

Value Chain Entrepreneurship for Materials Scientists from Africa

Date: 10 -11 December 2022

Venue: l'Université Cheikh Anta Diop de Dakar (UCAD) II

Facilitators

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BACKGROUND AND PURPOSE

A 2-day intensive workshop on Value Chain Innovation and Entrepreneurship will be organized during Dec. 10-11, 2022. Participants will be introduced to the basics concepts of value chains, and innovation and entrepreneurship in value chains specifically addressing opportunities for material scientists in coming up with innovative technical solutions to the needs of the industry and taking the ideas to the market by developing a viable business model, a sound business plan and a commercialization strategy.

GOALS AND TOPICS

The objectives of this Workshop are to introduce to the scientists the process of innovation, generation and protection of intellectual property, technology transfer and commercialization of inventions. The Workshop will consist of lectures by invited speakers, case studies, group discussions and role-playing sessions related to commercialization of a product.

Topics will include:

- Basics of value chains and importance of sustainable value chain resilience for industry
- Relation between scientific research, inventions and products with value chain planning
- Innovation/Research to market case studies
- Market need identification/feasibility study
- Concept of intellectual property (IP) and its significance in commercializing your ideas
- Business Model development
- Taking science to the market - Timelines and processes
- Doing business in Africa (components of the entrepreneurial ecosystem, business formalities, IP office, grants, investor resources, etc.)
- Finance – basic financial skills needed for start-ups
- Marketing and Sales
- Communication and networking skills
- Plenty of group exercises, networking and collaboration among participants
- Pitching your ideas to investors, customers, etc., business plan presentations by participants

Participation: About 50-participants (max) –Faculty, post-doc/postgrads, graduates/undergrads + a few observers

This program is for a selected and limited number of participants. It is particularly ideal for faculty-postdoc, faculty-post graduate/undergraduate students who are interested in learning innovation and entrepreneurial skills to commercialize their scientific inventions from their research. Participants from all branches of science, engineering and management related to material science are invited to apply for participation in the Workshop. Women candidates are strongly encouraged to apply. Selection of candidates will be based on their technical background to get a mix of disciplines and strong motivation to become innovators and entrepreneurs as evidenced in their application. Given the continuity of topics in the program, participants should be willing to attend all sessions on both days.

Table 1 Tentative Time table for the entrepreneurship workshop**Day 1**

Time	Session (tentative topics, to be finalized)
08:30 – 09:00	Welcome remarks and self-introductions, intro to workshop
09:00 -- 09:45	Intro to value chains, resilient value chains and sustainable value chains
09:45 -- 10:30	Identifying value chain niches in various industry from materials perspectives
10:30 – 11:00	Break
11:00 – 12:00	Generating business ideas based on value chain opportunities
12: 00 – 12:30	Feasibility analysis of business ideas
12:30 – 13:30	Lunch
13:30 – 14:30	Design thinking, Market Survey and evaluating customer feedback for your ideas – value proposition – practicing a value proposition for your business ideas
14:30 – 15:30	Basics of Finance for entrepreneurs
15:30 – 16:00	Break
16:00 – 17:00	Introduction to Intellectual Property

Day 2

Time	Session (tentative topics, to be finalized)
08:30 – 09:30	Competition, Entry barrier and market analysis, price point, first customer, user feedback, endorsement, decision maker, etc.
09:30 -- 10:30	Business Models for start-ups
10:30 – 11:00	Break
11:00 – 12:30	Government incentives and sources of financing for start-ups in Senegal/Africa for Value Chain companies - 2 local speakers
12:30 – 13:30	Lunch
13:30 – 14:30	Estimating finances for a start-up and business plan development
14:30 – 15:30	How to pitch to an investor and investor expectations Pitching for cash: Equity issues, share dilution Understanding funding needs at different stages of a start-up Valuation at various stages of development. Presentation Skills
15:30 – 16:00	Break
16:00 – 17:00	Discussion and wrap-up