The Abdus Salam International Centre for Theoretical Physics

Joint ICTP-TWAS Workshop on Entrepreneurship for Physicists and Engineers from Developing Countries

Organizer(s): Directors: Surya Raghu, Dipali Bhatt-Chauhan, Joseph Niemela
Trieste - Italy, 23 - 27 April 2012

Venue: Leonardo da Vinci Building Main Lecture Hall

Final programme

Monday 23 April 2012 (Room:Leonardo da Vinci Building Main Lecture Hall)
Chairperson: Morning: Beth Taylor - Afternoon: Claudio Tuniz

23 April 2012

08:30 - 10:00 (Room: Leonardo da Vinci Building, Lobby)
--- Registration ---
All Speakers and Participants are required to complete registration formalities

10:00 - 10:45 **Dipali Bhatt-Chauhan (IOP), Surya Raghu (Advanced Fluidics LLC), Joseph Niemela (ICTP), Beth Taylor (IOP), Peter McGrath (TWAS Programmes Officer)**
Welcome Remarks
Brief introduction of Speakers and Organizers. Workshop objectives. 15-second participant self-introductions.

10:45 - 11:00 (Room: Leonardo da Vinci Building, Lobby)
--- Coffee Break ---

11:00 - 12:30 **Duncan Moore** / *University of Rochester, New York, USA*
Opportunities and barriers for commercialization

12:30 - 14:00 --- Lunch Break ---

14:00 - 15:00 **Dawood Parker** / *Melys Diagnostics Limited, UK*
Scientists and Engineers as Entrepreneurs

15:00 - 16:30	**Richard Brooks** / *FD Solutions, London, UK* **Making a business case of an idea - a classroom exercise**
16:30 - 17:00	(Room: Leonardo da Vinci Building, Lobby) --- Coffee Break ---
17:00 - 18:00	**All Speakers** **Group Project and Open Forum**
18:00 - 18:15	**Surya Raghu, Dipali Bhatt-Chauhan** **Wrap-up for Day 1**

Tuesday, 24 April 2012 (Room:Leonardo da Vinci Building Main Lecture Hall)
Chairperson: Morning: D. Bhatt-Chauhan - Afternoon: D. Moore

08:30 - 09:30	**Beth Taylor** / *IOP, London, UK* **Effective communication skills for entrepreneurs**
09:30 - 10:45	**Duncan Moore** / *University of Rochester, New York, USA* **Investors' perspectives on start-up funding**
10:45 - 11:00	(Room: Leonardo da Vinci Building, Lobby) --- Coffee Break ---
11:00 - 12:30	**Yumiko Hamano** / *WIPO, Geneva, Switzerland* **Concept of intellectual property and its significance for starting a high-tech company** IP: Patents, trade secrets and trademarks; Who is the inventor and who is not?; Who owns the rights to an invention - you or your organization/company?; Publications vs. patents.
12:35 - 13:50	--- Lunch Break ---
13:50 - 14:00	--- Group Photo ---
14:00 - 15:15	**Yumiko Hamano, Surya Raghu** **Classroom exercise on patenting an idea, legal documents and product launch**
15:15 - 16:30	**Richard Brooks** / *FD Solutions, London, UK* **Business plan fundamentals** Introduction to financial terminology, short quiz on financial terminology. Suggested content for scientific business plan.
16:30 - 16:45	(Room: Leonardo da Vinci Building, Lobby) --- Coffee Break ---
16:45 - 17:45	**Stephen Taylor** / *Strategic Technology Transfer, AREA Science Park, Trieste* **Technology trend forecasting and opportunity assessment**
17:45 - 18:15	**All Speakers** **Project updates from groups and Open Forum**
18:15 - 18:30	**Dipali Bhatt-Chauhan, Surya Raghu** **Wrap-up for Day 2**

Wednesday 25 April 2012 (Room:Leonardo da Vinci Building Main Lecture Hall)
Chairperson: Morning: Dawood Parker - Afternoon: Yumiko Hamano

25 April 2012

08:30 - 09:45 **Surya Raghu** / *Advanced Fluidics LLC, Ellicott City, USA*
Taking the inventions to market
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.

09:45 - 11:00 **Anthony Bunn** / *MRC Innovation Centre, Cape Town, South Africa*
Commercializing your innovation
Decision to form your own start-up, license or sell your technology? How does a single inventor/university team/small company make these decisions? Who is the customer? How viable is the technology and how receptive is the market?

11:00 - 11:15 (Room: Leonardo da Vinci Building, Lobby)
--- Coffee Break ---

11:15 - 12:15 **Richard Brooks** / *FD Solutions, London, UK*
Start-up financing options for an entrepreneur

12:15 - 13:30 --- Lunch Break ---

13:30 - 14:30 **Rakesh Roshan** / *Isis Innovation Ltd., Oxford, UK*
Inventions to start-ups
How it is done at Oxford and what experience can be translated to developing countries

14:30 - 15:30 **Anthony Bunn, Dawood Parker**
Lessons from start-ups and spin-offs
30 minutes each

15:30 - 15:45 (Room: Leonardo da Vinci Building, Lobby)
--- Coffee Break ---

15:45 - 16:45 **Participants (TBD)**
Case Studies

16:45 - 17:45 **All Speakers and Participants**
Project updates and Open Forun

17:45 - 18:00 **Dipali Bhatt-Chauhan, Surya Raghu**
Wrap-up for Day 3

Thursday 26 April 2012 (Room:Leonardo da Vinci Building Main Lecture Hall)
Chairperson: Morning: D. Bhatt-Chauhan - Afternoon: R. Brooks

26 April 2012

09:00 - 10:00 **Duncan Moore** / *University of Rochester, New York, USA*
Marketing

10:00 - 10:30 (Room: Leonardo da Vinci Building, Lobby)
--- Coffee Break ---

10:30 - 11:30 **Richard Brooks** / *FD Solutions, London, UK*
Social Media for Entrepreneurship

11:30 - 12:30	**Rakesh Roshan** / *Isis Innovation Ltd., Oxford, UK* **Open Innovation and Entrepreneurship for Sustainability**
12:30 - 14:00	--- Lunch Break ---
14:00 - 15:00	**Surya Raghu** / *Advanced Fluidics LLC, Ellicott City, USA* **Key decisions in starting a company**
15:00 - 17:00	**Project Work** All Speakers available for consultation on projects 15.30-17.00: Introducing Entrepreneurship and Business Skills in Science Curriculum (Optional) (Dipali Bhatt-Chauhan & Surya Raghu)
15:15 - 15:30	--- Coffee Break ---

Friday 27 April 2012 (Room:Leonardo da Vinci Building Main Lecture Hall)
Chairperson: Joseph Niemela

27 April 2012

09:00 - 09:30	**Panel** / *All Speakers and Local Representatives* **Participants' idea/business plan presentations to a panel of experts for critique** Introduction of the panel of judges
09:30 - 11:00	**Session 1, Groups 1, 2 and 3**
11:00 - 11:15	(Room: Leonardo da Vinci Building, Lobby) --- Coffee Break ---
11:15 - 12:45	**Session 2, Groups 4, 5 and 6**
12:45 - 14:00	--- Lunch Break ---
14:00 - 15:00	**Session 3, Groups 7 and 8**
15:00 - 15:30	**All panelists, all participants** **Feedback to the participants on their plans. Feedback from participants to the organizers (written and informal)** Moderator: Richard Brooks
15:30 - 16:00	**Dipali Bhatt-Chauhan, Surya Raghu, Joseph Niemela & Peter McGrath** **Concluding Remarks**
16:00 - 16:30	**Distribution of Certificates after handing out the written evaluations**