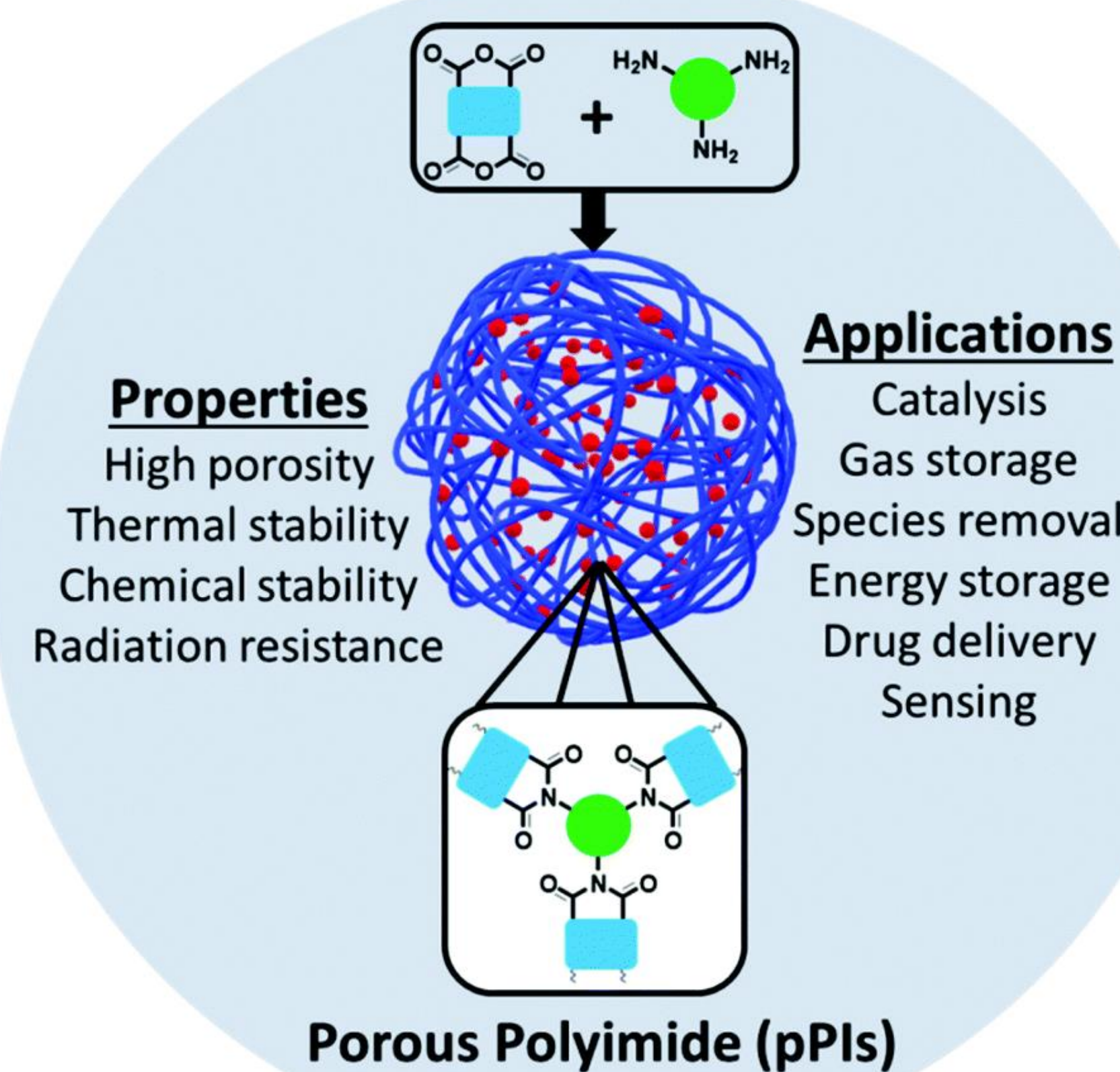
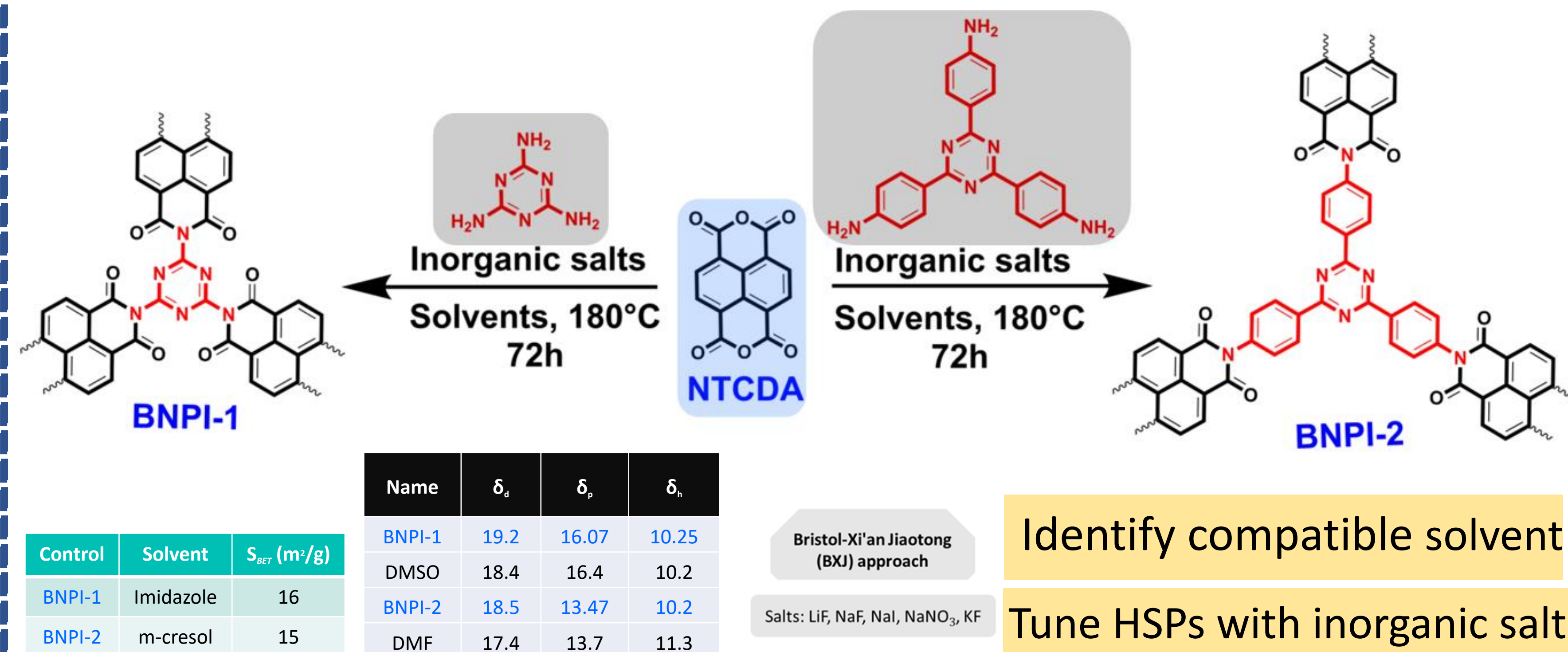


1. Introduction

Porous polyimides (pPIs) are a unique class of highly cross-linked porous organic polymers (POPs).

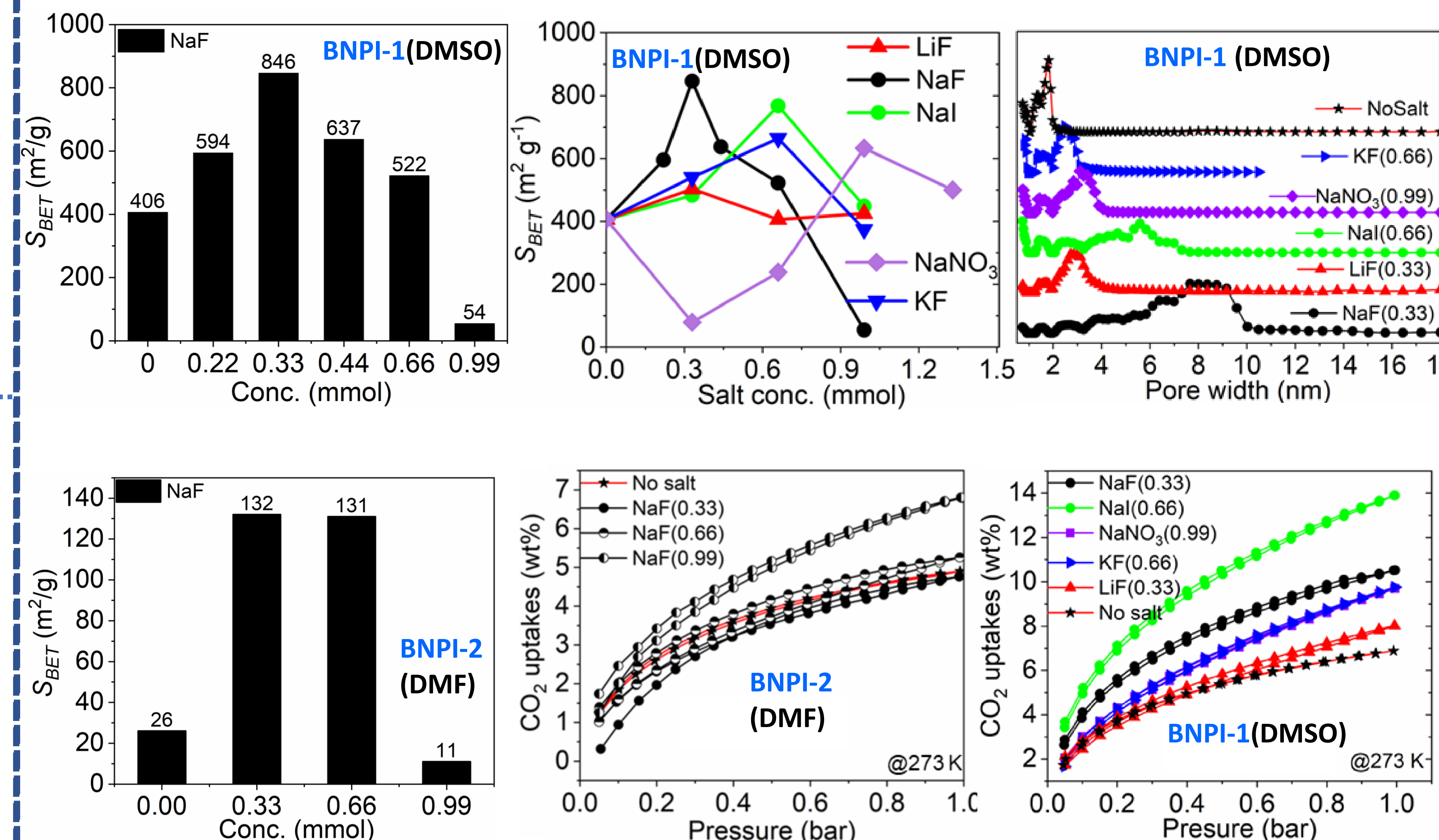


4. Synthetic Condition

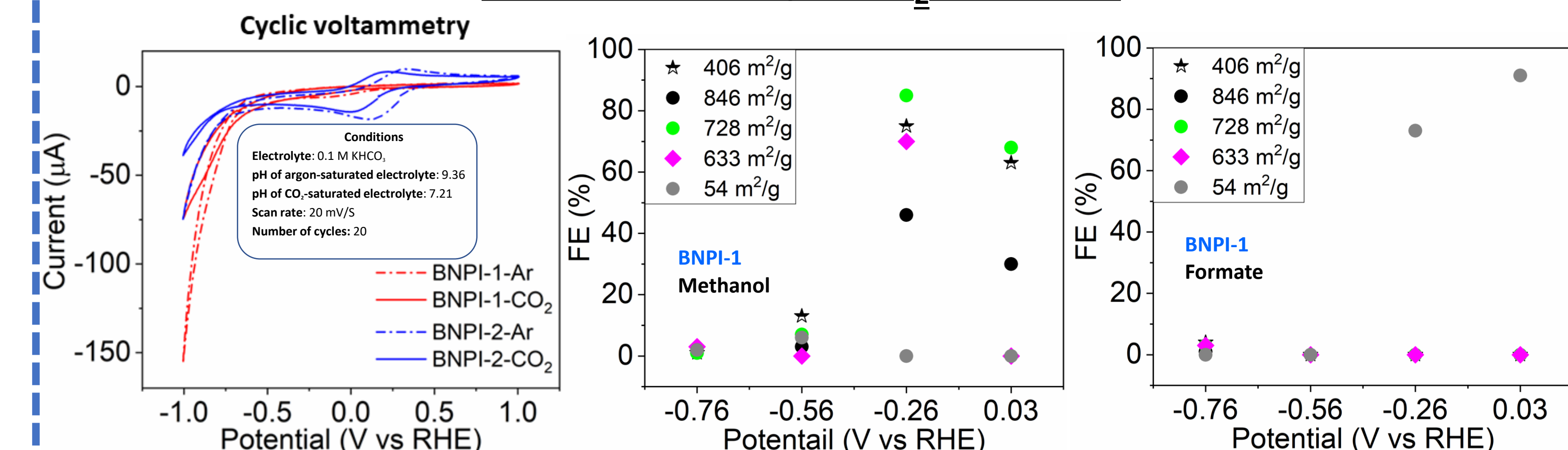


5. Results and Discussions

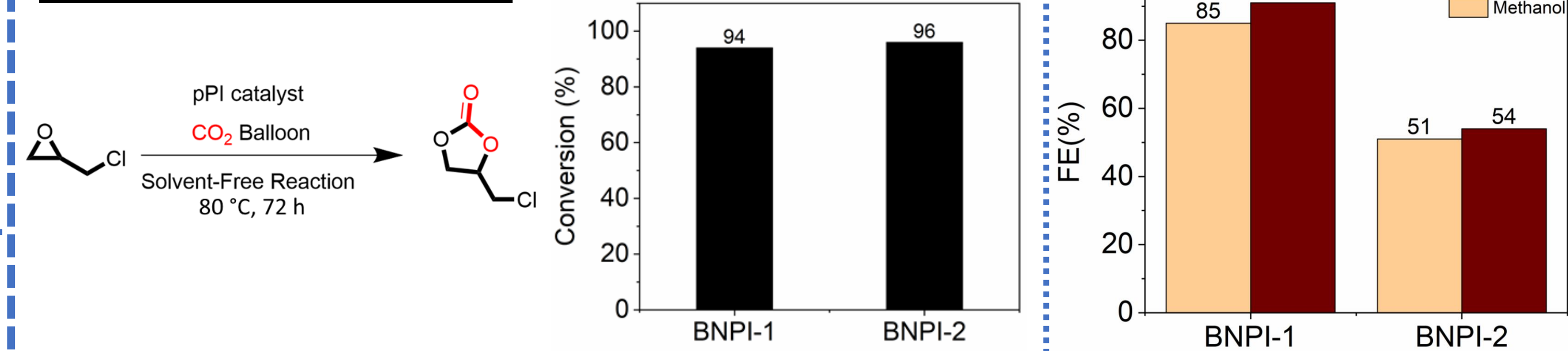
5.1. Porosity and CO₂ uptakes



5.2. Electrocatalytic CO₂ reduction



5.3. Chemical conversion

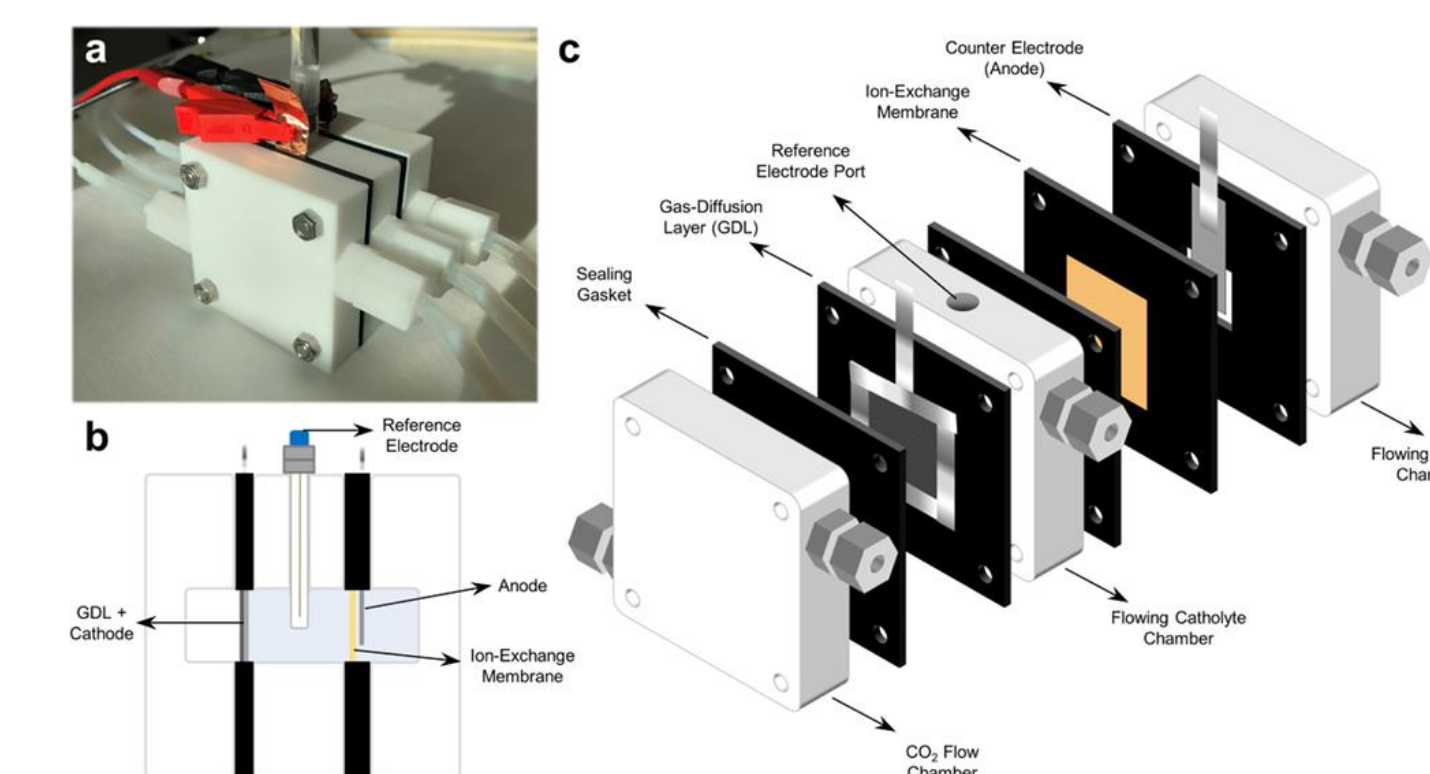


6. Conclusion

- Global warming is a growing issue and materials are needed to provide solutions
- pPIs can be tuned with the BXJ approach to improve surface area and therefore CO₂ capture performance
- Electrochemical conversion of CO₂ to useful feedstocks is feasible using pPIs
- pPIs have shown reusable heterogeneous catalytic capabilities without the need for solvent

7. Future work

- Further optimisation of pPIs
- Electrocatalytic CO₂ reduction using gas diffusion electrolyser



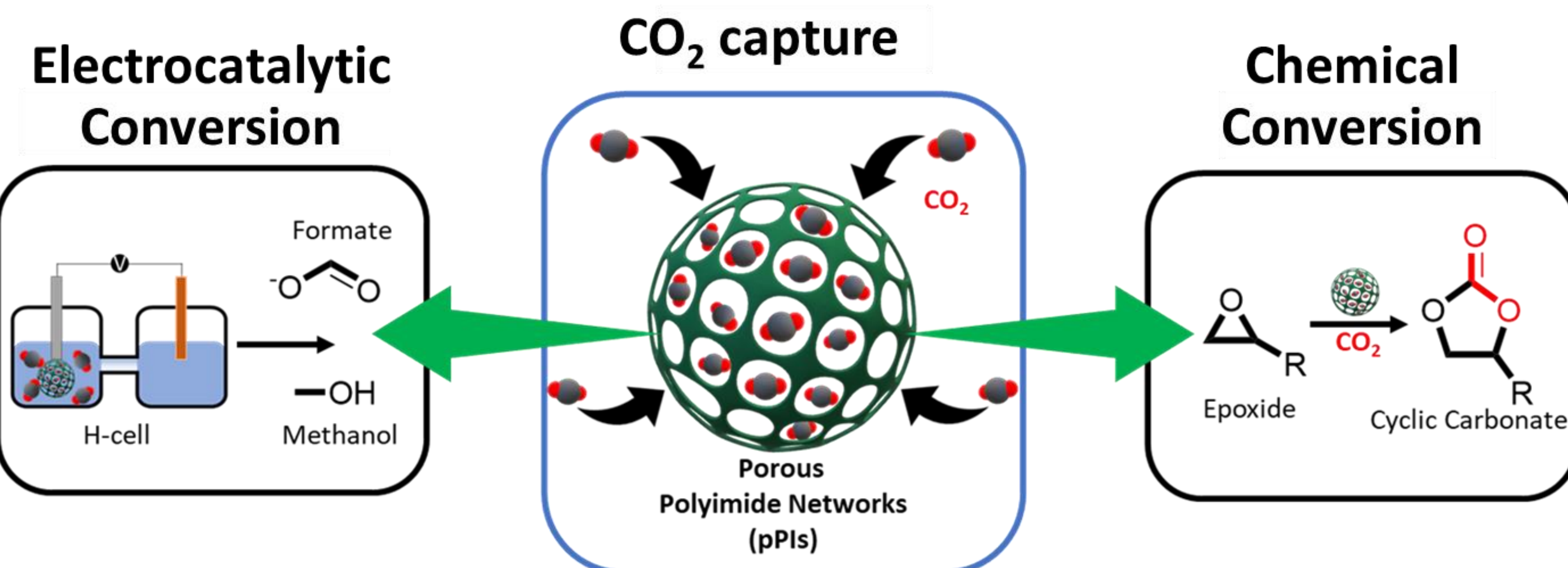
8. References

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- Chen, et al., *Angew Chem Int Ed Engl*, **2019**, 58, 11715-11719.
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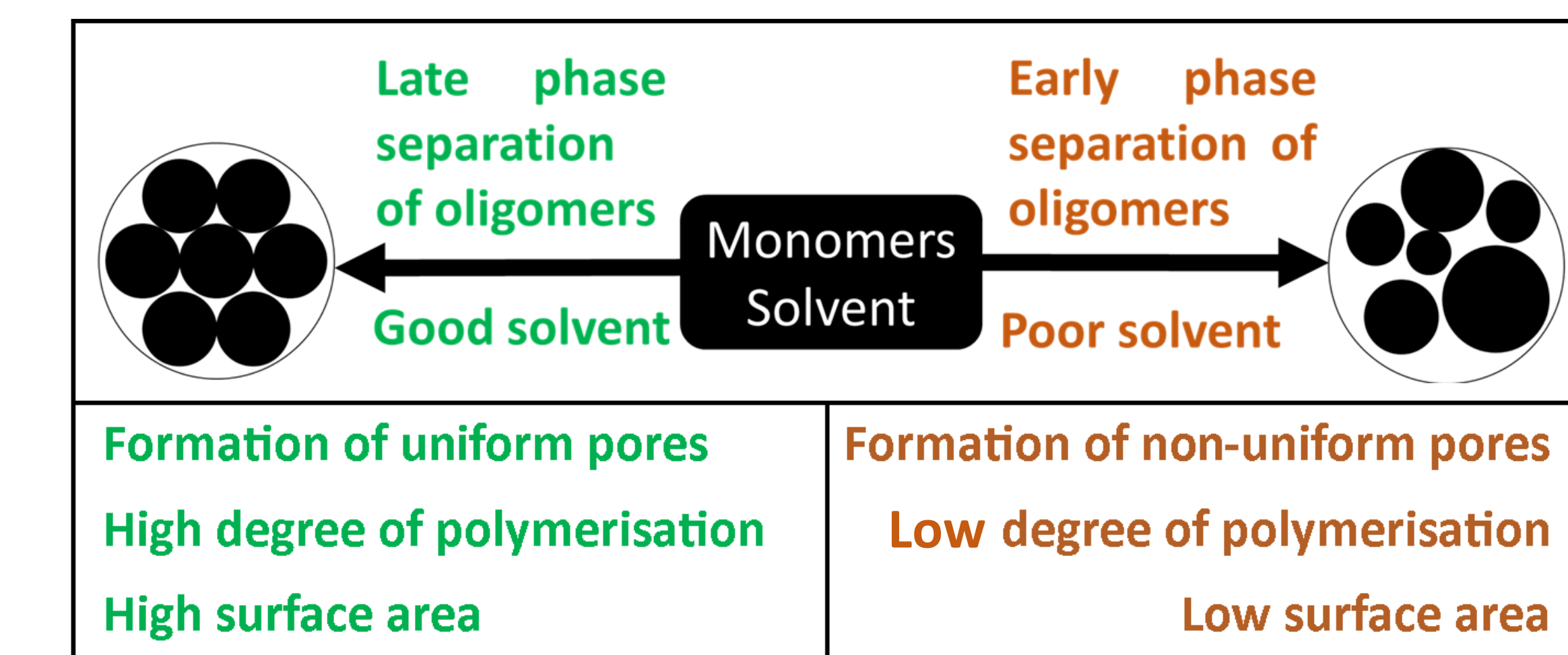
9. Acknowledgement

Prof. Charl F.J. Faul
Dr. Benjamin Baker
Faul Research Group

2. Aim and Objectives



3. Importance of Solvent selection



Hansen Solubility Parameters (HSPs)
Bristol-Xi'an Jiaotong method