

INDUSTRIAL TRANSLATION OF NANOPOROUS SILICON: EXPERIENCES FROM INVOLVEMENT WITH SME'S IN THE MEDICAL AND CONSUMER CARE SECTORS

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Industrial or clinical translation of nanomaterials presents numerous challenges. Four common examples are scale-up, cost of goods, batch reproducibility with regard to size control, and chemical stability. The 1995 discovery that nanostructured semiconducting silicon is medically biodegradable led to a start-up company, pSiMedica Ltd UK, being created via venture capital investment. The first medical product was in brachytherapy and to progress from product conception and patenting, early research, product development, pre-clinical formal toxicology through clinical trials to regulatory approval in Europe and other jurisdictions, took about 20 years. The product is currently marketed by an Australian company (www.oncosil.com). A US public company (www.eyepointpharma.com) evaluated biodegradable nanoporous silicon for ophthalmic drug delivery for many years. The 2011 demonstration of porous silicon fabrication from inexpensive plant-based feedstocks led to potential higher volume, lower cost products in the consumer care sector. A UK SME (IntrinsiQ Materials Ltd) took up this challenge with a multinational partnering business model. Cooperative training and R&D were in nutraceuticals, oral hygiene and cosmetics. I will describe the progress made in these very different sectors, and perhaps more usefully, some of the challenges experienced and lessons learnt.

日時

2022
12/7 (水) 18:30~20:00
参加無料

実施形態 オンライン開催 (Zoomを使用したライブ配信)

参加対象 大学生、大学院生、社会人

参加定員 特になし

MC



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スタートアップ推進室 副室長

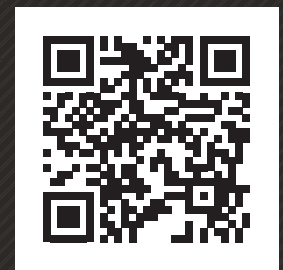
小西 由樹子
KONISHI yukiko



キム ヒョンウン
KIM Hyunwoong

参加申込

締切
12/7 [水]
開催当日



<https://tongali.net/events/tic2022-8th/>

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