applied on the radical copolymerization of VDF with other fluoromonomers opening various applications such as **fuel cell membranes**, **F-surfactants** as alternatives to PFOA, or for $scCO_2$ medium, and original **F-elastomers**.

Brief Resume: Dr. Ameduri received Ph.D. in Polymer Chemistry at University of Montpellier in 1988. That same year, he got a Junior Researcher CNRS position and then was promoted Senior Researcher in 2000. He has published 3 books, 45 reviews or book chapters and more than 300 articles; was also invited in more than 100 International conferences and in various Universities (especially Kyushu in Takahara Soft Interfaces' Lab). Presently, he is assigned to visiting professor of IMCE. His research interest encompasses the synthesis of fluorinated monomers, telomers, and (co)polymers by free radical or RDR Polymerizations and their applications in elastomers, fuel cell membßranes, ferroelectrics, polymer gel electrolytes for LIBs, or surfactants.

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