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## Electrodeposited Ni Nanowires-Track Etched P.E.T. Composites As Selective Solar Absorbers

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**Abstract content <br> &nbsp; (Max 300 words)<br><a href="http://events.saip.org.za/getFile.py/a" target="\_blank">Formatting &<br>Special chars</a>**

This contribution reports on the fabrication and characterization of flexible nano-structured selective solar absorber composites for low-temperature solar-thermal applications. The active material in this system consists of electrodeposited Ni nano-cylinders embedded in track etched polyethylene tetrathalate host membrane. The tubular and metallic structure of the Ni nano-cylinders within the insulator polymeric host forms a typical ceramic-metal nano-composite "Cermet". The optical properties of such Ni- polyethylene tetrathalate nano-cermet were optimized following various structural, morphological and optical investigations.

**Apply to be<br> considered for a student <br> &nbsp; award (Yes / No)?**

Yes

**Level for award<br>&nbsp;(Hons, MSc, <br> &nbsp; PhD, N/A)?**

MSc

**Main supervisor (name and email)<br>and his / her institution**

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**Would you like to <br> submit a short paper <br> for the Conference <br> Proceedings (Yes / No)?**

No

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Yes

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