

มุมมองของบริษัทเอกชนต่อการวิเคราะห์ทดสอบ ทางด้านนาโนเทคโนโลยี

จักรวาล เพิ่มญาณวรรณะ

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Nano-Characterization and Testing Service for AEC
April 1, 2013
www.irpc.co.th

IRPC Infrastructure



Refinery

- 215 KBD, including a deep catalytic cracker, lubricant base oils and asphalt production
- Primarily used as a feedstock preparation unit for the petrochemical facilities at the site



Petrochemical

- Olefins cracking: 728 KTA
- Aromatic: 367 KTA
- Polymer: 841KTA
- Polyol: 25 KTA



Power Plant

- 108 MW of power supply, both electricity and steam
- New 200 Mega watts to be ready in 2009, will improve power plant reliability and reduce steam production cost



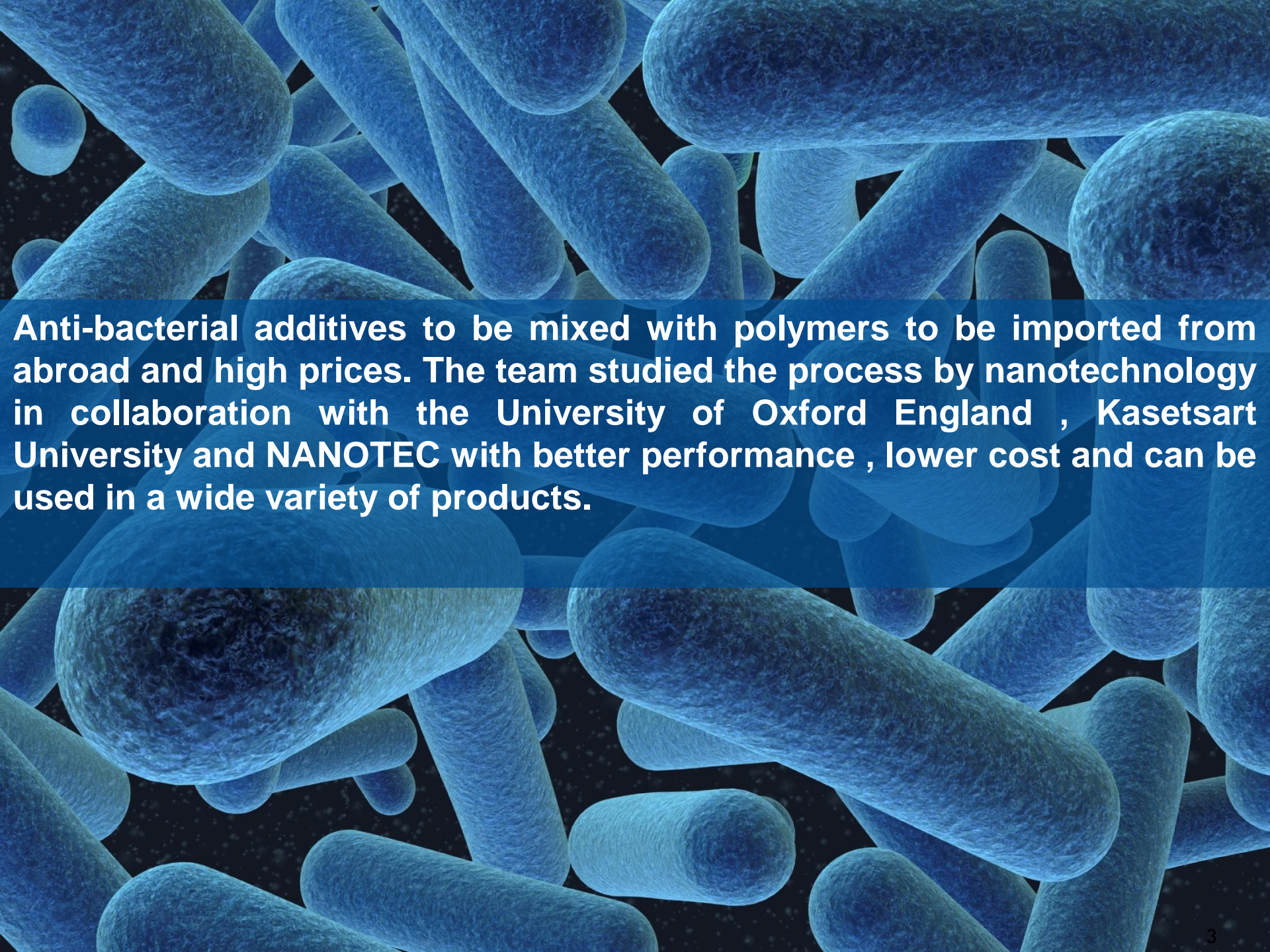
Deep Sea Port

- 2 jetties
 - Eight liquids and gas berths including the capacity of handling Very Large Crude Carriers ("VLCCs") up to 250 K dwt
 - Nine bulk cargo berths, One container berth



Industrial Park

The company's Industrial Park covers a total area of 2,239 acres with more than 1,000 acres of vacant land available for future expansion

A microscopic view of numerous blue, rod-shaped bacteria, likely Bacillus subtilis, against a dark background. The bacteria are densely packed and oriented in various directions. A semi-transparent blue horizontal band is overlaid across the center of the image, containing white text.

Anti-bacterial additives to be mixed with polymers to be imported from abroad and high prices. The team studied the process by nanotechnology in collaboration with the University of Oxford England , Kasetsart University and NANOTEC with better performance , lower cost and can be used in a wide variety of products.

Initiatives to be managed through a stage-gate funnel for technology to drive execution and ensure linkage to business.



1. Concept	2. Research	3. Analysis	4. Develop	5. Launch
<p>Description of Activities:</p> <ul style="list-style-type: none"> Idea Generation: <ul style="list-style-type: none"> Requests Customer Pain Market Studies Legislation Competitors <p>Key Deliverables:</p> <p>Product Concept Doc.</p>	<p>Description of Activities:</p> <ul style="list-style-type: none"> Assess Market: <ul style="list-style-type: none"> Segments & Size Growth Potential Customer Needs Legal Issues Competition <p>Key Deliverables:</p> <p>Market Research Report</p> <p>Market Req. Document</p> <p>Product Definition Statement</p>	<p>Description of Activities:</p> <ul style="list-style-type: none"> Business Analysis: <ul style="list-style-type: none"> Cost/Benefit Resources Required Capital Expenses Profitability/Margin Anticipated Sales <p>Key Deliverables:</p> <p>Business Case</p> <p>Profitability Analysis</p> <p>Product Req. Document</p>	<p>Description of Activities:</p> <ul style="list-style-type: none"> Product Development: <ul style="list-style-type: none"> Technical Specs Prototyping Trial Production Testing & QA Test Market Selling <p>Key Deliverables:</p> <p>Product Dev. Schedule</p> <p>Product Testing Report</p> <p>Test Market Sales Report</p>	<p>Description of Activities:</p> <ul style="list-style-type: none"> Go To Market: <ul style="list-style-type: none"> Marketing Plan Sales Training Distribution Plan Collateral Design Set Launch Date <p>Key Deliverables:</p> <p>Product Launch Plan</p> <p>Product Launch Budget</p> <p>Product ROI Forecast</p> <p>Target Launch Date Set</p>



Develop of testing and approval before commercial launch

Antimicrobial effect

It shows antimicrobial effect against a wide spectrum of bacteria, bacteria and fungi.

Safety data

Proved safety of an inorganic antimicrobial agent

Approval/accreditation, etc.

As a proof of IRPC's high product safety, it is approved or accredited by various organs.

Application methods

can be applied to various products.

Physical properties of antimicrobial agent

Powder, master batch, slurry. A choice of product forms available for various uses.

Deodorizing power

antimicrobial agent IRPC with both antimicrobial and deodorizing power

Literature concerning

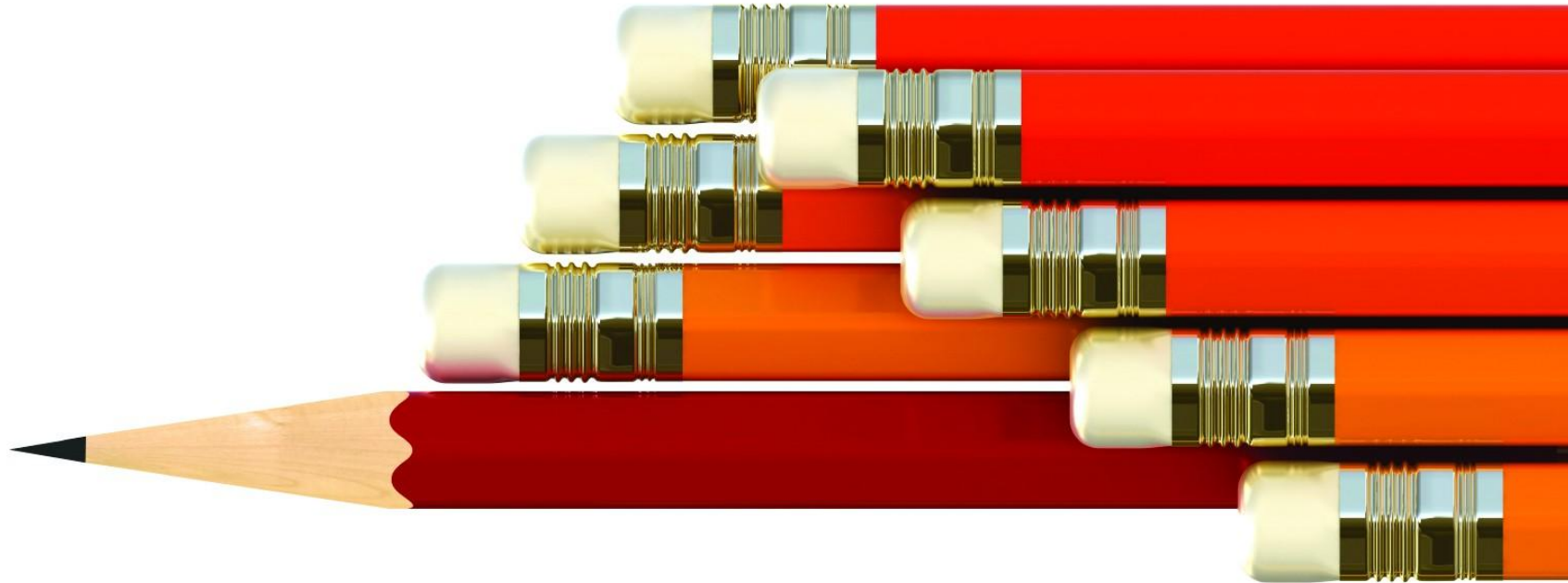
Examples of actual applications



HELP



standardization



Faster





competitiveness

A close-up photograph of two men in business suits shaking hands. The man on the left is wearing a dark suit jacket with three buttons and a white shirt with a yellow grid pattern. The man on the right is wearing a dark suit jacket and a white shirt with thin blue vertical stripes. They are standing in a green field under a bright, cloudy sky. The word "collaboration" is written in large, bold, black letters across the center of the image, overlaid on a semi-transparent grey band.

collaboration

A close-up photograph of a green highlighter pen. The pen is positioned diagonally across the frame, with its tip pointing towards the bottom right. The word "Integrity" is written in a bold, black, sans-serif font and is highlighted with a thick, bright green stroke. The background is a plain, light-colored surface.

Integrity

Adherence to moral principles.
In ethics, integrity is recognized as the honesty and truthfulness, uprightness, sincerity,

**“If You want to go quickly
Go alone
If you want to go far
Go together.”**

African Proverb

