

PCS

- Answer Fundamental Physics Questions (binary mixtures of colloids)
- 1980 Brazillian Opal – AB_{13} ($NaZn_{13}$, UBe_{13})
- Variety of colloidal materials
- Binary xtals, polymeric gels, fractal gels
- "Colloidal Engineering" – fabrication of new and novel materials suitable as optoeletronic devices (filters, switches, photonic bandgap)

1997 Bell Labs \Rightarrow Template – Directed Colloidal Xtallization
However binary xtals are yet to be realized.

Periodic arrangements of atoms occurs naturally in semiconductors, photonic xtals need to be fabricated artificially.

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