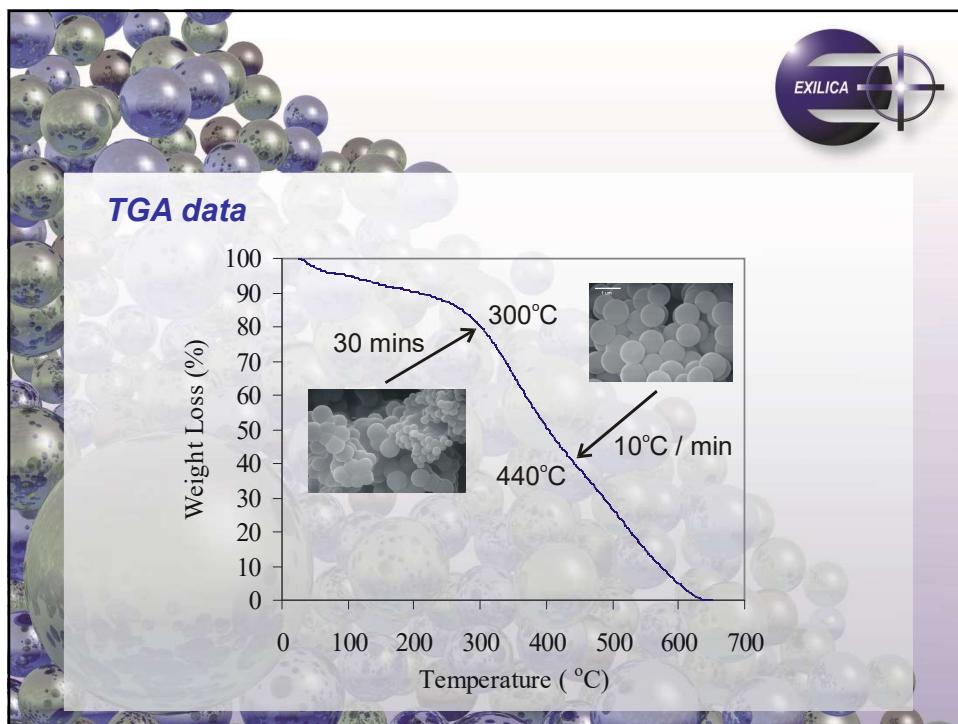


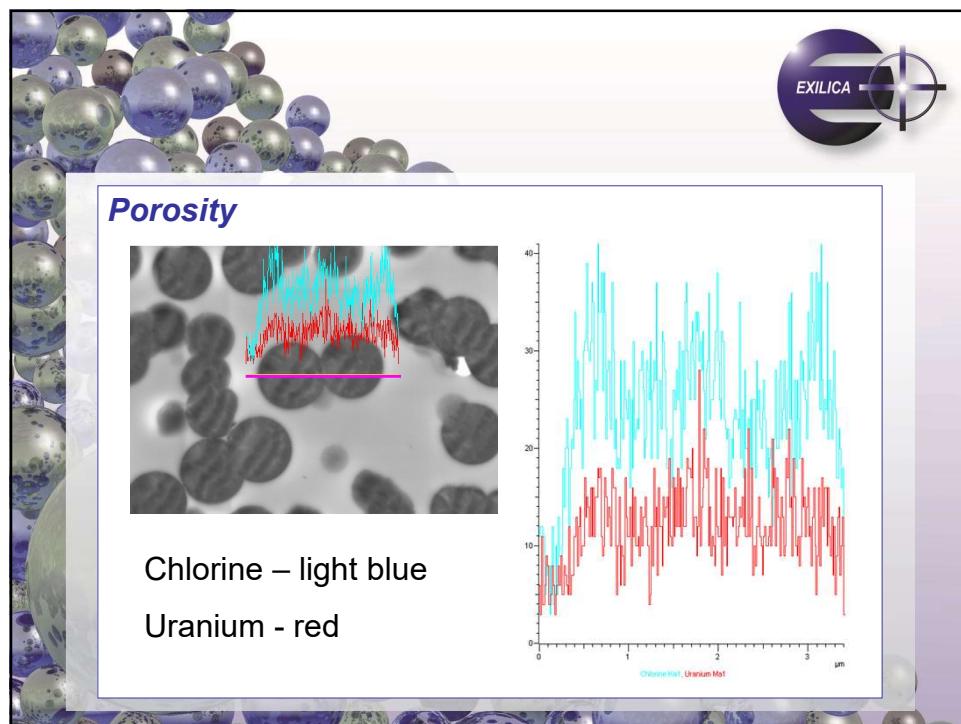
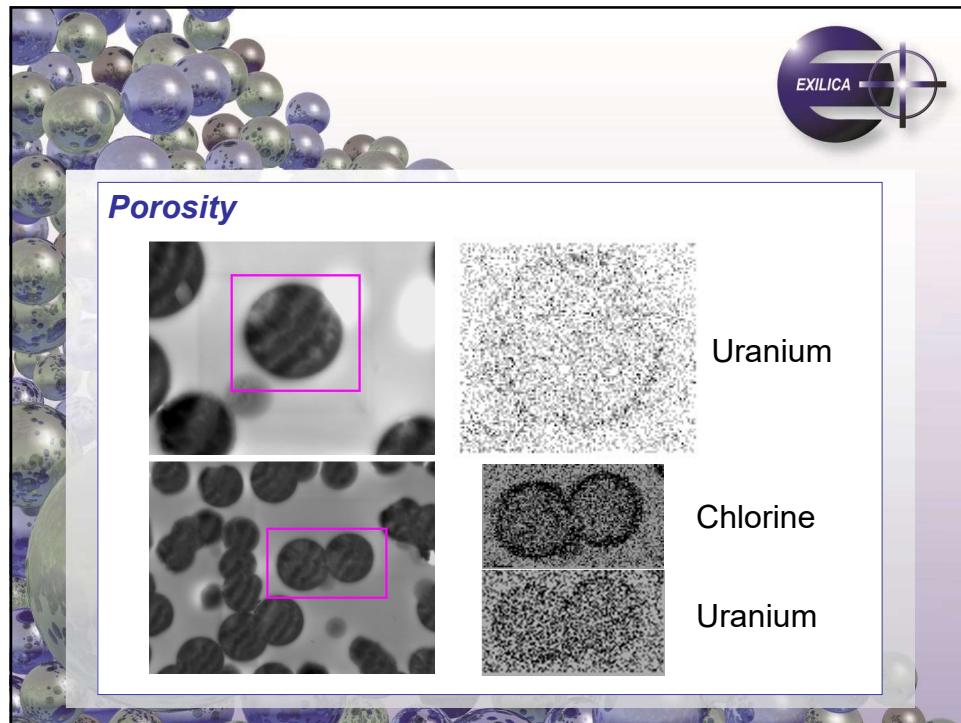
PMPS particle parameters

- particle size: 1.3 – 2 μm diameter
- few beads with diameters up to 4 μm
- thermally stable up to 280°C
- mean nominal stress at rupture: 493 ± 113 MPa
- mean deformation at rupture: + 65% initial diameter
- polymer additives / functional fillers
- storage and slow release
- separation / filtration media

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The image consists of two side-by-side grayscale micrographs. The left micrograph shows a circular cross-section of a material with a granular, porous texture, characterized by numerous small, dark, irregular voids distributed throughout a lighter matrix. The right micrograph provides a higher magnification view of the same or a very similar material, highlighting a dense network of interconnected pores of varying sizes.



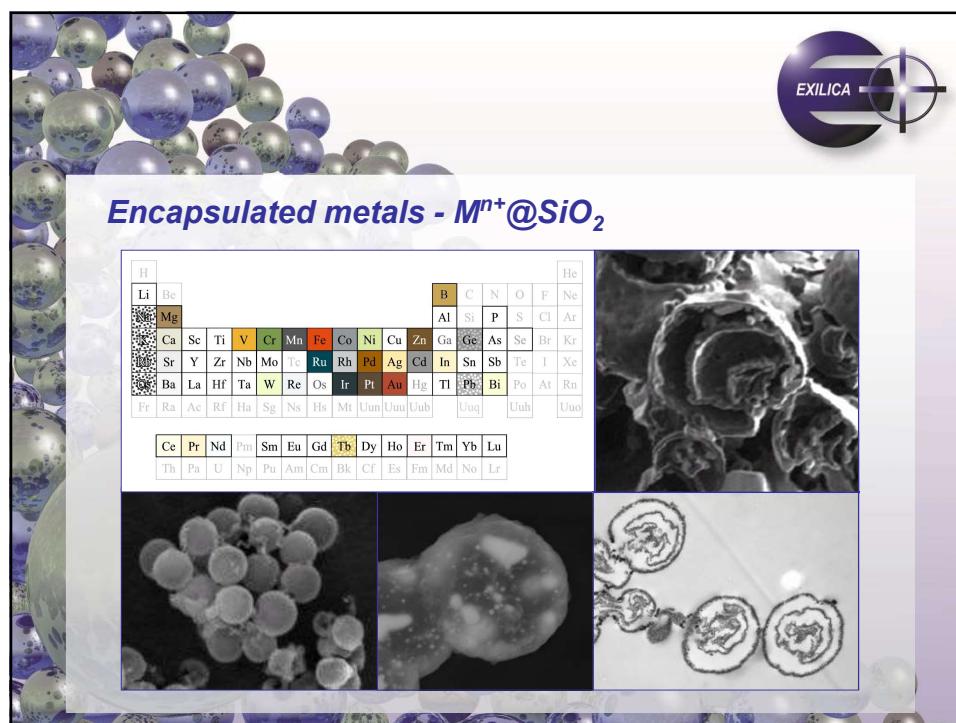
Hollow silica shells

The collage displays various characterization methods for hollow silica shells. It includes a photograph of a white, granular powder sample, four scanning electron micrographs (SEM) showing different particle morphologies, and one image showing a single hollow particle with internal pores.

Silica shell parameters

- particle size:
650 nm – 1.0 µm diameter
- wall thickness ≥10% diameter
- aggregated
- mean nominal stress at rupture:
 438 ± 47 MPa
- mean deformation at rupture:
+ 53% initial diameter
- BET SSA > 370 m²/g

The collage displays physical and mechanical properties of the silica shells. It includes a scanning electron micrograph (SEM) of aggregated particles and an XRD pattern plot.



The slide features a decorative border of blue and green spheres at the top and bottom. In the top right corner is the EXILICA logo, which consists of a stylized 'E' with a crosshair and the word 'EXILICA' below it. The main title 'Encapsulated dyes and pigments' is centered in a blue box. Below the title, there are two rows of images. The top row shows six pieces of encapsulated organic dyes on the left, labeled 'Organic dyes@SiO₂', and a sample of YVO₄-Eu_{2%}@SiO₂ on the right, shown as a yellow powder with a small red inset. The bottom row shows five small white dishes containing different colored powders: red, orange-red, orange, yellow, and green.

The slide features a decorative border of blue and green spheres at the top and bottom. In the top right corner is the EXILICA logo. The main title 'Principal applications' is centered in a blue box. Below the title is a bulleted list of applications:

- Storage and controlled release media
- Slow release media
- Encapsulated optical media (i.e. dyes, pigments etc.)
- Encapsulated fragrances and flavours
- Encapsulated UV absorbents
- Polymer additives / Functional fillers
- Biological / catalysis support media
- Separation / filtration media