

Suntar International Group presenting

# SUNTAR ENVIRONMENTAL TECHNOLOGY



## WHO ARE WE?

Suntar Environmental Technology is a world-leading technology company focused on **membrane development and application**

## OUR MODEL

Research.  
Development.  
Platform.  
Application.

## INDUSTRIES OF AFFILIATION



## ACCOLADES & ACHIEVEMENTS

150+ Authorized Patents  
500+ Membrane Applied Processes  
30+ BOT Wastewater Treatment Plants

# WHO ARE WE LOOKING OUT FOR?

An overview of Suntar's structure

## BUSINESS DIVISION

Calling out to:

- Business Administration/Analytics majors
- Accountancy majors
- FASS (Economics) majors
- Other related majors

- Project Management and Client Engagement
- Global Investment Analysis
- Partnerships with Institutes of Higher Learning (IHL) & Government Agencies

## TECHNICAL DIVISION

Calling out to:

- Engineering majors
  - Chemical Engineering
  - Environmental Engineering
  - Materials Science Engineering
  - Civil/Mechanical Engineering
  - Bioengineering

- Alternative protein projects
- Collaborations with various Venture Capitalists
- Partnership with A\*STAR and other Government Agencies

## WHY CHOOSE SUNTAR?

- Inclusive and vibrant working culture
- Corporate climate that is nurturing and encourages autonomy
- High levels of exposure for fresh graduates
- Promising career progressions
- Flexible working arrangements
- Opportunities for international and regional exposure (after COVID travel bans are lifted)

**Apply now at NUSTalentConnect!**

Any queries? Email [@quz.suntar.com](mailto:@quz.suntar.com) (business) or [@huyikuan@suntar.com](mailto:@huyikuan@suntar.com) (technical)! Or visit our website [www.suntar.com.sg](http://www.suntar.com.sg) for more information!

# MORE ABOUT SUNTAR'S OPERATIONS

## Business to Business (B2B)

Process Separation &  
Industrial Wastewater  
Treatment



Business to  
Government (B2G)  
Environmental  
Engineering Solutions

Business to  
Consumer (B2C)  
Potable Water  
Purification

Suntar has driven upstream expansion by building up a core team of scientists & engineers at the firm

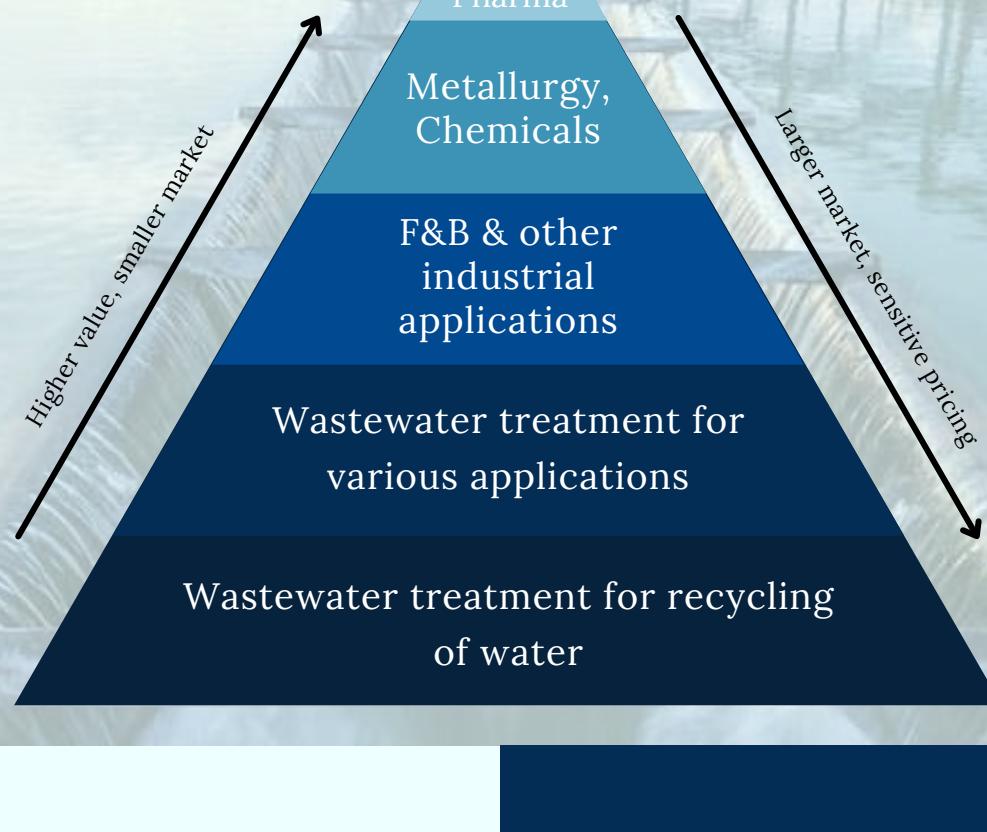
- Materials R&D & Production
  - Organic/Inorganic membrane
  - Hollow Fibre membrane
  - Spiral Wound membrane
  - Ceramic membrane
- Equipment Manufacturing
  - Nanofiltration
  - Reverse Osmosis
  - MBR

## EXTENSIVE VALUE-CHAIN PRESENCE

- Application Systems: Equipment + Process
  - Ceramic System for food processing
  - MBR System for wastewater treatment
- Process Design

Suntar has driven downstream expansion by working with investors & governments

## OVERVIEW OF APPLICATIONS



### WASTEWATER RECYCLING

#### Problem:

Wastewater discharged without further utilisation

Daily wastewater discharge: 7200m<sup>3</sup>/d

#### Outcome:

Recovery: 70% (5040m<sup>3</sup>/d)

Salt removal rate: 95%

Recycled water used in desalination system in place of municipal water

### BIOTECH APPLICATIONS

#### Problem:

Peptide Clarification & Concentration

#### Conventional Method:

1) Use of plate & frame filter press or centrifugation

2) Use of additional chemicals

Results in poor clarity of desired peptide &

loss of texture in the product

#### Outcome:

Concentration factor: 20

Higher purity

No additional chemicals required

### METALLURGY & CHEMICALS

#### Problem:

High heavy metal ion content in industrial wastewater

Water quality (mg/L)

Cd: <0.2

As: <0.2

Pb: <2.0

Zn: <4.0

Cu: <0.5

#### Outcome:

Significant removal of heavy metal ion

90% recovery rate

Water quality (mg/L)

Cd: <0.01

As: <0.1

Pb: <0.1

Zn: <1.0

Cu: <0.5

### PHARMA APPLICATIONS

#### Problem:

Collagen Extraction

High pigmented protein content

High large molecular weight protein content

Requires low temperature separation

Low concentration of protein

#### Outcome:

Able to maintain low operating temperature

Concentration: Increased from 1 Brix to 15

Brix

Concentration factor: 15

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