## **Entrepreneurship Workshop for Scientists and Engineers**

Oct. 17<sup>th</sup> - 21<sup>st</sup> 2016

Date: 17<sup>th</sup> October 2016

Day 1

Session Chairs: Morning: Surya Raghu

**Afternoon: Richard Books** 

Time	Subject	Speaker
8:30 - 9:30	Registration	
9:30 - 10:00	All to be seated Welcome remarks	ICTP - Brazil - Nathan Berkovits Surya Raghu IOP - Linsey Clark AUIN - Vanderlan da Silva Bolzani IQ - Rodrigo Fernando Costa Marques
10:00 - 10:45	Brief introduction of speakers, organisers and participants - self introduction (10 seconds each - 10 minutes) Workshop expectations and introduction to group projects	Surya Raghu
10.45 11.00	"Speed-Networking" Exercise	Richard Books/Dawood Parker
10:45 - 11:00 11:00 - 12:00	Coffee break Science-based entrepreneurship and research results commercialization in Brazil	Brito Cruz
12:00 - 13:30	Lunch break	
13:30 - 14:30	Identify10 selected problems related to Brazil needing technical solutions and generate list of skills and resources needed to invent, innovate and implement solutions to the problems	Richard Brooks/Dawood Parker Group Activity
14:30 - 16:00	Tools for opportunity assessment and feasibility analysis	Surya Raghu
16:00 - 16:15	Coffee break	
16:15 - 18:00	Gathering the talent pool in the class for developing solutions to the problems Technical skills Other skills related to business What are you willing to learn to get the job done? Example of a good team to execute a solution to a typical problem	Richard Books/ Surya Raghu - with support from all speakers  Participant-intensive session
18:00 - 19:00	Brainstorming for projects and wrap-up	Surya Raghu/ Richard Books

Date: 18<sup>th</sup> October 2016

Day 2

Session Chairs: Morning: Linsey Clark
Afternoon: Surya Raghu

Time	Subject	Speaker
9:30 - 11:00	Down-selecting high-impact projects	Richard Brooks/ Dawood Parker
	and Resource Mapping and teaming	
	the talent pool for working on specific	Group Activity
	ideas – team formations	
	Group Project Part 1	
	Identifying markets and customers	
11:00 - 12:00	Coffee break	
	Teaming	
12:00 - 13:00	Competition, entry barrier and market	Surya Raghu
	analysis, business model development	
13:00 - 14:30	Lunch break	
	Group photo	
14:30 - 15:30	Tools for financial estimations	Richard Brooks
	Sales price and market demand	
	Costs of sales for products and	
	services	
	Gross margin	
	Examples of costs of sales for product	
	and service, range for different	
	sectors	
	Fixed overheads	
15:30 - 16:30	Tools for protecting intellectual	Maria Inez Fernandes Faraldo
	property, copyrights, trademarks,	
	patents, trade secrets, etc.	
16:30 - 16:45	Coffee break	
16:45 - 17:45	Brazil patent office information	Maria Inez Fernandes Faraldo
17:45 - 19:00	Group project part 2	All Speakers
	Technology road mapping and	
	opportunity assessment	
	Market analysis	
	Preliminary costs and margins	
	IP strategy	
	Wrap-up	
19:00 - 19:30	Break before Dinner	
19:30 - 21:30	Workshop Dinner	

Date: 19<sup>th</sup> October 2016

Day 3

Session Chairs: Morning: Rodrigo Fernando Costa Marques

Afternoon: Surya Raghu

Time	Subject	Speaker
9:30 - 10:15	Legal contracts and agreements in	Dawood Parker
	start-ups	
10:15 - 11:00	Creative protagonism: navigating	Daniel Gurgel
	future challenges	
11:00 - 11:15	Coffee break	
11:15 - 12:15	Taking the inventions to market:	Surya Raghu
	Evaluating the Technology Readiness	
	Level (TRL) of an invention for	
	commercialization, processes involved	
	and estimates of time required to	
	develop a product from an invention.	
12:15 -13:15	Pitching for cash: equity issues, share	Richard Books
	dilution	
	Valuation at various stages of	
	development.	
	Funding needs at different stages	
13:15 - 14:45	Lunch break	
14:45 - 15:45	The bases of IP and innovation in	Maria Valnice Boldrin Zanoni
15.45 17.45	Brazil scenario.	David and Davidson / Course Davidson
15:45 - 17:15	Classroom exercise on taking an idea to market	Dawood Parker / Surya Raghu
17:15 - 17:30	Coffee break	
17:30 - 18:30	Group project part 3	All speakers and participants
17.30 - 16.30	Forecasting costs and cash	All speakers and participants
	requirement	
	Stage of your product/service and	
	time to market	
	Valuations and Return on Investment	
	Collaborations/ partnerships/	
	Strategic Relationships	
	Competition Analysis	
	Barriers to Entry	
18:30 - 19:00	Wrap-up for the day 3	Surya Raghu

Date: 20<sup>th</sup> October 2016

Day 4

Session Chairs: Morning: Dawood Parker

Afternoon: Richard Brooks

Time	Subject	Speaker
9:30 - 10:15	Communication and presentation skills	Richard Brooks
10:15 - 10:45	Start, stumble and succeed	Surya Raghu
10:45 - 11:00	Coffee break	
11:00 - 11:45	Outlook and experiences of being an inventor/ entrepreneur in Brazil	Fernando Galambeck
11:45 - 13:15	Local entrepreneurs/ innovators  Presentation and panel discussion  Fifteen minutes for individual talks before a round table	<ul> <li>Panel Chair: Fernando Galambeck:</li> <li>Luciano Avalone: Telos Consulting - Technological Prospecting</li> <li>Rodrigo Marques: Procell Biologics</li> <li>Rafael: Kanaí: First Sugar-Cane juice in bottle</li> </ul>
		Estácio Terui: TEY Eolic generator
13:15 - 14:45	Lunch break	
14:45 - 16:45	Project trouble shooting Q&A for speakers Group Project Part 4 - complete the 10- minute pitch and practice for the presentation using guidelines provided.	All speakers
16:45 - 17:00	Coffee break	
17:00 - 19:00	Group project (continued) and business pitch preparation and a practice presentation	Surya Raghu

Date: 21<sup>st</sup> October 2016

Day 5

Time keeping official: Surya Raghu

Time	Subject	Speaker
09:30 - 10:00	Upload business-pitch presentations	Panel: All Speakers, (TBD)
	Determine order of presentations	Richard Brooks
	Lateral alternation for	C Paul
	Introduction to rules of	Surya Raghu
	presentations	
	Introduction to the panel of judges	
10:00 - 11.20	Session 1, groups 1, 2, 3, 4	Timekeeping official
11.20 -11:35	Coffee break	
11:35 -12:55	Session 2, groups 5, 6,7,8	Timekeeping official
12:55 - 14:25	Lunch break	
14:25 -15:25	Feedback to the participants on their	All panellists:
	presentations	Moderator: Richard Brooks
		All participants
	Feedback from participants to the	Moderator: Surya Raghu
	organisers (written and informal)	, -
15:25 - 15:45	Follow-up Support from IOP	Linsey Clark
15:45	Concluding Remarks	Nathan Berkovits
		Rodrigo Fernando Costa Marques
	Distribution of certificates	Surya Raghu