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## **Supported chiral proline and pyrrolidine organocatalysts for enantioselective C-C bond formation reactions.**

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## Acronyms

(DHQ)<sub>2</sub>PHAL phthalazine adduct with dihydroquinine.

A<sup>3</sup> coupling transition-metal catalyzed three-component coupling of an aldehyde, an alkyne and an amine

AIBN Azobisisobutyronitrile

ATRP Atom Transfer Radical Polymerization

BINAP 2,2'-bis(diphenylphosphino)-1,1'-binaphthyl

BINOL 1,1'-bi-2-naphthol

bmim butylmethylimidazolium

BnBr Benzylbromide

Boc<sub>2</sub>O di-*tert*-butyl dicarbonate

BOX bis(oxazoline) ligand

bpy 2,2'-bipyridine

CL Crosslinker

NP Nanoparticle

CFR Catalytic flow reactor

CMR Catalytic microreactor

COD Cyclooctadiene

CSP-HPLC Chiral stationary phase high pressure liquid chromatography

CuAAC Copper(I) catalyzed Azide-Alkyne Cycloaddition

DBAD Dibenzyl azodicarboxylate

DIPEA Ethyldiisopropylamine

DMF Dimethylformamide

DMSO Dimethylsulfoxide

DVB Divinylbenzene

Fmoc-OSu N-(9-Fluorenylmethoxycarbonyloxy) succinimide

FTIR	Fourier Transform Infrared Spectroscopy
GC	Gas chromatography
GMA	Glycidyl Methacrylate
HIPE	High internal phase emulsion
HPLC	High Pressure Liquid Chromatography
IL	Ionic Liquid
IPB	Insoluble Polymer-Bound
L-DOPA	L-3,4-dihydroxyphenylalanine
MeOPEG	Methoxy polyethylene glycol
NBD	norbornadiene
NMR	Nuclear magnetic resonance
PAzPMA	poly(3-azidopropyl methacrylate)
PASSflow	Polymer Assisted Solution-Phase Synthesis flow-through technique
PDMS	poly(dimethylsiloxane)
PEG	polyethylene glycol
PEO	polyethylene oxide
PgBr	Propargylbromide
PGMA	poly(glycidyl methacrylate)
PMO	periodic mesoporous organosilica
PS	Polystyrene
PS-PEG	(polystyrene-poly(ethylene glycol))
PTFE	Polytetrafluoroethylene
RCM	Olefin ring-closing metathesis
ROMP	Ring opening metathesis polymerization
RT	Room Temperature
Salen	N,N'-Ethylenebis(salicylimine), condensation product of ethylenediamine and salicylaldehyde

SI-ATRP	Surface initiated atom transfer radical polymerization
TADDOL	$\alpha,\alpha,\alpha',\alpha'$ -Tetraaryl-1,3-dioxolan-4,5-dimethanol
TBTA	tris((1-Benzyl-1 <i>H</i> -1,2,3-triazol-4-yl)methyl)amine
TEOS	Tetraethoxysilane
TFA	Trifluoroacetic Acid
THF	Tetrahydrofurane
TLC	Thin Layer Chromatography
TON	Turnover Number
TsCl	4-Toluenesulfonyl chloride