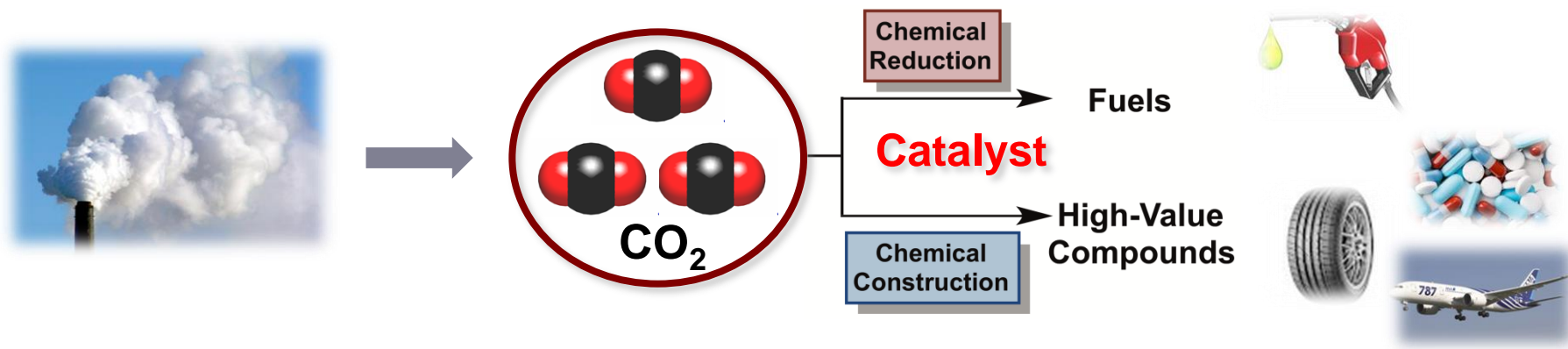
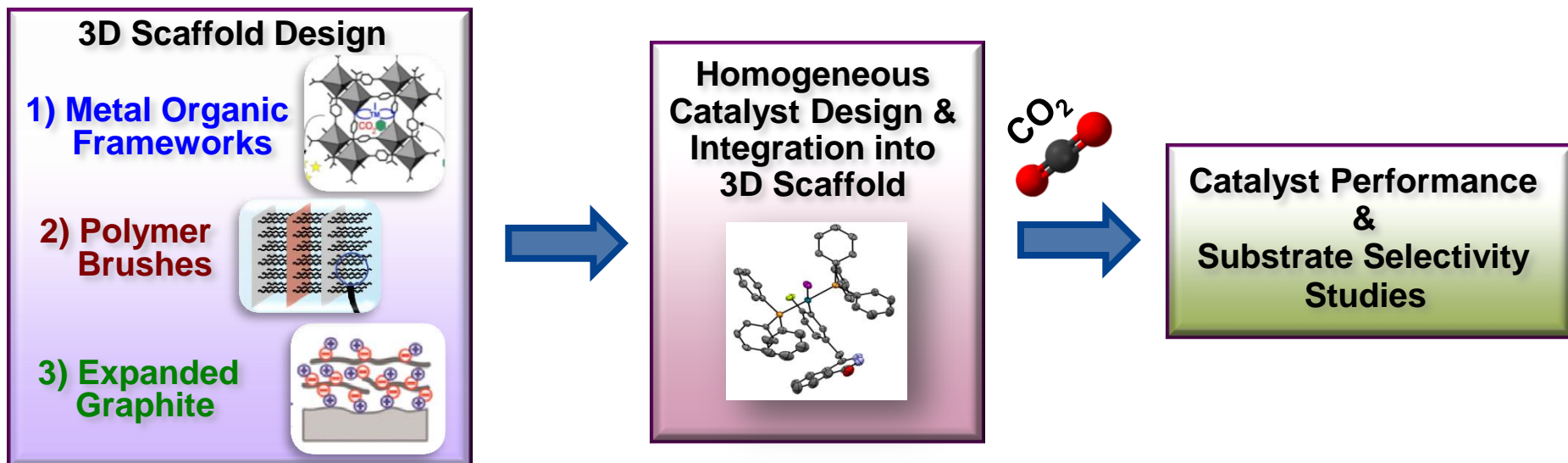


Carbon Dioxide Activation Center (CADIAC)

Exploiting CO₂ as a Valuable Feedstock “Waste to Value!”



Design Procedure for CADIAC's Catalysts and Application



CADIAC's "Dream" Reactions with CO₂

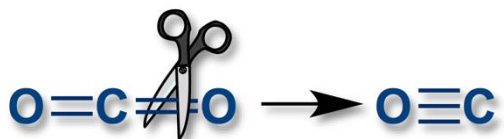
Changing the Face on How We Perform Synthesis

C-H Activation



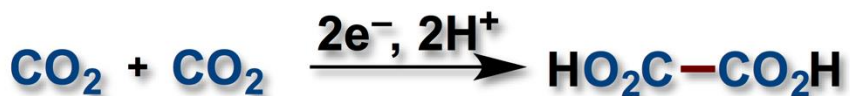
Clipping and inserting CO₂ into a difficult bond

CO₂ to CO



Creating a valuable C1-building block

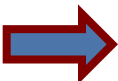
Controlled Dimerization



Synthesis of a versatile building block (precursor to ethylene glycol and more)

Accessing Industrially Important Chemicals

Acrylates, terephthalates, benzoic acid, acetic acid, linear and cyclic acids, diacids



The CADIAC Team: Interdisciplinarity Matters

Core Members



**Assist. Prof.
Joseph Iruthayarai**
Surface Chemistry



Prof. Kim Daasbjerg
Surface/Electrode
Modification and
Polymer Chemistry



Prof. Troels Skrydstrup R.
Center Leader
Catalysis with Low Molecular
Weight Gases, Synthetic Organic
Chemistry



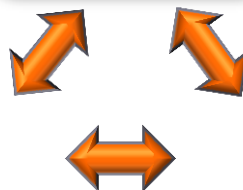
**Assist. Prof.
Nina Lock**
Materials Chemistry/
Photocatalysis



**Assist. Prof.
Anders Lindhardt**
Organic Synthesis/
Flow chemistry



Prof. Melanie Sanford
Hybrid Inorganic/Organic
Catalysts and C-H
Activation



Prof. Matthias Beller (Director)
High-Pressure
Catalysis/Use of Benign
Metal Catalysts

Partners

Prof. Stephen Buchwald
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Université Paris VII