

## ORGANIC MOLECULAR MATERIALS REFLECTING IN THE VISIBLE - NEAR INFRARED SPECTRAL RANGE

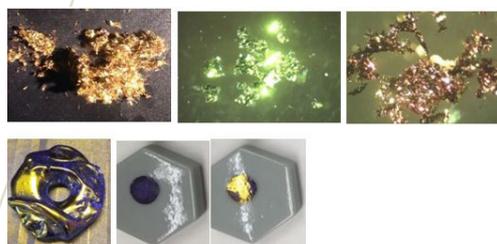
Elaboration of innovative organic pigments for the design of non-conductive reflective materials with a metallic appearance, of potential use in numerous aesthetic and technical applications.

### PRESENTATION

This technology is based on the design of molecular, organic pigments, able to self-organize into non-conducting materials with reflective properties in the visible and near-infrared spectral range.

These excitonic organic mirror materials can be exploited for either aesthetic or technical applications.

They constitute a green and sustainable alternative to conventional metal-based mirror materials.



Green and sustainable technology - Lustrous materials  
Organic pigments exhibiting special optical effects  
Organic mirrors - Aesthetic & technical reflective coatings  
Duochrome / dichroic aspects

### INTELLECTUAL PROPERTY

Family of three patents:

- EP16306849.7
- EP18305893.2
- EP18305891.6

### DEVELOPMENT PHASE

- ☑ Start up in progress. Synthesis and implementation is mastered in the laboratory. Half a dozen different metallic effect shades can already be obtained.

### CONTACT

- ☎ +33 (0)1 44 23 21 50
- ✉ [industriels@erganeo.com](mailto:industriels@erganeo.com)
- Ref. project : 370

### APPLICATIONS

- Glass or metal decoration with lustrous coatings (prestige or masstige products)
- Window glass decoration with dichroic / duochrome aspect
- Plastics decoration with lustrous coatings (LED lamp reflectors, automotive headlight reflectors, automotive accessories, sanitary, ...)
- Manufacture of lightweight and cheap mirrors (conversion of solar and photoelectric solar energy)
- Manufacture of very large mirrors (telescopes, LIDAR, ...)
- Manufacture of tiny layers for photonic circuits

### COMPETITIVE ADVANTAGES

- Green alternative solution
- No metal / no electronic conductivity / lightweight
- Low production cost
- Ease of implementation on several substrates
- Compatibility with existing industrial coating processes
- Tunability of optical characteristics