NATIONAL **R**ESEARCH **F**OUNDATION

SINGAPORE



GYSS@one-north SINGAPORE CHALLENGE 2013

Singapore Challenge 2013

The Singapore Challenge 2013 taps the Global Young Scientists Summit@one-north (GYSS@one-north) platform to harness innovative ideas and solutions to address challenges faced by global cities. Young enterprising scientists and researchers are encouraged to envision opportunities for sustainable development in cities with dense populations and heavy demands on infrastructure. *"Innovations for Future Cities"* is the theme of the first Singapore Challenge 2013.

Phase I

The participants of the Singapore Challenge 2013 would be required to submit a White Paper describing the research on the proposed solution to address an identified challenge for future cities. Participants should:

- Decide on the topic/issue they wish to tackle (i.e. pollution, slums, sanitation, etc)
- Determine a technical solution.
- Develop an action plan based on current and possible future research
- Work on a prototype or demonstrator (schedule permitting)

Singapore Challenge 2013 White Paper

The Singapore Challenge White Paper must contain the following information:

- I. Challenge statement.
- II. Nature of the challenge and proposed solution. Describe briefly the initial situation, the issues and



The annual "i Light Marina Bay 2012", a lighting festival organised by the Urban Redevelopment Authority of Singapore, advocates the use of energy-efficient lighting technology for a sustainable future. Photo: Sandy Chian

problems faced. Detail the proposed idea/solution to address the challenge.

III. Current and future research. Detail participant's current and future research plans that contribute to the development of the proposed idea/solution to the identified challenge. Elaborate on the originality and uniqueness of the research areas for the proposed idea.

- IV. Objectives and strategies. Explain the overall vision and the key objectives of the proposal, e.g. urban policy, programmes, plans, urban management, application of technology etc. Highlight the novelty/innovation(s) in the initiatives taken.
- V. **Potential impact and benefits.** Explain the potential impact and benefits (e.g. economical, societal), the proposed idea would bring to cities. Also, describe how the project can easily be replicated for the benefit of other cities.
- VI. Development team.
- VII. **Project** images/videos/prototypes. Images/ videos should provide context and show the positive or intended results. Each image must include a short photo caption. The URL to the video should be listed for the panel of judges to access.
- VIII. Additional supporting documents such as articles, press reviews, publications, reports, videos, testimonials or any other materials that provide relevant support to the nomination.

The Singapore Challenge 2013 White Paper and all accompanying materials must be submitted in English.

Phase II

Shortlisted participants will present their ideas to a panel of judges, invited guests and participants of the GYSS@ one-north on Friday, 25 January 2013 at the GYSS@ one-north 2013 Closing Ceremony.



Fishing and viewing deck at Pandan Reservoir, built as part of PUB's Active, Beautiful, Clean Waters (ABC Waters) Programme, a long-term initiative to transform Singapore's drains, canals and reservoirs into beautiful and clean waterways, creating community spaces for all. Photo: PUB



Analysis of battery materials is a key component of TUM CREATE's research into electric vehicles and other e-technology for urban infrastructure and transportation systems. Photo: TUM CREATE

Cash prizes totalling US\$100,000 and Singapore Challenge Medallions will be awarded to the candidate(s) with the most compelling idea in terms of novelty and potential impact.

The GYSS@one-north Organising Committee holds the final right to decide on the final awardee(s).

Participants can log on to the website (www.gyssone-north.sg) for more information on Singapore Challenge 2013.

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