



Organiser: Hong Kong Science and Technology Parks Corporation
 Strategic partner: The Hong Kong Polytechnic University

PROGRAMME-AT-A-GLANCE

DAY ONE - Tuesday, 15 November Venue: Hong Kong Science Park	
Main Conference (9:00-15:30)	
Chairmen's Forum (16:00-17:30)	
Cocktails (17:30-19:00)	
Networking Dinner (19:00-21:00)	

DAY TWO - Wednesday, 16 November Venue: Hotel ICON	
Morning (9:00-12:30)	
Tech Forum 1: Policies, Markets & Business Opportunities	Tech Forum 2: Building Design & Automation
Afternoon (14:00-17:30)	
Tech Forum 3: Industry & Manufacturing	Tech Forum 4: Lighting & Display Innovation

DAY THREE - Thursday, 17 November Venue: Hong Kong Science Park		
Morning (9:15-12:00)		
SPARC Forum 1: Angel Investment Matching	SPARC Forum 2: Venture Capital Investment Matching	Workshop: An Inside Look at the Entrepreneurial Path to IPO
Afternoon		
Lunch (12:30-14:00)		
HK Venture Capital and Angel Investor Conference (14:00-17:30)		
Networking Cocktails (17:30-19:00)		

INNOASIA 2011: MAIN CONFERENCE
Energy Efficiency and Management for a Sustainable Future
Tuesday, 15 November 2011

Focus:

Accelerating demand for energy, coupled with pressing global climate change concerns, is focusing the attention of governments and industry leaders on how to build more energy-efficient economies to assure a sustainable future. Innovative technologies and solutions that can drive energy savings and reduce emissions are at the top of government and business agendas in China and across the Asia-Pacific region.

InnoAsia 2011 will address the critical need for greater understanding of the opportunities for investment in energy efficiency and the adoption of world best practices. Key areas to be explored include the energy-related impacts of China's 12th Five Year Plan, design and certification for green energy efficient buildings, intelligent automation and control systems, renewable energy and smart infrastructure, integrated clean-tech solutions, and breakthroughs in ultra-efficient lighting technologies.

8:30 Registration

9:00 **Official Opening Ceremony**

- The Honourable John C. Tsang, Financial Secretary, Government of HKSAR
- Prof. Timothy W. Tong, President, The Hong Kong Polytechnic University
- Nicholas Brooke, BBS, JP, Chairman, Hong Kong Science and Technology Parks Corporation

9:30 **Challenges and goals for China's energy development and strategic plan for energy technology 2011-2015**

- Challenges facing China as an energy producer and consumer in terms of 1) carbon emission control; 2) uneven energy resource distribution; 3) low energy utilisation efficiency; 4) poor equipment standard and 5) difficulty in feeding large-scale intermittent energy to the power grid
- China's strategic goals: 1) non-fossil energy to account for 15% of the national total primary energy consumption and 2) carbon dioxide emission per GDP to decrease by 40-45% by 2020 (from 2005)
- Priorities for development of clean, efficient utilisation of conventional fossil fuel
- Accelerating clean energies including hydro, nuclear, wind, solar and biomass
- RD&D focus on technologies for smart grid, clean coal, renewable energy, nuclear energy, hydrogen / fuel cell, and energy reservation and storage
- Zheng Fangneng, Senior Engineer, Director, Energy Division, High-Tech Development and Industrialization Department (HTDI), Ministry of Science and Technology (MOST), China

9:45 **The green revolution: Innovative solutions for climate protection**

- Current situation in Europe and Germany's energy world: Facing a paradigm shift
- Efforts undertaken to overcome the challenges from the perspective of public and private research
- Developments in the entire energy conversion chain in power generation, power transportation, power distribution and efficient use of energy
- Challenges, opportunities and future potential of eMobility
- Dr. Ing. Reinhold Achatz, Corporate Vice President, Head of Research & Technologies, Siemens, Germany

10:10 **Evolution of China's energy strategy for sustainable development**

- Critical energy strategies and innovations needed to ensure China's sustainable future growth and development
 - How will the energy industry landscape evolve under the direction set by China's 12th Five Plan?
 - What are the opportunities ahead for China's power producers, energy utilities and service companies?
 - Importance of energy efficiency and management for a green industrial revolution - how will commercial and industrial end users be affected?
 - How can investors capitalise on China's innovations in energy efficiency, management and supply?
- Chen Fei, Board Director, President and CPC Committee Member, China Three Gorges Corporation

10:25 Q&A

10:35 Networking Coffee Break

11:10 **Smart energy, Smart grid**

- Delivering cleaner and more efficient energy in the next decade
 - The global challenge - how to reduce carbon emissions while maintaining reliable power supplies and keeping the cost of energy affordable
 - More efficient use of energy in homes, commercial premises and industry as a critical part of future plans for the electricity industry
 - New technologies and new initiatives in energy saving
 - How these help make electricity grids smarter and provide opportunities for end-users to be more efficient and better manage their energy needs
- Richard Lancaster, Managing Director, CLP Power

11:30 **Sustainable development and energy efficiency best practices: A corporate perspective**

- Business drivers and best practices for sustainable development
 - Future projects planning and environmental impact assessment
 - Key initiatives to improve energy efficiency and management as well as reduce greenhouse gas emissions
 - Managing enterprise risk and the impact of climate change
 - Innovation and responsible stewardship to enable the low carbon future
- Chew Tai Chong, Member of Executive Directorate and Projects Director, MTR Corporation

11:50 Q&A

12:00 **Discussion Roundtable: Benefiting from the world's best practices in sustainable urban design and investing for energy efficiency**

- How will concepts of the efficient, sustainable, intelligent and desirable to live in city evolve?
- What infrastructure investment strategies can be adopted to move closer to carbon neutral and near zero energy buildings?
- What minimum benchmarks on GHG / carbon savings should be set for urban infrastructure?
- How can renewable energy targets (RET) best be adopted in the built environment to drive energy saving initiatives?
- Taking a more aggressive and strategic approach to urban renewal and retrofitting for energy saving: What can be achieved?

Moderator:

→ Prof. Timothy W. Tong, President, The Hong Kong Polytechnic University

Panelists to be advised from the day's speakers plus:

→ Richard Lancaster, Managing Director, CLP Power

→ Harry Verhaar, Senior Director, Energy and Climate Change, Head of Strategic Sustainability Initiatives, Philips Lighting, Netherlands

12:45 Networking Lunch

14:10 **China's development of a low-carbon economy: strategy, policy, planning and outlook**

- China's proactive low-carbon economy strategy and its initiatives in global climate change
- Campaigns for energy-saving and emission reduction driven by government
- Roadmap from carbon emission reduction and "circular economy park" to the ultimate eco-city goal
- Energy saving and emission reduction funds as a key government policy measure
- Policy system for low-carbon economic development
- Outline of the nationwide low-carbon plan for China

→ Prof. Xu Zhengzhong, Professor, Chinese Academy of Governance and Chief Management Expert, National Major Project of Science and Technology, China

14:25 **Design for energy efficient green buildings and cities: Creating a global transformation**

- State-of-the-art in green building standards and energy codes for commercial and residential buildings and their implications
- Progressing green building initiatives in China and other countries
- Importance of integrated clean-tech strategies across building systems for improved environmental and economic performance
- Opportunities for the future evolution of "Leadership in Energy and Environmental Design" (LEED)

→ Rob Watson, Chairman, CEO and Chief Scientist, EcoTech International, USA, Founding father of LEED green building rating system

14:50 **The contribution of energy efficient LED lighting to a Circular Society**

- Creating a change in mindset from initial cost to an energy efficiency / saving perspective
- Facilitating the switch-over from old technologies to the new green wave of lighting systems for commercial, professional and consumer applications
- Maximising the potential for high-efficiency lighting in commercial buildings through dynamic and intelligent lighting
- Lighting at the crossroads - update on LED / OLED commercialisation timelines, standards initiatives, cost expectations and their implications
- Future directions - seizing the opportunity for innovative applications and business models to grow new technologies and markets

→ Harry Verhaar, Senior Director, Energy and Climate Change, Head of Strategic Sustainability Initiatives, Philips Lighting, Netherlands

15:15 Q&A

15:30 Networking Coffee Break

INNOASIA 2011: CHAIRMEN'S FORUM
Energy Strategies for Sustainable Growth and Competitiveness
Tuesday, 15 November 2011

16:00 Chairmen's Forum

In celebration of Hong Kong Science & Technology Parks Corporation's 10th anniversary, a high-level **Chairmen's Forum** is being launched as the highlight of the opening day of **InnoAsia 2011**. This high-profile session will bring together distinguished leaders from business, industry and government.

The objective of the **Chairmen's Forum** is to identify and discuss creative energy strategies which could form part of the future policy agenda for Hong Kong's sustainable growth and competitiveness, both as part of China / Pearl River Delta region and as a leading business hub in Asia.

Leaders from business, industry and government will explore the way forward including:

- Future vision for a competitive, resilient and sustainable Hong Kong
- Facilitating an energy efficient economy
- Transformation to a low energy built environment
- Capitalising on China's energy initiatives
- Clean tech and energy efficiency
- Evolving a flexible, integrated energy infrastructure for future needs

Moderator:

- Nicholas Brooke, BBS, JP, Chairman, Hong Kong Science and Technology Parks Corporation

Hong Kong business / industry leaders:

- Ir. Dr. Andrew K. C. Chan, JP, Chairman, Hong Kong Green Building Council and Deputy Chairman, Arup Group

Overseas business / industry leaders:

- Philippe Delorme, Executive Vice President, Strategy & Innovation, Schneider Electric & Member of Executive Committee, Schneider Electric
- Rob Watson, Chairman, CEO and Chief Scientist, EcoTech International, USA, Founding father of LEED green building rating system
- Dr. Ing. Reinhold Achatz, Corporate Vice President, Head of Research & Technologies, Siemens, Germany (TBC)

17:30 Closing Remarks for Day 1

- E. Anthony Tan, Chief Executive Officer, Hong Kong Science and Technology Parks Corporation

17:40 Cocktails

19:00 Networking Dinner

TECH FORUM 1: POLICIES & MARKETS
Capitalising on New Business Opportunities in Energy Efficiency
Wednesday Morning, 16 November 2011

Co-organised with: The Hong Kong University of Science and Technology

Focus:

Best practices in energy efficiency investment can deliver substantial economic benefits - one source suggests that every \$1 dollar spent on energy efficiency can realise as much as \$6-7 dollars worth of economic gains, job creation and energy savings.

Tech Forum 1 will explore emerging market opportunities for B2B and B2C energy efficiency services, applications and solutions. Effective business models and investment strategies, as well as the latest approaches to energy efficiency measurement and benchmarking / audit, are also highlighted. The tremendous growth opportunities ahead are highlighted by forecasts that energy service company business in China will grow to US\$17bn annual revenue by 2015.

8:30 Registration

9:00 **Welcoming remarks**

→ E. Anthony Tan, Chief Executive Officer, Hong Kong Science and Technology Parks Corporation

9:05 **Opening address: Opportunities for a green, energy efficient future and HKUST initiatives**

→ Lionel M. Ni, Special Assistant to the President, Dean of HKUST Fok Ying Tung Graduate School, Chair Professor of Computer Science and Engineering, The Hong Kong University of Science and Technology

9:15 **Responding to growing energy efficiency and cost challenges with creative and sustainable solutions**

- What are the implications for the global business community of the energy and environmental challenges ahead?
 - Can the high-profile targets being set for transforming the energy infrastructure to renewable sources be achieved?
 - Promoting the adoption of energy efficient technologies and overcoming market barriers to implementation
 - What business models, investment strategies and project delivery approaches show the greatest promise?
 - Likely impacts of China's 12th Five Year Plan on energy-related opportunities for business
- McKinsey & Company (possible new speaker to be advised)

9:40 **Corporate green movement: Adopting sustainable and energy efficient practices in the commercial office environment**

- Integrating sustainability principles into business practices and processes
- Going beyond public relations spectacle: Green as a business process change
- Update on key emerging technologies that will drive transformation to sustainable, low carbon business operations, management and decision making
- Making the business case: Criteria for evaluating sustainable, energy efficient technologies, products and services
- Case studies: What savings are being realised in terms of lower costs (capex and opex), reduced office space needs and minimised carbon footprint?

→ Katherine Lau, General Manager, Corporate Quality and Sustainability, Fuji Xerox

10:05 **Sustainable city solutions: Policies, incentives and business benefits**

- Strategies for the development of world class utility systems in energy supply, sewage treatment and waste management
- Best practices in the transformation of surplus heat, sewage and waste into resources including electric power, heating, cooling, vehicle fuel and bio fertilisers
- What types of policies and incentives are needed to make this infrastructure possible?

→ Håkan Knutsson, Managing Director, Sustainable Business Hub, Sweden

10:30 Networking Coffee Break

11:00 **The future of sustainable mobility - Leading (E)-mobility Into a new era**

- Opportunities ahead in bringing electric vehicles and e-mobility solutions to the mass market
- Requirements and challenges for e-mobility: vehicles, infrastructure, user expectations, legal and regulatory demands
- A holistic sustainability approach for individual mobility
- Mini E and BMW ActiveE international fleet trials: Over 15 million kilometers EV experience
- E-mobility: What's in it for Hong Kong?

→ Dr. Julian Weber, Head of Innovation Projects E-Mobility, BMW Group, Germany

11:25 **Integrated EV charging infrastructure solutions - A journey to sustainable mobility**

- The new energy vehicle landscape and standardisation roadmap
- EV charging business models and payment methods
- Technology innovations for AC and DC fast charging
- The Open Charge Point Protocol (OCPP) for EV chargers
- Back office integration for authorisation and transaction support
- Global experiences and lessons learnt to date

→ Dr. Fabian Hess, Vice President - Asia Region, Product Group EV Charging Infrastructure, ABB Switzerland

11:50 **Panel Discussion: What are the most effective business and investment strategies for implementing energy efficiency and cleantech projects?**

- How are innovations in energy efficiency, cleantech and renewable technologies being transformed into real business opportunities?
- Business and investment models for energy efficiency and cleantech projects: What are the experiences to date?
- What role might a renewable energy credits system play to reward power and energy efficiency?
- Potential for energy efficiency funds and investments structured around innovation and flexibility
- Implications of China's plans for a clean industrial revolution in terms of business opportunities and potential future economic growth

Moderator to be advised

Panelists:

→ Bruce Hicks, Founder and Managing Director, TPIZ Resources

→ Nicolai Sederberg Rottbøll, Director, Copenhagen Cleantech Cluster, Denmark

→ Dr. Fabian Hess, Vice President - Asia Region, Product Group EV Charging Infrastructure, ABB Switzerland

12:30 End of Tech Forum 1

TECH FORUM 2: BUILDING DESIGN & AUTOMATION
Best Practices in Transforming to a Low Energy Built Environment
Wednesday Morning, 16 November 2011

Co-organised with: The Hong Kong Polytechnic University

Focus:

It is widely recognised that buildings now account for around one third of global energy use and are responsible for between 35% and 50% of global carbon emissions.

Tech Forum 2 focuses on the great opportunities ahead for achieving a renaissance in building energy efficiency and savings through improved building and insulation materials, energy efficient appliances, and well integrated automated and control systems coupled with improved building intelligence. Emerging markets for new services such as integrated facilities management and related green services will be explored.

8:30 Registration

9:00 High performance low carbon buildings in high density cities

- Hong Kong's carbon situation - past performance, targets and future projection
 - Focus area for Hong Kong buildings - carbon contributions from various sectors
 - Examining the projections for different levels of energy efficient retrofits for existing buildings
 - Highlights of key building energy efficiency technologies applicable to the context (hi-rise, hi-density) and climate (sub-tropical)
- Dr. Trevor Ng, Building Sustainability Consultant, Arup Group

9:25 Can chemistry improve energy efficiency in Asia?

In buildings, automobiles, and household equipment, Asia is wasting an unprecedented amount of energy. Solutions exist today that enable substantial improvements at multiple stages of the value chain - and many of these solutions come from the world of chemistry. The speakers will discuss examples including:

- Latest technical and material innovations for building energy efficiency
- Public-private pilot projects that test these concepts in practical applications
- Barriers and opportunities for implementing these solutions, especially in China

Co-presenters:

- Jan Kluessendorf, Senior Manager, Asia Pacific, Environmental Health and Safety, BASF and Climate Protection Officer, China, BASF
- Vincent Loke, Head of Construction Industry Target Group, China, BASF (co-presenter to bring in Tianjin China eco-project experience)

9.50 International Commerce Centre, Hong Kong: Case study and experiences in world class energy efficient design

- ICC's achievements as a world class development incorporating the most advanced intelligent systems and energy optimising technologies
- How the highest green rating was obtained including design, construction, operation, maintenance and property management criteria

Co-presenters:

- Prof. Wang Shengwei, Chair Professor of Building Services Engineering, The Hong Kong Polytechnic University

→ Ir. Elmen Chu, Senior Associate, J. Roger Preston Group

10:15 Networking Coffee Break

10:55 **No building is an island: Moving towards zero carbon cities**

- Looking beyond the design quest for zero energy buildings
 - Cities as an integrated system of energy consumers and energy producers
 - Opportunities provided through increased integration of buildings and infrastructure
 - Building an energy system based on a 100% renewable sources
 - Scandinavia's experiences and directions in future sustainable design
- Lars Ostenfeld Riemann, Group Director, Buildings and Design, Ramboll Group, Denmark

11:20 **Opportunities for implementing green integrated facilities management (GIFM): Including experiences from HKIA**

- Economic drivers and the business case in terms of lower operational / maintenance (O&M) costs and increased employee productivity
 - Evolution from property asset management to green practices in facilities management
 - Measuring and monitoring progress towards a low carbon footprint
 - Developing a longer term facilities management strategy accommodating new terminal projects incorporating energy efficient technologies
- Ricky Leung, General Manager - Technical Services, Airport Authority Hong Kong

11:45 **Panel discussion: Making the business case for energy efficiency, renewable energy and sustainable intelligent building design features**

- Building smart for sustainability: what are the emerging best practices? - How can these be implemented in Hong Kong?
- Which technologies and processes offer the greatest promise for integrated, intelligent and sustainable new buildings?
- What role might performance contracting / energy performance contracts (EPC) play in Asian markets to accelerate efficient improvements?
- How can the greatest returns be achieved with green refurbishment / retrofit of existing buildings?

Moderator:

- Prof. Geoffrey Shen, Chair Professor of Construction Management, Associate Dean, Faculty of Construction Environment, and Head, Department of Building and Real Estate, The Hong Kong Polytechnic University

Panelists:

- Prof. Carsten Rode, Head of Section. DTU Civil Engineering. Department of Civil Engineering, Technical University of Denmark (DTU)
- Vincent Loke, Head of Construction Industry Target Group, China, BASF
- Prof. Edward Ng Yan-yung, School of Architecture, The Chinese University of Hong Kong
- Ricky Leung, General Manager - Technical Services, Airport Authority Hong Kong

12:30 End of Tech Forum 2

TECH FORUM 3: INDUSTRY & MANUFACTURING
Smart Solutions for Reduced Environmental Impact and Cost Saving
Wednesday Afternoon, 16 November 2011

Co-organised with: The Chinese University of Hong Kong

Focus:

Industrial processes and manufacturing are the largest sources of greenhouse gas (GHG) emissions accounting for about 40% of global CO₂ emissions. Emissions reduction and energy efficiency throughout the value chain are the key to ensuring a sustainable energy future.

Tech Forum 3 explores how technology advances and energy optimisation in industrial processes can be deployed to deliver crucial benefits in terms of reduced environmental impact and cost savings. The scale of emerging business opportunities in the industrial sector is illustrated by a forecast 33% compound annual growth rate over the next five years in the market for carbon management software, services and applications.

13:30 Registration

14:00 How are we adapting to the changing business environment of the smart grid?

- Transformative impacts of the evolution to a smart grid world
 - Collaboration and partnerships as a smart approach
 - Synergy between energy efficiency and demand response
 - Energy efficiency implications of renewable energy sources integration
 - Impacts of a future integrated electric vehicle and smart grid infrastructure
 - Emerging wireless energy / demand management technologies and automation systems
 - Potential for new services and integrated, adaptable solutions
- Emmanuel Lagarrigue, Senior Vice-President Corporate Strategy & Development, Strategy and Innovation, Schneider Electric

14:25 Power electronics as a crucial enabling technology for energy efficiency: Development trends and challenges

Boosting energy efficiency is vital in stretching energy resources and reducing carbon emissions. Power devices and optimised power electronics converters will play a crucial role in increasing the efficiency with which electric power is consumed. The speaker will explore:

- Megatrends driving development including energy efficiency, renewable energy generation, e-mobility and smart grid
 - Demand controlled flow of electrical energy via ultra high efficiency power electronics converters to meet energy needs at optimal efficiency
 - System integration, high density design of monolithic devices, discrete components / multichip approaches driving progress in power electronics systems
 - Key development factors including silicon utilisation, system reliability, power unit miniaturisation and overall operating efficiency
 - Technologies roadmap and future energy saving potential
- Prof. Dr. Leo Lorenz, IEEE Fellow, Senior Principal, Infineon Technologies, Germany & President, European Center for Power Electronics (ECPE)

14:50 Creating value through effective adoption of greentech business models and energy efficient strategies

- Making the business case: How can the benefits of cleantech, renewable energy and energy efficiency-improvement spending be maximised?

- Applying sourcing strategies to understand and access greentech product markets, achieve energy savings, reduce emissions and meet carbon footprint targets
- Case studies of sourcing opportunities for i) green building / energy saving products, ii) renewable energy components, and iii) water conservation technologies

→ Mona Ip, Vice President, Business Development, GreenLink Global

15:10 Networking Coffee Break

15:45 **The future energy roadmap and its implications for staying competitive**

- Managing today's increasing pressures to adopt sustainability principles: how should industry and manufacturing respond?
- Expectations on future Investment linked to carbon markets evolution
- Potential for the introduction of cap-and-trade systems
- Potential impacts of China's plans to create a low carbon economy and adopt market-oriented mechanisms
- Key developments to watch including price reform, carbon trading pilots and support for energy services companies (ESCOs) in China

→ Chris McNally, Director, Energy and Chemicals, Booz & Company, China

16:05 **Research in sustainability turned into business: The Lund University case**

- Case examples of research and collaboration in sustainability
- Concept and value of industrial "white" biotechnology and biorefinery

→ Josefin Ahlqvist, Project Director, Biosciences, Lund University, Sweden

16:25 **Innovations in energy harvesting and storage for manufacturing and industrial applications: Creating a battery-less world**

- New frontiers in energy harvesting concepts, technologies and devices
- Evaluating cost-benefits - which technologies and applications offer the greatest potential?
- Ultra-low-voltage power conversion technologies and their application in wireless sensor networks, portable wireless instrumentation and industrial process monitoring
- Ambient energy harvesting as a complimentary power source for portable low-power electronic devices
- Storage innovations including micro fuel cells and thin-film micro-energy devices

→ Shih-Chi Chen, Ph.D, Associate Professor, Department of Mechanical and Automation Engineering, The Chinese University of Hong Kong

16:45 **Panel discussion: How much can be saved?**

- Pros and cons of government imposed regulatory policies, incentives and subsidies
- How much improvement can we expect from future hi-tech innovations for energy efficiency in industrial processes?
- How should new energy-efficient technologies be evaluated and prioritised?
- Engineering vs. optimisation approaches for a sector's energy conservation
- Potential for energy performance contracting (EPC) in industry / manufacturing facilities
- Can project payback concerns be overcome?
- Which financing models work best for industrial / manufacturing energy efficiency projects?

Moderator:

→ Prof. Yeung Yam, Department of Mechanical and Automation Engineering, The Chinese University of Hong Kong

Panelists:

- Chris McNally, Director, Energy and Chemicals, Booz & Company, China
- Xu Yan, Ph.D, Assistant Professor, Department of Geography and Resource Management, The Chinese University of Hong Kong
- Prof. Dr. Leo Lorenz, IEEE Fellow, Senior Principal, Infineon Technologies, Germany & President, European Center for Power Electronics (ECPE)
- John Herbert, Founder and Managing Director, Kelcroft E&M & Vice Chairman, Hong Kong Association of Energy Service Companies, (HAESCO)

17:30 End of Tech Forum 3

TECH FORUM 4: LIGHTING & DISPLAY INNOVATION
Technology Breakthroughs and Commercial Opportunities
Wednesday Afternoon, 16 November 2011

Co-organised with: The Hong Kong Polytechnic University

Focus:

Lighting represents over 17% of all global electricity consumption, so significant increases in efficiency and performance promise a major impact in terms of reduced energy needs and costs.

Tech Forum 4 will evaluate the exciting opportunities now emerging with the new revolution in lighting technologies, including OLED, PLED and organic semiconductors. Technology innovators will address the impact of these technologies on costs and energy efficiency, as well as commercialisation prospects and market positioning strategies. Possibilities for innovation and creativity in display lighting and application opportunities will be explored.

13:30 Registration

14:00 Update on the latest breakthroughs in organic electronics and state-of-the-art manufacturing innovations

- Update on OLED as a promising technology for lighting applications
 - Status of OLED displays and future requirements from an equipment manufacturer's perspective
 - Overcoming manufacturing challenges: basic principles of carrier-gas enhanced vapor phase deposition and major differences to vacuum processes
 - Advanced possibilities for state-of-the-art OLED devices enabled through organic vapor phase deposition (OVPD)
 - Carrier-gas enhanced vapor phase deposition for other organic materials including in-situ formation of polymer films
 - Polymer vapor phase deposition (PVPD) as a disruptive approach to enable advanced functional polymer films
 - Looking ahead to flexible electronics, displays, and lighting: challenges being overcome
- Juergen Kreis, Senior Department Manager, Business Development, Aixtron SE, Germany

14:25 Creative potential of OLED and other new lighting innovations: Capturing the unique design possibilities

- Architectural design approaches being adopted to maximise the impact of new lighting technologies
- Artistic lighting and signage applications
- Energy efficiency and environmental design

- Case studies on design and implementation to make the most of the lighting qualities
- Melissa Mak, Senior Designer, ARUP Lighting, UK

14:50 Application of secondary optics to LED lighting design

- Defining lighting requirements and design goals
- Adding secondary optics that will shape LED output to a particular profile
- How secondary optics can affect not only beam pattern, but also lighting efficiency
- Application examples including outdoor lighting, automotive and display
- Ir Prof. W. B. Lee, Cheng Yick Chi Chair Professor of Manufacturing Engineering, Hong Kong Polytechnic University

15:15 Networking Coffee Break

15:55 Exploring new light sources, innovative lighting systems and applications

- Development and design of new luminaires for LED systems
- New LED light sources that improves health
- New standards for LEDs
- LEDs for museums
- Future applications of LEDs
- Prof. Paul Michael Petersen, Head of Research, Diode Lasers and LED Systems, DTU Fotonik, Technical University of Denmark

16:20 Exploring digital mirror applications and dramatic lighting innovations

- Key applications for a Cybertecture mirror - A reflective Window into a Digital Life
- Lighting up the future - A walk through cinematic, salon, residential, commercial and interior space design
- Experiences in working with international customer segments
- An infinite future with imaginative thinking, smart ICT and lighting design
- James Law, Founder and Chief Cybertect, James Law Cybertecture International Holdings

16:45 Panel discussion: How best to capitalise on new markets and commercial opportunities for innovations in lighting and display technologies

- Evaluating products, applications and partnerships for successful commercialisation
- Creating and developing new markets in OLED, PLED, solid state lighting (SSL) and related technologies
- Market dynamics and the potential for accessing new customers
- Implications of regulatory and standards initiatives
- Are government regulations or incentives needed to facilitate adoption?

Moderator:

- Prof. Charles Surya, Acting Dean of the Faculty of Engineering, Hong Kong Polytechnic University

Panelists:

- Prof. Paul Michael Petersen, Head of Research, Diode Lasers and LED Systems, DTU Fotonik, Technical University of Denmark
- Juergen Kreis, Senior Department Manager, Business Development, Aixtron SE, Germany
- Melissa Mak, Senior Designer, ARUP Lighting, UK
- James Law, Founder and Chief Cybertect, James Law Cybertecture International Holdings

17:30 End of Tech Forum 4

**SPARC FORUMS 1 & 2:
ANGEL AND VENTURE CAPITAL INVESTMENT MATCHING*
Thursday Morning, 17 November**

Morning session: 9:15 - 12:00

The **Science Park Applied Research and Commercialisation (SPARC) Forum** is an investment-matching event that facilitates meetings between start-ups and technology companies with angel investors in Hong Kong and venture capitalists in Hong Kong and China. Investment size of an angel fund can start from as little as US\$30,000 to a venture capital investment typically starting from US\$2 million.

This year on the investor side, the event will be attended by angel investors from the Hong Kong Business Angel Network (HKBAN), VC firms from Hong Kong as well as from Mainland China. The ultimate aim of the SPARC Forum is to accelerate the development and commercialisation of start-up / technology companies' products and services through angel and venture funding.

* Attendance by invitation only

**AN INSIDE LOOK AT THE ENTREPRENEURIAL PATH TO IPO
Thursday Morning, 17 November**

Morning session: 9:15 - 12:00

This practical and informative workshop will focus on evolution of the entrepreneurial companies in their valuation, equity dilution, and typical company growth in terms of number of customers, employees, and capital requirements in each stage of the progression before reaching IPO. Key issues involved in preparation for IPO will also be discussed.

Highlights of the workshop include:

- Entrepreneurial path from seed to latter stages (venture capital stages)
- Entrepreneurial path from expansion stage to pre-IPO (private equity stages)
- Pre-IP preparation and IPO process at a glance

8:45 Registration

9:15 Overview of workshop

→ Marvin Lai, Managing Principal, Burgeon Group Consulting and Co-Chairman, Venture Committee, Hong Kong Venture Capital and Private Equity Association (HKVCA)

9:25 Entrepreneurial path from seed to latter stages (venture capital stages)

→ Marvin Lai, Managing Principal, Burgeon Group Consulting and Co-Chairman, Venture Committee, HKVCA

10:10 Networking Coffee Break

10:20 Entrepreneurial path from expansion stage to pre-IPO (private equity stages)

→ Alvin Ho, Managing Director, Chepstow Capital Advisors

- 11:05 Networking Coffee Break
- 11:15 **Pre-IPO preparation and IPO process at a glance**
→ Regina Wong, Director, RAAB International Capital
- 12:00 End of Workshop

HK VENTURE CAPITAL AND ANGEL CONFERENCE
Thursday Afternoon, 17 November

Co-organised with:

The **Hong Kong Venture Capital and Private Equity Association's** ("HKVCA") mission is to stimulate a vibrant venture capital and private equity industry in Asia while promoting the role of member firms in value creation, innovation and economic development. HKVCA provides a forum for networking and experience sharing for its members; promotes industry professional ethics, international best practices and standards, and represents the views of its members before governmental and other relevant bodies.

Hong Kong Business Angel Network ("HKBAN") is registered as a non-profit making organisation. The mission is to foster angel investment in Hong Kong, with an attempt to solve the difficulties of start-ups in obtaining investment funding between the initial seed money stage and venture capital (VC) funding. Its Investment Matching Gathering is a platform where entrepreneurs needing angel investment will meet and present to angel investors to solicit their investment. The platform is opened up to HKSTPC incubatees and partner companies, university start-ups and any start-ups that belong to a recognized Partner Organisation which is capable of screening the investment readiness of their members.

- 12:00 Registration
- 12:15 **Lunch Keynote: The contribution of angel investment to economic development**
→ Karen Wilson, Structural Policy Division, Directorate for Science, Technology and Industry, OECD, France
- 13:45 **Presentations and panel: Technology investment trends**
→ Moderator: Roger Marshall, Managing Director, Persimmon Capital
- 13:50 **Key industry directions in green-tech, energy efficiency and renewables: Emerging investment themes for China and the Asian region**
- What are the most promising technology developments for green-tech / low carbon investment?
 - Emergence of energy efficiency and management industries including opportunities in smart grid / meters, demand response, building / factory automation and next generation lighting
 - Clean-tech and solid waste management: investment promise and challenges
 - Which sectors of renewable energy investment have the greatest prospects? To what extent, if any, are these impacted by nuclear re-evaluation?
 - Emerging opportunities for green-tech entrepreneurship in China and Asia
- Evan Li, Director, Regional Head of Renewable Energy, Environment & Utilities, Equity Research, Standard Chartered Bank
- 14:15 **Future of mobile and Internet: Emerging China and Asian investment themes**
- Mobile broadband and smart devices: where to from here?
 - Business models and emerging technologies: which are potentially disruptive?

- How might cloud service initiatives impact future mobile broadband?
 - Growth opportunities in mobile commerce, payments and advertising
 - China's mobile and Internet business revolution: how far can growth go?
 - Emerging opportunities for mobile and Internet entrepreneurship
- Alan Hellowell, Managing Director, Head of Asian Telecommunications, Media and Technology Equity Research, Deutsche Bank

14:40 Healthcare, life sciences/ biotech and pharma: Global industry directions and emerging investment themes for China

- Healthcare initiatives in China and investor opportunities
 - Bio-tech / life sciences innovation: R&D breakthroughs to watch
 - What are the best commercialisation prospects?
 - Impacts on the bio-tech / pharma industry globally
 - Evolving collaborations, partnerships and licensing strategies
 - Emerging opportunities for bio-tech entrepreneurship in China, India, SE Asia
- Norman Chen, Partner, Healthcare, Fidelity Growth Partners Asia

15:05 Q&A

15:15 Panel: Case studies of closing angel and venture capital investments

- Moderator: Dr. Wilton Chau, Founder & Managing Partner, QLeap Asia
- Jeff Ng (angel)
- Laurence Chan, Chief Executive Officer, AMOS
- Pierre Hennes, Managing Partner, Extream Ventures, Singapore

15:45 Networking Coffee Break

16:15 Inauguration Ceremony of Hong Kong Business Angel Network (HKBAN)

- Inauguration Ceremony: Guests of Honour, Founding Members, Honorary Lawyer, Honorary Auditor, Patron of HKBAN

Guests of Honour:

- Nicholas Brooke, BBS, JP, Chairman, Hong Kong Science and Technology Parks Corporation
- Prof. Xu Zhengzhong, Professor, Chinese Academy of Governance and Chief Management Expert, National Major Project of Science and Technology
- Karen Wilson, Directorate for Science, Technology & Industry, OECD

Inauguration Speech:

- Allen Yeung, Founding Chairman, HKBAN

16:45 Panel: Case studies of successful exits

- Moderator: Marvin Lai, Principal, Burgeon Group and Co-Chairman, Venture Committee, HKVCA
- Gary Lai, Strategic Principal, Burgeon Group Consulting (ex-Morningside)
- Denny Wong, Chairman and CEO, Advance Cards Systems
- Wendy Cho, Strategic Principal, Burgeon Group Consulting

17:15 Best practices in angel and venture capital investments

- Syndications, DD, term sheets, valuations, structure
- Moderator: Johnny Chan, Chairman & CEO, Crosby Asset Management (HK) & Chairman, Executive Committee 2010-2011, HKVCA

- Johnson Chen, Managing Partner, Clearbridge Partners (angel investor, confirmed)
- Feng Li, Partner, IDG Capital Partners
- Alan Wong, Partner, Deloitte & Touche Financial Advisory Services
- Robert Ogilvy Watson, Partner, Ashurst

17:45 Networking Cocktail
