

Creation of energy and environment materials based on chemical reactions

Department of Molecular Designing of Materials

1. Fuel cell catalysts

Nitrogen-doped carbon catalysts, Bio fuel cells, Mechanism of enzymatic catalysis

2. Catalyst developments for CO₂ conversion

Surface science study to clarify the CO₂ activation

3. organic film solar cells and organic electro-luminescence devices

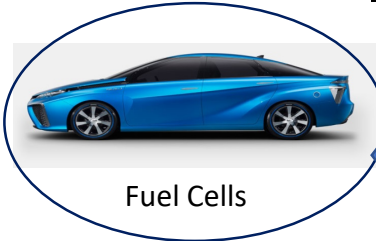
Polymers prepared by direct arylation

4. Laser devices and micro resonator

Wisper gallery mode, Spheric micro polymers

5. Chemical synthesis from Algae oils

Polymers, Rubbers, Chemicals



TIA Project
AIST, NIMS, KEK, Univ Tokyo



Stanford Univ
SLAC Prof. Ogasawara,
Cross Appointment



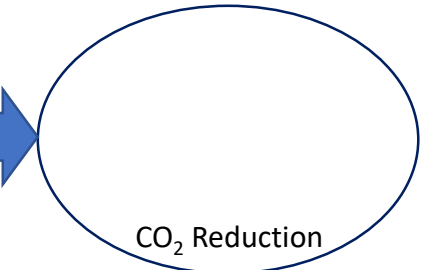
Algae Biomass and Energy System
R&D Center

AIST
Prof Fujitani
Prof. Choi
Cross Appointment

Pre-Strategic Initiatives

(Prof. Yamamoto)

Ensemble of Light with Matter
and Life for Discovery and
Insights of Novel Phenomena



Prof. Nakamura
Collaboration with
Univ Tokyo and Osaka Univ



Prof. Barcikowski, Prof. Lorke
Prof. Behrns,

