Novel ruthenium-silver PTA-based polymers and their behavior in water

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New coordination polymers based on two metal-containing moieties Ru-Ag are synthesized:

Na[RuCpX(PTA)-?-(PTA)-1?P:2?2N-AgX2]? (X = CI (1), Br (2), I (3)). Characterization is performed

by NMR, UV-visible and FT-IR spectroscopy, optical-electron microscopy, and elemental analyses

(C, H, N, S). Light scattering is employed to characterize the colloidal particles growth by polymer

self-assembling. These structures are stable over a broad range of pH and exhibit thermally-driven

swelling, thus resembling a typical thermosensitive hydrogel. © 2019 by the authors.

Light scattering

Organometallic

Polymer swelling

ΡΤΑ

Ruthenium complexes

Binary alloys

Light scattering

Organometallics

Ruthenium alloys

Ruthenium compounds

Silver

Silver alloys

Sodium alloys

Colloidal particle

Coordination Polymers

FTIR spectroscopy

Optical electron microscopy

Polymer swelling

Ruthenium complexes

Thermally driven

Thermo-sensitive hydrogel

Polymers