Gruppo Prof. Masiero

Chimica Organica

Dipartimento di Chimica “G. Ciamician”
Plesso Navile - UE4

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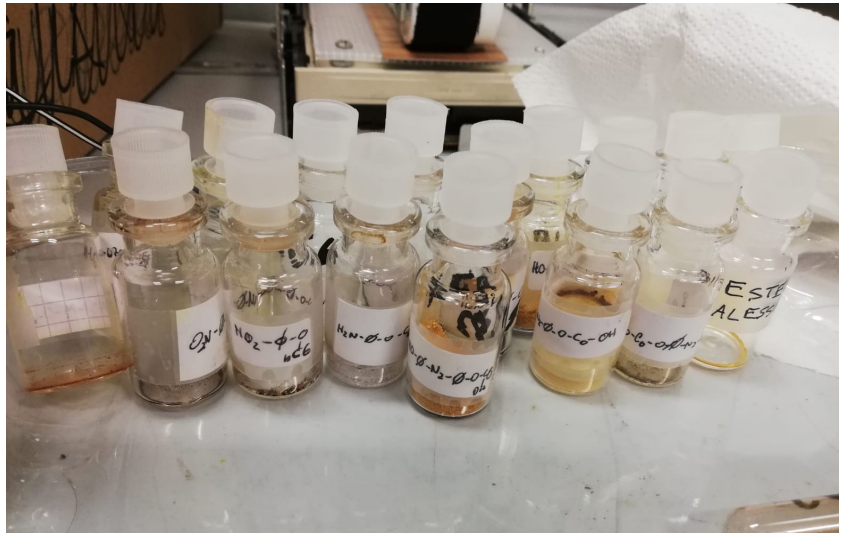
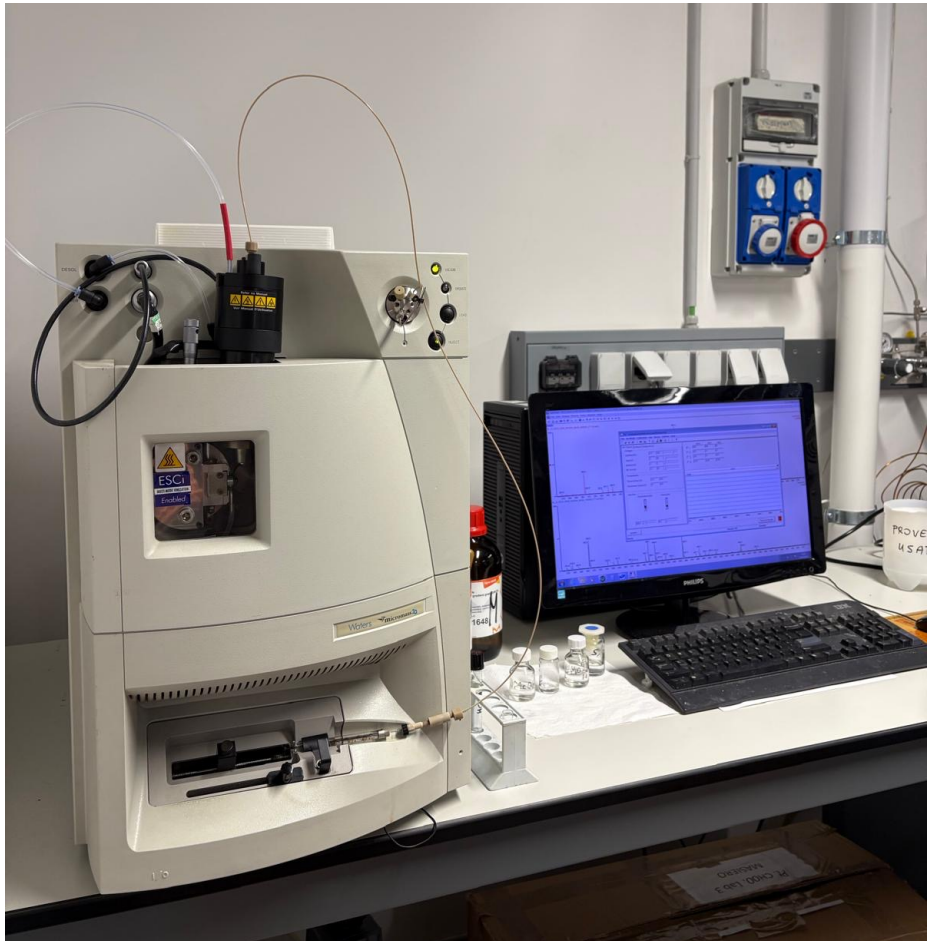
martina.occhi2@unibo.it

SVILUPPO DELLA TESI: sintesi

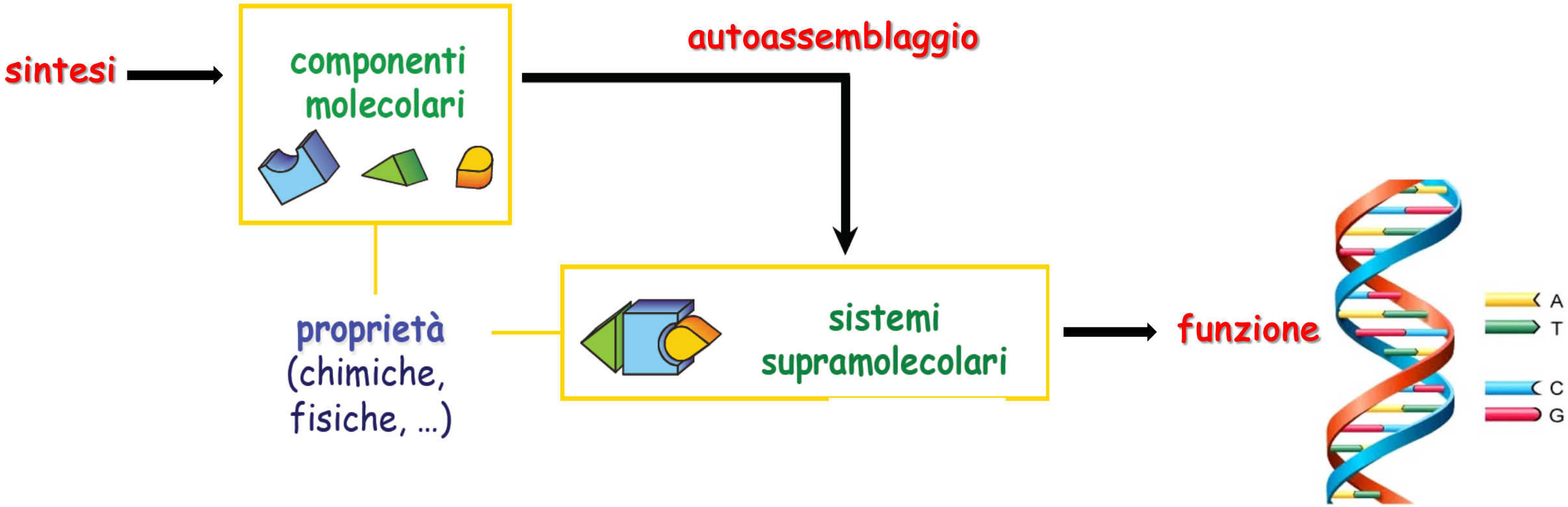


SVILUPPO DELLA TESI: caratterizzazione



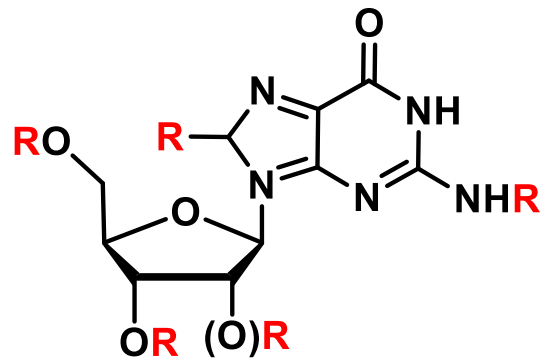
Chimica e stereochimica supramolecolare

- *la chimica oltre le molecole*
- autoorganizzazione attraverso interazioni intermolecolari non covalenti

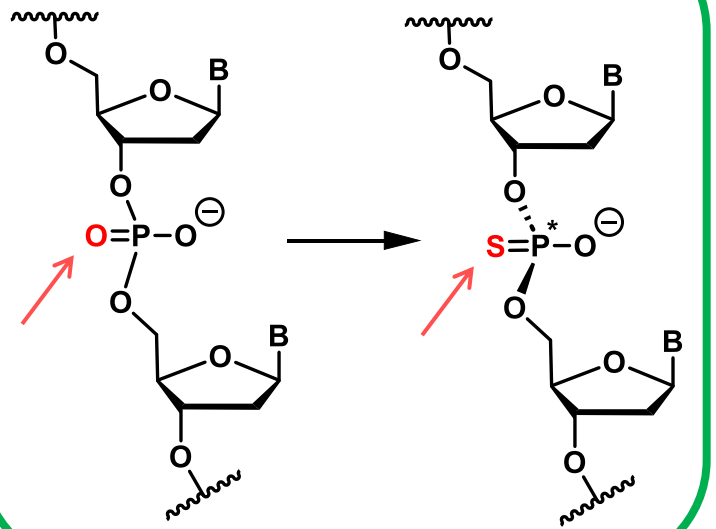


COMPONENTI MOLECOLARI: sintesi e caratterizzazione

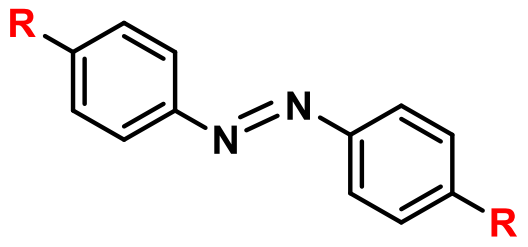
Guanosine funzionalizzate



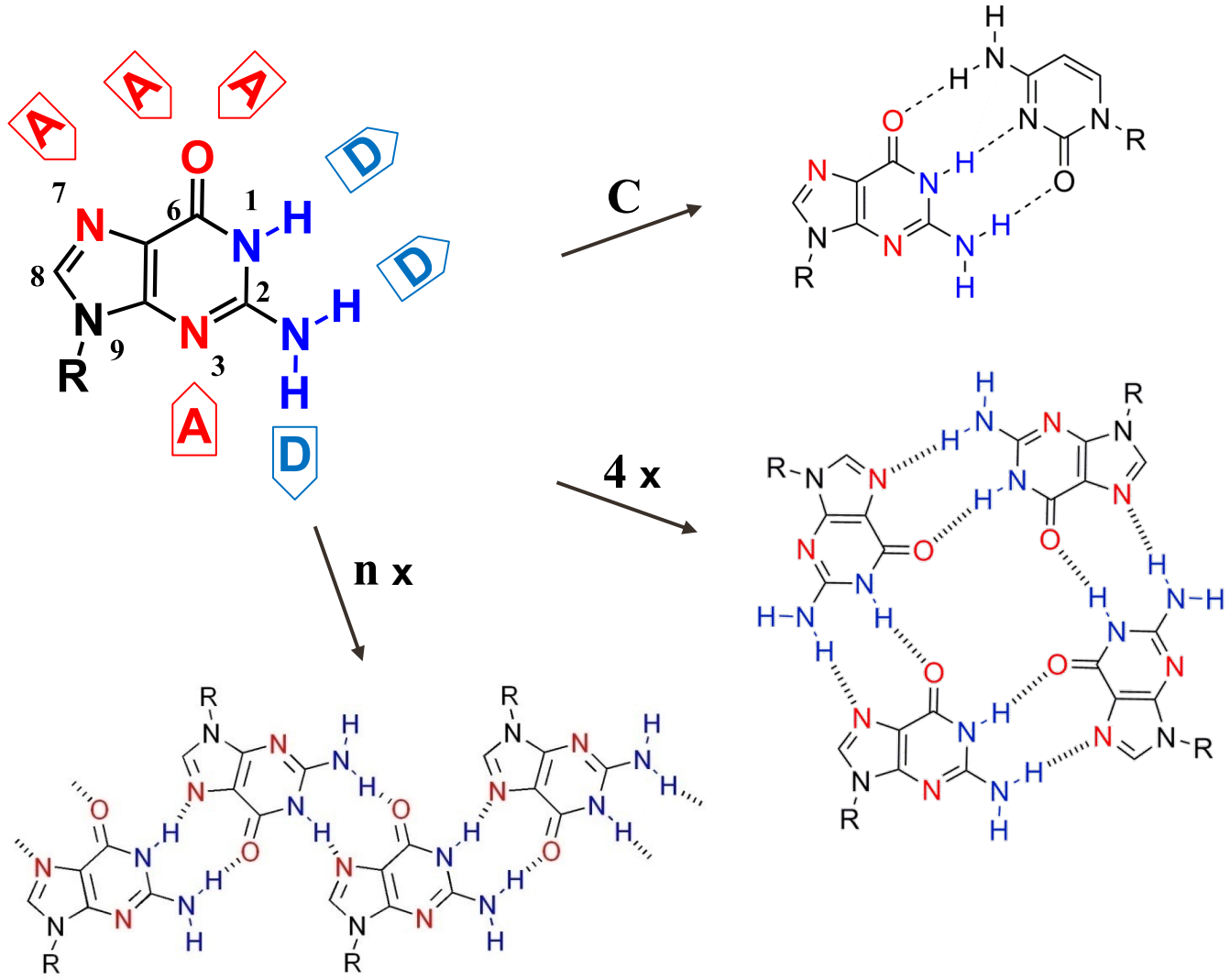
Fosfodiesteri e Fosfotioati



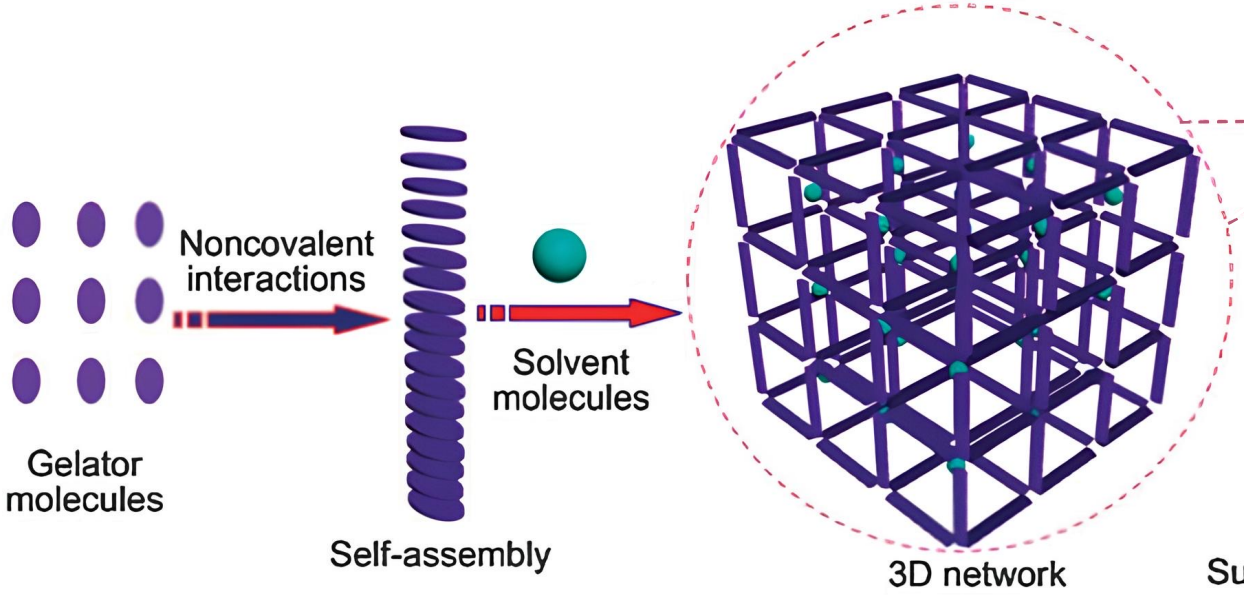
Azobenzeni e Poliazobenzeni

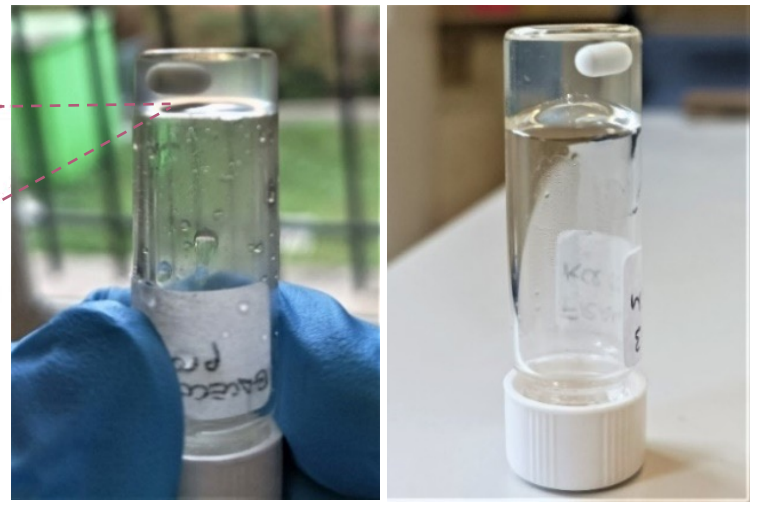


Guanosine: autoassemblaggio della guanosina

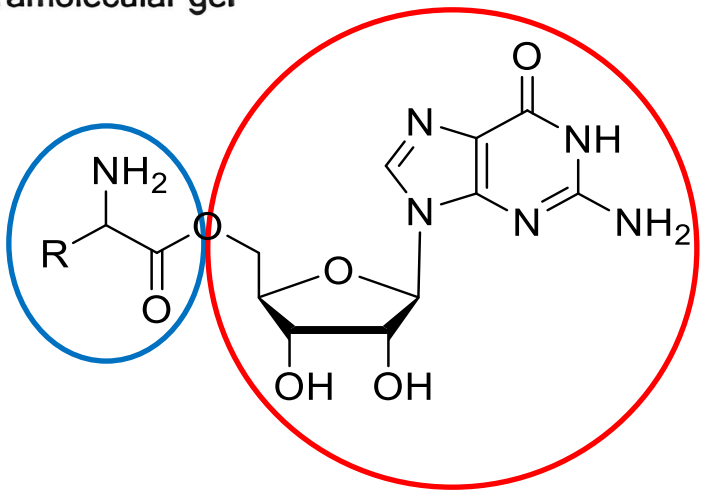


Ibridi guanosina-amminoacido: gelificanti a basso p.m.

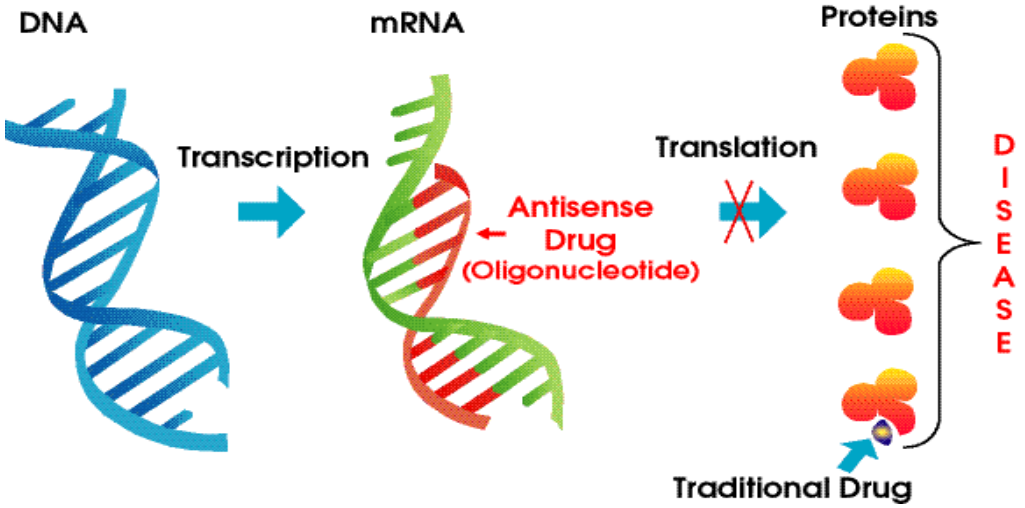


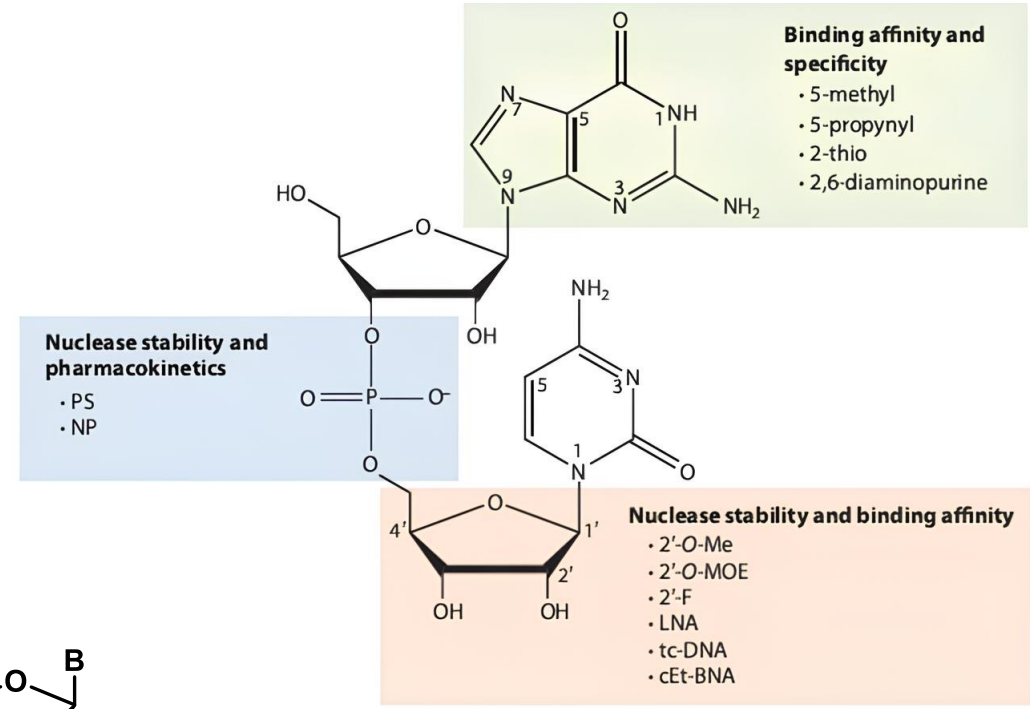


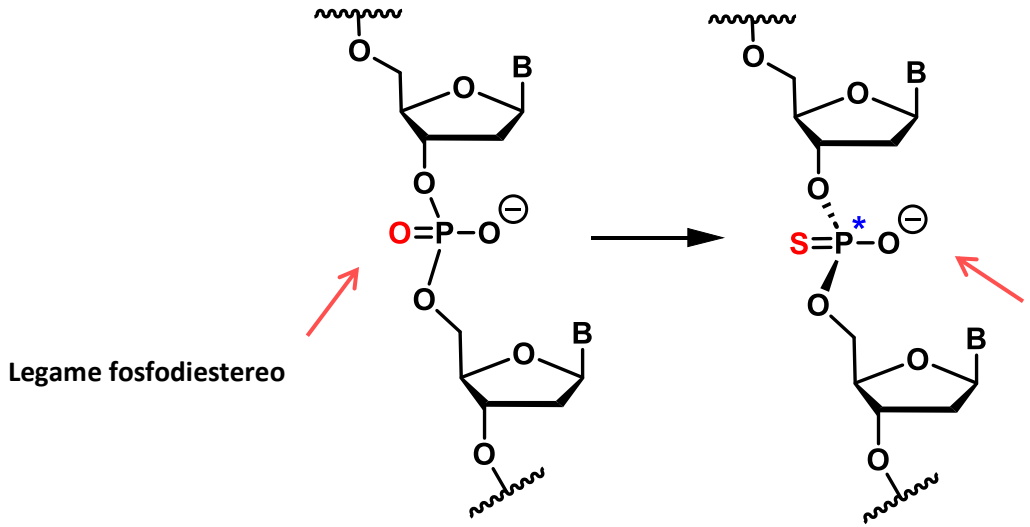
Supramolecular gel



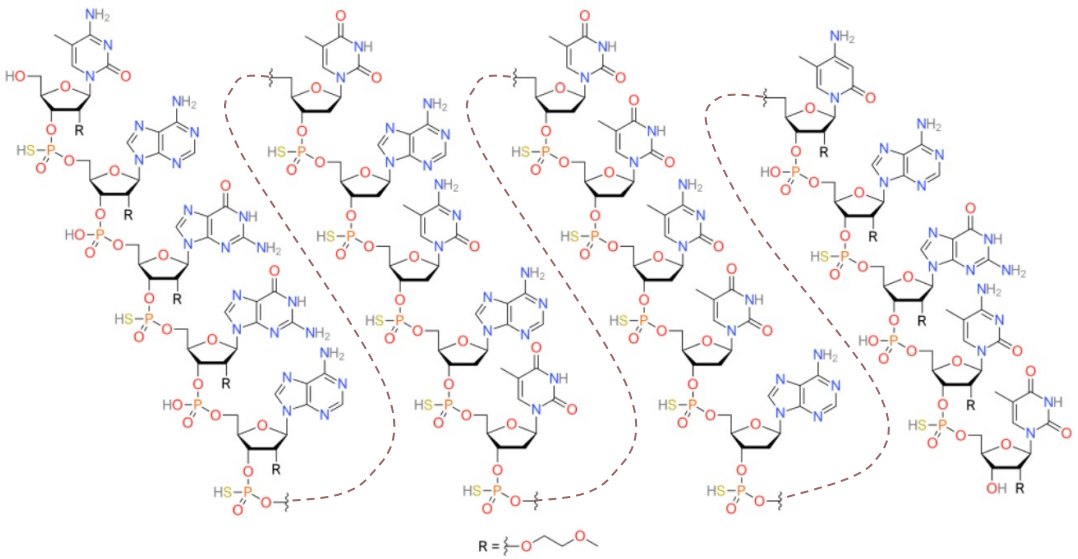
Oligonucleotidi antisenso: fosforotioati otticamente puri



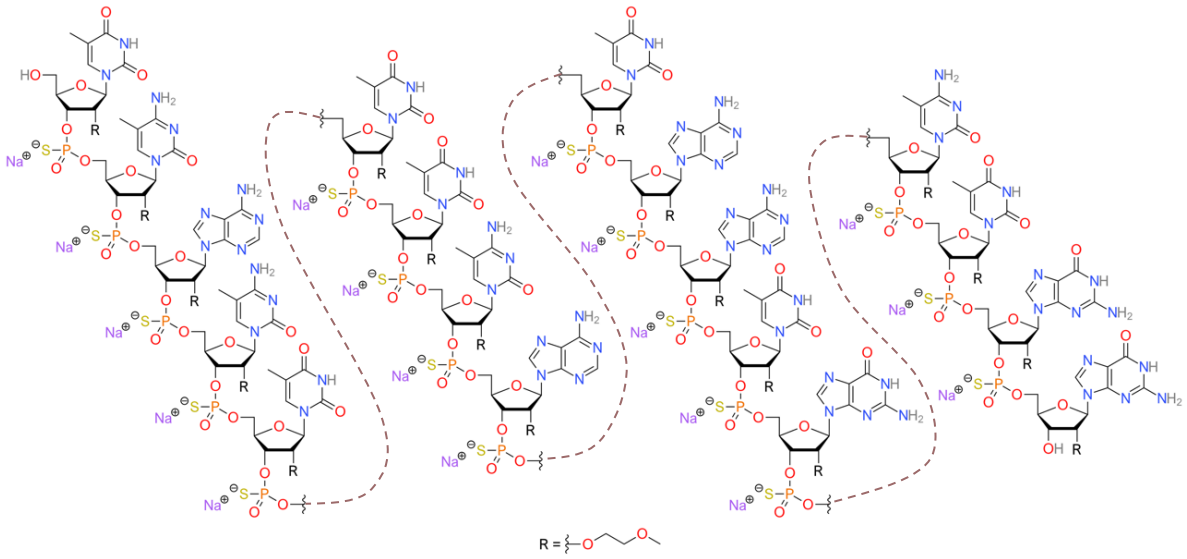




Oligonucleotidi antisenso: applicazioni terapeutiche

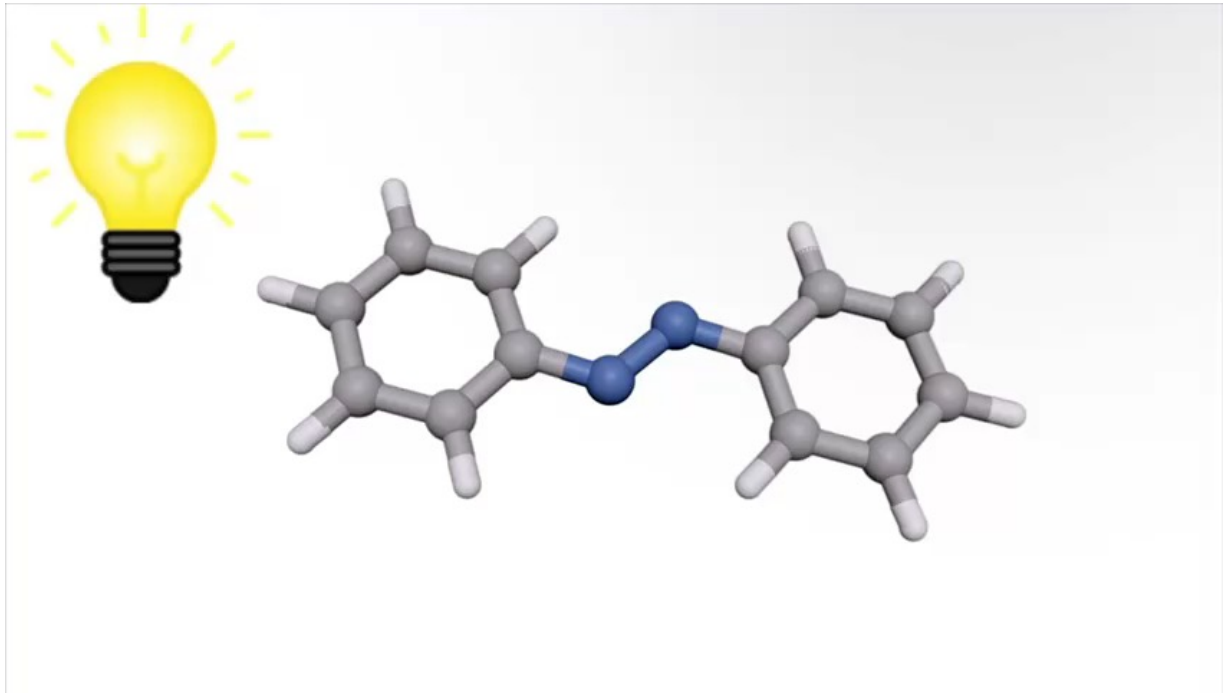


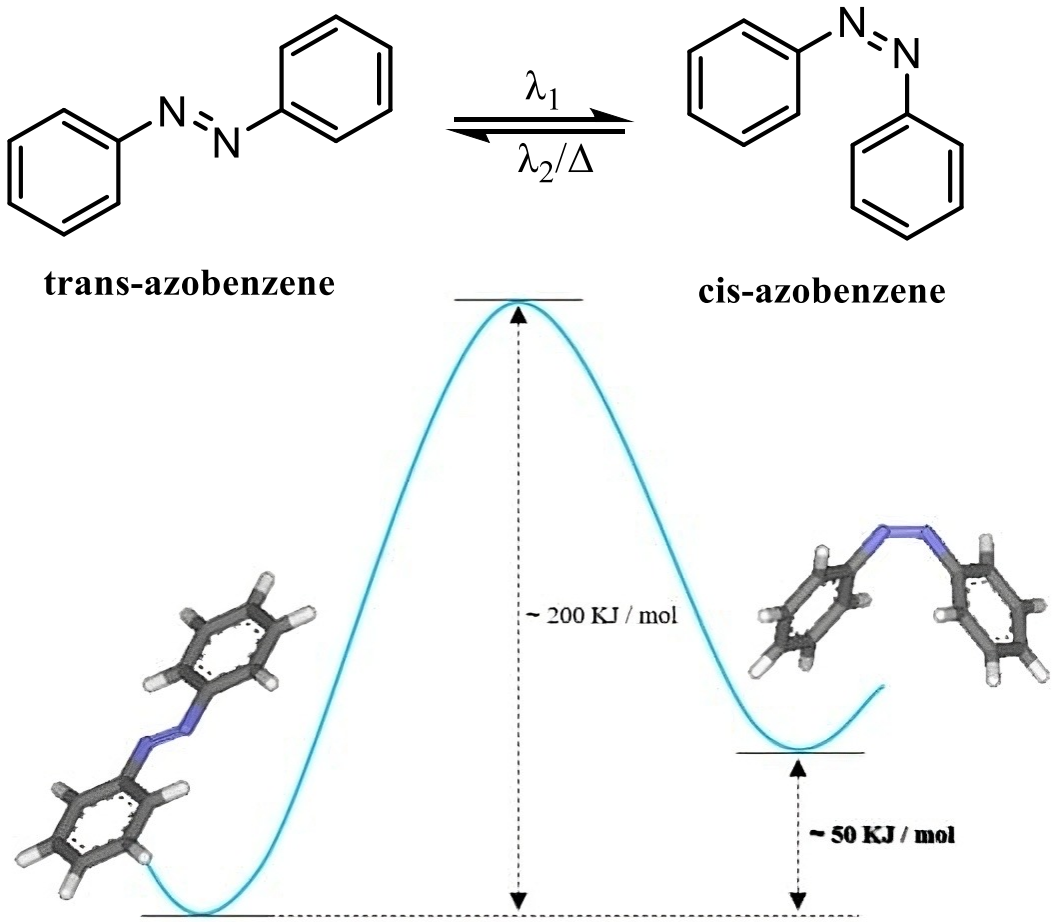
Tofersen
Sclerosi laterale amiotrofica



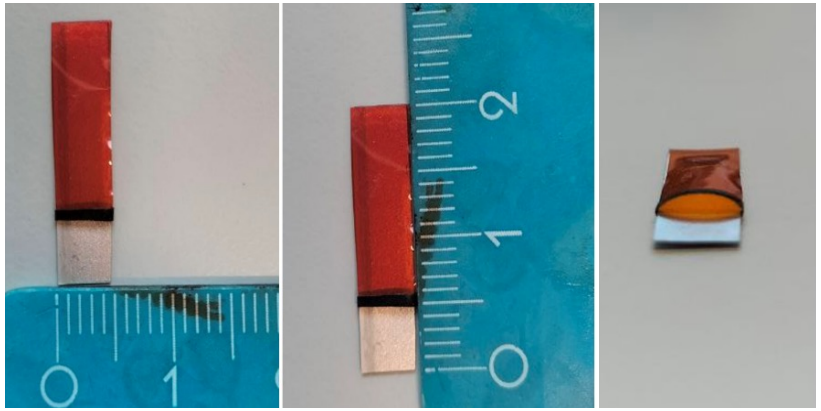
Nusinersen
Atrofia muscolare spinale

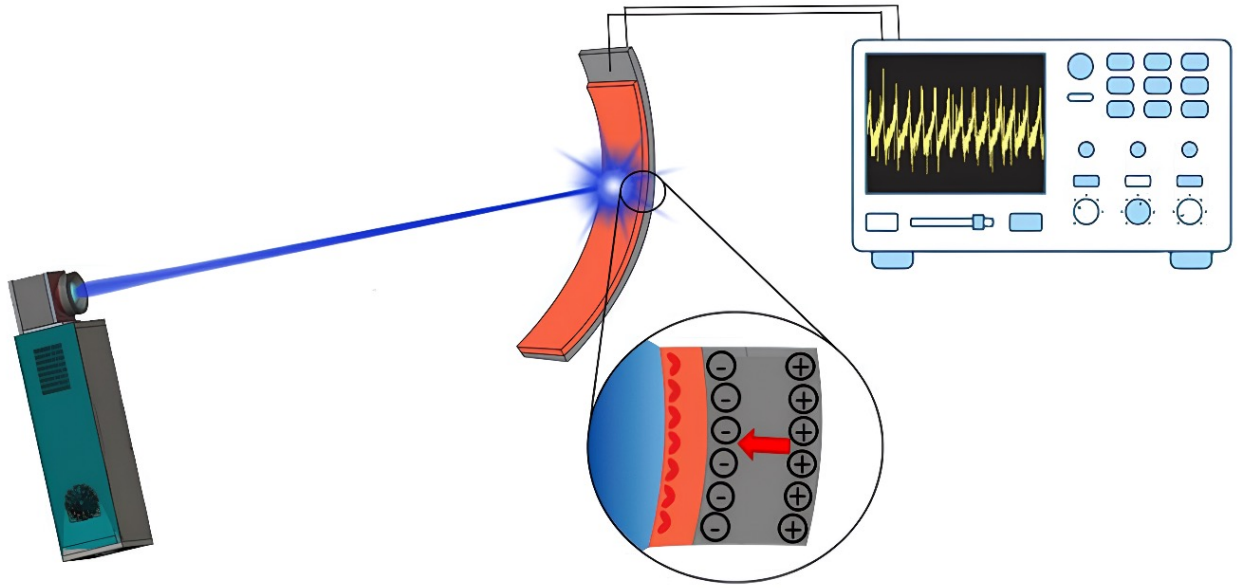
Azobenzeni: fotoisomerizzazione dell'azobenzene

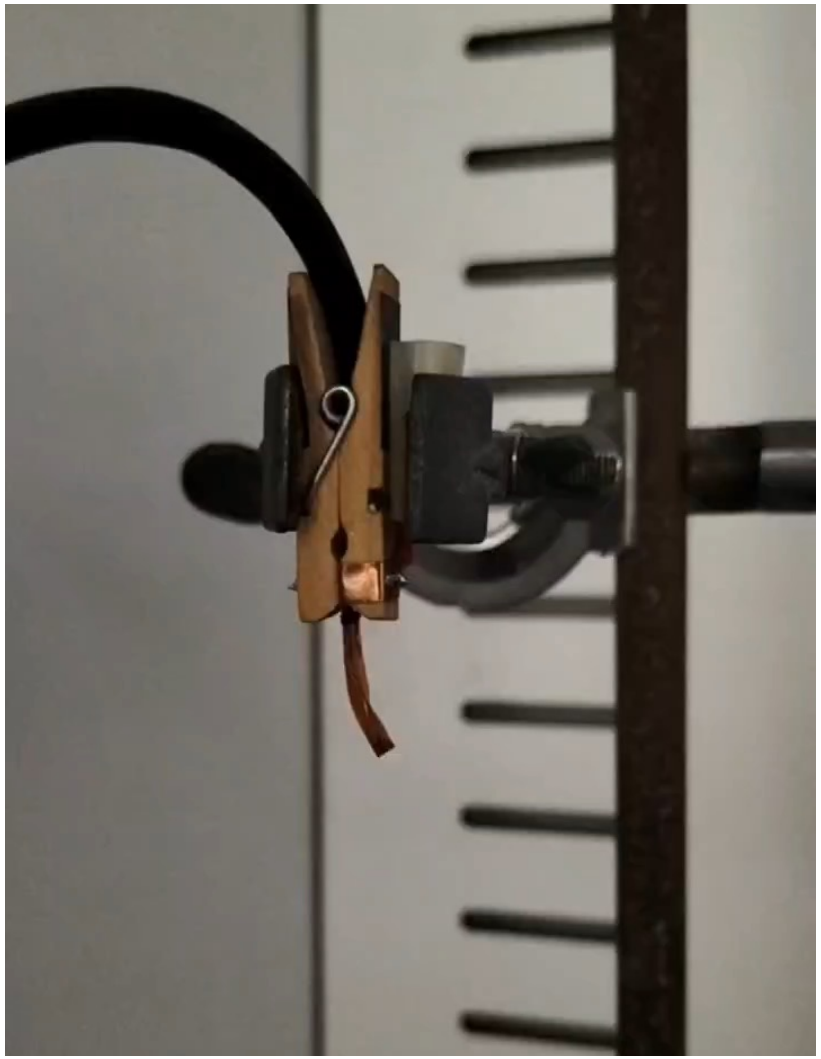




Azobenzeni: polimeri fotoresponsivi







Azobenzeni: necessità di sistemi liquido cristallini

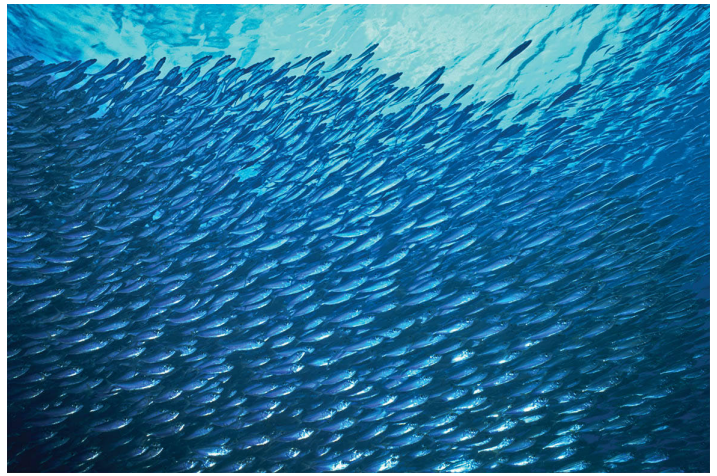
ΔT

ΔT

solido

liquido

gas

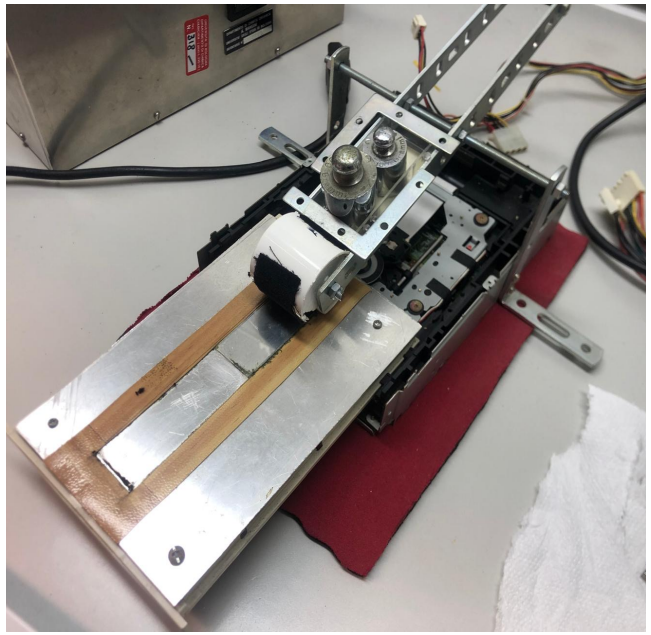


n

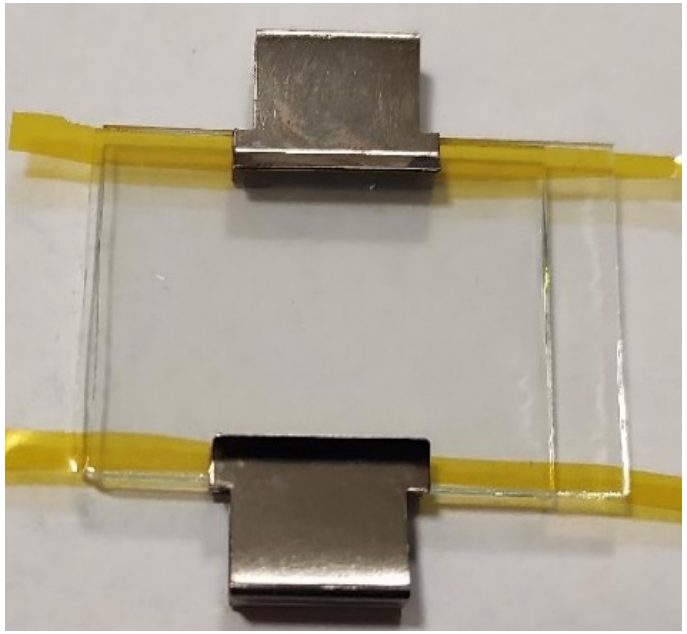
mesofase liquido cristallina

Azobenzeni: necessità di orientamento

Spincoater

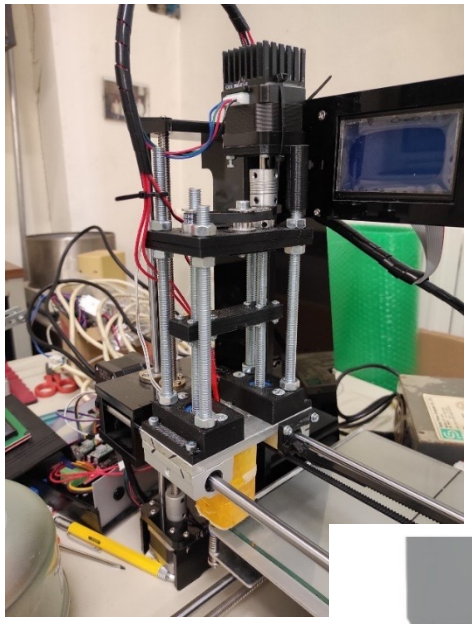


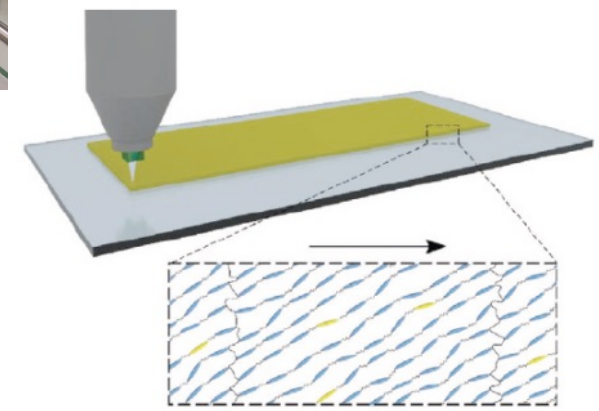
Microsolchi



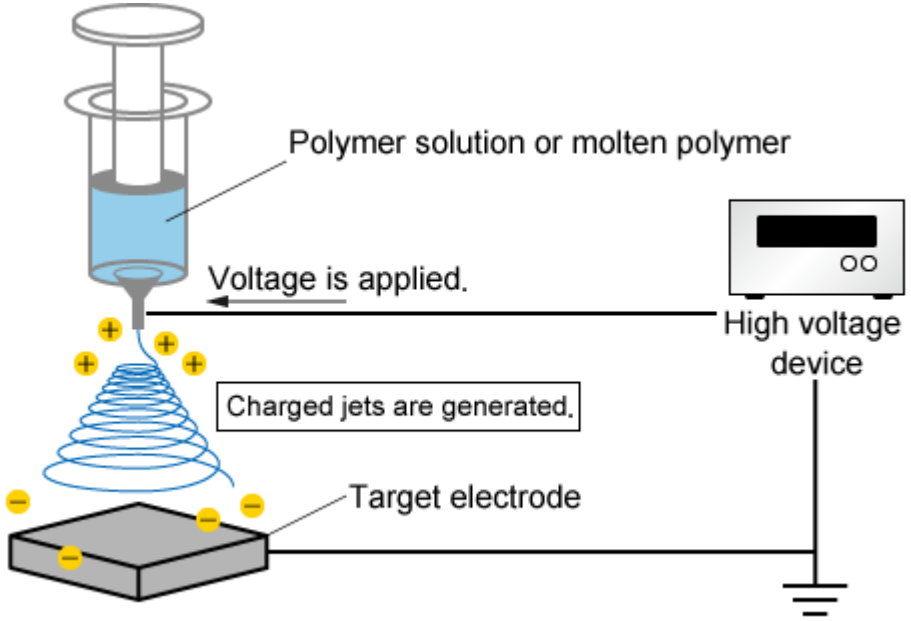
Celle di polimerizzazione

Azobenzeni: necessità di orientamento



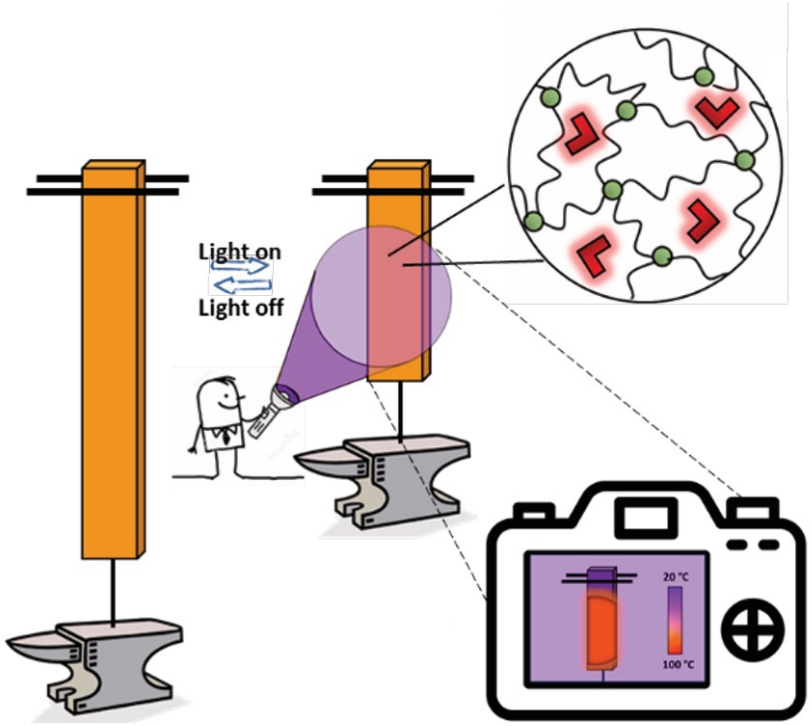


3D print

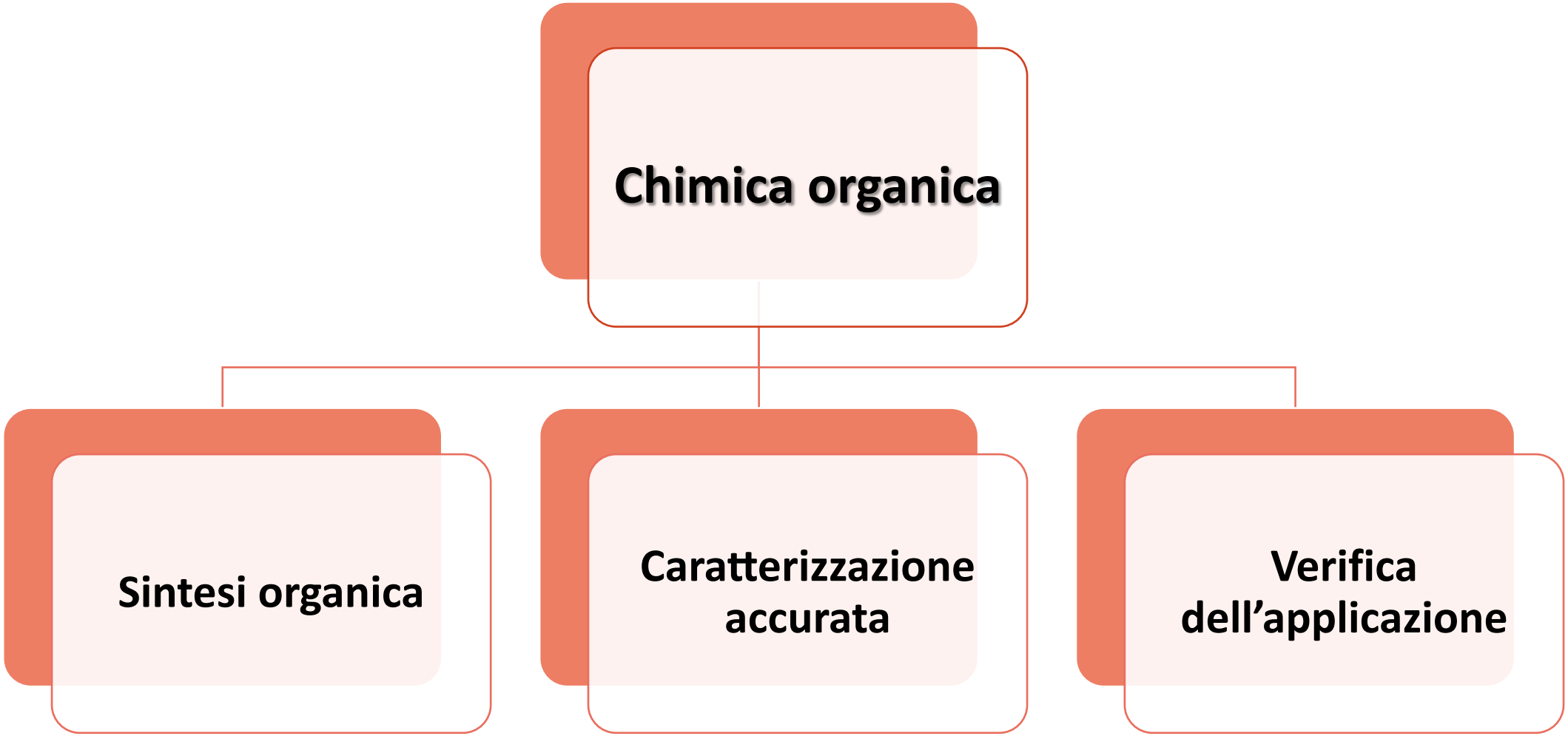


electrospinning

Azobenzeni: un muscolo artificiale alimentato a luce



Conclusioni



Corsi consigliati *

Scelta del profilo professionalizzante

Metodologie per lo studio dell'interazione farmaco/bersaglio molecolare (C.I.) – 6 CFU

- *Metodologie analitiche a supporto della scoperta di nuovi farmaci* (3 CFU, CHIM/08, M. Naldi)
- *Tecniche e metodi di chimica supramolecolare per lo studio dei farmaci* (3 CFU, CHIM/06, S. Masiero)

✓ *Propedeuticità:* Analisi strumentale dei medicinali, Caratterizzazione strutturale di composti organici, Chimica organica II

Attività formative a scelta dello studente

Metodi innovativi della chimica organica nello studio del farmaco (C.I.) – 8 CFU

- *Metodi di caratterizzazione strutturale* (4 CFU, CHIM/06, E. Mezzina)
- *Metodi per lo studio della chiralità* (4 CFU, CHIM/06, S. Masiero)

✓ *Propedeuticità:* Caratterizzazione strutturale di composti organici, Chimica organica II

* Gli insegnamenti elencati sono *suggeriti* come percorsi utili, ma NON rappresentano un obbligo.

Grazie per l’attenzione

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