



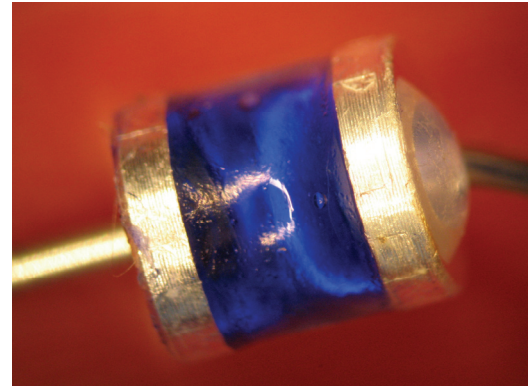
PARYLENE a versatile Group of Polymers for Medical and MEMS Applications



HSG-IMIT (Villingen-Schwenningen)

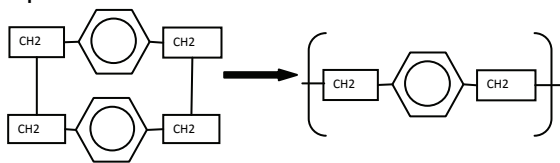
BACKGROUND and BASICS

- PARYLENE will be presented as a material suitable for passivation and mounting in
- MEMS
- Electronics
- Automotive
- Aeronautics and space
- Medical Applications
- Preservation of rare documents and arts

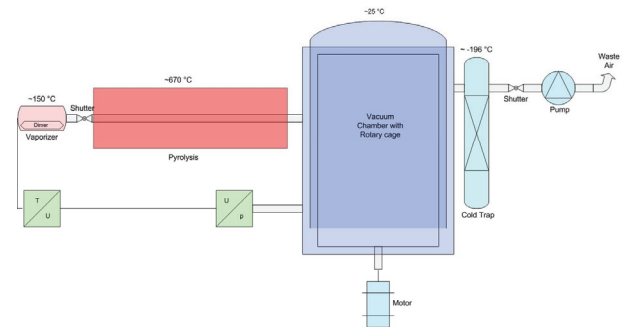


CONCEPT and SOLUTION

- PARYLENE is applied in a cold vacuum process. Due to the lack of any liquid phase a thin, pinhole-free and conformal coating can be achieved with high electrical resistance and low water absorption and transmission.
- For medical applications PARYLENE is FDA-tested to make devices biocompatible e.g. implantation in animals or human bodies.



Scheme of a Typical Parylene Coater



STATUS and OUTLOOK

- At HSG – IMIT a machine is available for preparing PARYLENE-C and –N type coatings.
- Typical thicknesses from 100nm to 25µm have been done on a variety of substrates.
- These coatings are already available on request.
- A plasma source can be introduced to perform in-situ cleaning and surface activation. Processes using this option are still under development.
- Pilot and small production series are welcomed as well as sample coating for development and evaluation purposes.



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