

Poster Preparation Format

1. Inventors must produce their own poster according to the poster template. The evaluation will be only on the contents of the poster; thus, the inventors can choose an appropriate design and background for the poster.
2. The poster size is A4 size (297 mm x 210 mm) and it must be uploaded in PDF format.
3. Poster orientation must be in Portrait (Width: 210 mm & Height: 297 mm).
4. Contents must follow the prescribed format.
5. The main content of the poster must include:
 - Product photo
 - Inventor's details
 - Problem statement
 - Product features/ description
 - Main findings
 - Novelty
 - Commercial Potential
 - Market survey/ comparison
 - Other relevant information (e.g: Potential market, collaborators, extra pictures, etc).
6. Poster should be prepared in English or Malay only.
7. Relevant images can be included.

Reminder:

- Don't use small font size.
- Don't use shadow effect.
- Don't use the same background colour as the title and its content.
- Don't use blurry images of product or logos.
- Don't put in descriptions that are too long.

Inventor's Details	Title & IP Details	Product Image
Main contents of the Poster (suggested as in item #5 above). Can refer to the poster example for preparation idea.		
INVIDE 2023 Logo and Name		

Poster Preparation Sample



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ANTI-THPRO: A NOVEL ELECTROMAGNETIC AND THERMAL GRADED-Z SHIELDING FOR LARGE SCALE GLOVEBOX IN NUCLEAR INDUSTRY

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PROBLEM STATEMENT

Radiation protection, sometimes known as radiological protection, is defined by the International Atomic Energy Agency (IAEA) as "The protection of people from harmful effects of exposure to ionizing radiation, and the means for achieving this". Ionizing radiation is widely used in industry and medicine, and can present a significant health hazard by causing microscopic damage to living tissue. This can result in skin burns and radiation sickness at high exposures, known as "tissue" or "deterministic" effects and statistically elevated risks of cancer at low exposures, known as "stochastic effects". According to the survey of researchers in Waterloo Institute of Nanotechnology, Canada, prolonged or accumulated radiation dosage from either particle-emissions such as alpha/beta, proton, electron, neutron emissions, or high-energy electromagnetic waves such as X-rays / γ rays, consequently, results in carcinogenesis, cell mutations and organ failure. Anti-ThPRO is a novel invention to protect and prevent electromagnetic and thermal radiation by utilizing a novel approach of electromagnetic and thermal graded-z shielding in large scale glovebox available in nuclear industry.

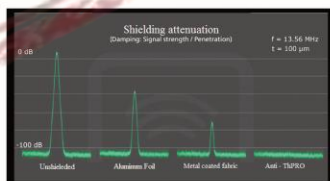
PRODUCT DESCRIPTION

Anti-ThPRO is a protective cover fabricated from waste materials to shield and protect people in surrounding from electromagnetic radiation from large scale glovebox available in nuclear industry. It provides flawless anti-radiation capability and provides thermal shield to prevent damages to the gloveboxes in nuclear facilities. Besides all these advantages, Anti-ThPRO is found to be lightweight and water resistant. It is fabricated using simple engineering skill and proven 100% environmental friendly.

ANTI-THPRO MANUFACTURING PROCESS



RESEARCHER FINDING



Comparison of aluminium, metal coated fabrics and Anti-ThPRO blocking film (13.56 MHz)
 (The formula of decibel is: $\text{dB} = 10 \cdot \log(P1/P2)$ (logarithm to the base 10 of the ratio of two powers); losses of signal levels have negative values).

NOVELTY

1. Anti-ThPRO is a first innovative protector for limiting the proximity of electromagnetic frequency radiation and boosting the thermal robustness totally from polymeric waste materials.
2. Water resistant and lightweight.
3. Anti-ThPRO can be easily produced with simple engineering skills and proven environmental friendly with a long-life span.
4. Solution for reducing electromagnetic radiation in nuclear industry.
5. Patent search is in progress. Similar engineering solution from waste materials is not available at the moment.

COMMERCIAL POTENTIAL

1. Highly marketable due to cheap production cost of only approximately KWN266000 (USD 235) compared to the existing type of commercial Blockit protector valued KWN2700000 (USD 2400).
2. Cost reduction about 10 times.
3. Easy replacement patch product with life span of approximately 15 years.
4. Collaborating marketing company CLTM Global Enterprise (RA0023074-A) and Hoe Heng Engineering Sdn. Bhd. (278074-H)

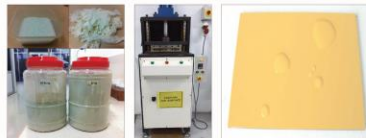
PRODUCT COMPARISON

Properties	BLOCKIT Protector	Anti-ThPRO Protector
Dimension (m)	10.8 x 7 x 1.9	10.8 x 7 x 0.1
Water Resistant	Yes	Yes
Features	Fixed Dimension	Customable to Product Size
Material	Plastic	Polymeric Waste Material
Selling Price	KWN2700000 (USD2400)	KWN266000 (USD235)
Cost Reduction	1 time	10 times

INDUSTRIAL COLLABORATION

- CLTM Global Enterprise (RA0023074-A)
- Hoe Heng Engineering Sdn. Bhd. (278074-H)

Process Photos



Industrial Collaboration



Polymer Composite Material

Final Product





Presentation Video Preparation Format

1. Inventors must prepare a short video (duration max. 10 minutes).
2. Inventors can use the video trailer given in the Expo website to start the presentation.
3. The main content of the video must include:
 - Inventor introduction
 - Overview – Current problems/ Background (Need)
 - Materials
 - Step by step demo
 - Purpose of Invention/ Product (Approach)
 - How this product can help industry/ society (Benefit)
 - Market survey and competitors (Competition)
 - Commercial potentials
 - Other relevant information
4. Presentation points and time suggestion:
 - Introduction (1 minute)
 - Invention explanation/ demonstration (6 minutes)
 - Commercialization planning/ idea (2 minutes)
 - Conclusion/ Wrap up (1 minute)
5. The presentation video preparation must be guided by expo evaluation criteria.
6. Presentation must be in English or Malay only.
7. All supporting evidence are requested to be shown in slideshow view:
 - Business plan/ business proposal
 - Intellectual Property document
 - Proof of publication
 - Collaboration letters from industry/ governmental bodies
 - Status or commercialization plans
 - Report analysis market study
 - Other documents that can support the presentation