Electronic Supplementary Information (ESI) for RSC Advances
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Supporting Information:

I$_2$-DMSO-PTSA: A simple and metal free oxidative cross coupling of imidazo[1,2-\(a\)]pyridines and methylketones

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Contents:

1) General Experimental information: Melting points were measured by CINTEX programmable melting point apparatus and are uncorrected. $^1$H and $^{13}$C NMR spectra of samples in CDCl$_3$ and DMSO-d$_6$ were recorded on AVANCE-300 MHz and 500 MHz spectrometers. Chemical shifts ($\delta$) are reported relative to TMS ($\delta = 0.0$) as the internal standard. Mass spectra were recorded on ESI spectrometers. All high resolution mass spectra were recorded on the QSTARXL Hybrid MS/MS System (Applied Biosystems/MDS Sciex, Foster City, USA), equipped with an ESI source (IICT, Hyderabad). IR were recorded on Thermo Nicolet nexus 670 spectrometer using KBr pellets. TLC was performed on Merck 60 F-254 silica gel plates. The chemicals used in this work were obtained from commercial channels and were used without purification.

2) Spectral soft copy $^1$H & $^{13}$C NMR of 3aa-3ap&3ba-3ia.
$^1$H NMR (500 MHz) Spectrum Of Compound 3ab In CDCl$_3$

$^{13}$C NMR (125 MHz) Spectrum Of Compound 3ab In CDCl$_3$. 
$^1$H NMR (500 MHz) Spectrum Of Compound 3ac In CDCl$_3$

$^{13}$C NMR (125 MHz) Spectrum Of Compound 3ac In CDCl$_3$. 
$^1$H NMR (500 MHz) Spectrum Of Compound 3ad In CDCl$_3$.

C NMR (125 MHz) Spectrum Of Compound 3ad In CDCl$_3$. 

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$^1$H NMR (500 MHz) Spectrum Of Compound 3ae In CDCl$_3$.

$^{13}$C NMR (125 MHz) Spectrum Of Compound 3ae In CDCl$_3$. 
$^{1}$H NMR (500 MHz) Spectrum Of Compound 3af In CDCl$_3$

$^{13}$C NMR (125 MHz) Spectrum Of Compound 3af In CDCl$_3$
$^1$H NMR (300 MHz) Spectrum Of Compound 3ag In CDCl$_3$.

$^{13}$C NMR (125 MHz) Spectrum Of Compound 3ag In CDCl$_3$. 
$^1$H NMR (500 MHz) Spectrum Of Compound 3ah In CDCl$_3$.

$^{13}$C NMR (125 MHz) Spectrum Of Compound 3ah In CDCl$_3$.
$^1$H NMR (500 MHz) Spectrum Of Compound 3ai In CDCl$_3$. 

$^{13}$C NMR (125 MHz) Spectrum Of Compound 3ai In CDCl$_3$. 

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$^1$H NMR(500 MHz) Spectrum Of Compound 3aj In CDCl$_3$.

$^{13}$CNMR(75 MHz) Spectrum Of Compound 3aj In DMSO-$d_6$+CDCl$_3$
\(^1\text{H NMR\,(300 MHz)}\) Spectrum Of Compound 3ak In CDCl\(_3\)

\(^{13}\text{C NMR\,(75 MHz)}\) Spectrum Of Compound 3ak In CDCl\(_3\),
$^1$H NMR(300 MHz) Spectrum Of Compound 3al In CDCl$_3$

$^{13}$C NMR(125 MHz) Spectrum Of Compound 3al In CDCl$_3$
$^1$H NMR (500 MHz) Spectrum Of Compound 3am In CDCl$_3$

$^{13}$CNMR (125 MHz) Spectrum Of Compound 3am In CDCl$_3$
$^1$H NMR (300 MHz) Spectrum Of Compound 3an In CDCl$_3$

$^{13}$C NMR (125 MHz) Spectrum Of Compound 3an In CDCl$_3$
$^1$H NMR (500 MHz) Spectrum Of Compound 3ap In CDCl$_3$
\[1^{3}C\text{ NMR}\, (125\, \text{MHz})\, \text{Spectrum Of Compound 3ap In CDCl}_3\]

\[1^{1}H\text{ NMR}\, (500\, \text{MHz})\, \text{Spectrum Of Compound 3ba In CDCl}_3\]
$^1$H NMR (300 MHz) Spectrum Of Compound 3ca In CDCl$_3$.

$^{13}$C NMR (125 MHz) Spectrum Of Compound 3ca In CDCl$_3$.
$^1$H NMR (300 MHz) Spectrum Of Compound 3da In CDCl$_3$

$^{13}$C NMR (125 MHz) Spectrum Of Compound 3da In CDCl$_3$
\(^1\)H NMR (300 MHz) Spectrum Of Compound 3ea In CDCl\(_3\)

\(^{13}\)C NMR (75 MHz) Spectrum Of Compound 3ea In CDCl\(_3\)
$^1$H NMR (500 MHz) Spectrum Of Compound 3fa In CDCl$_3$.

$^{13}$C NMR (125 MHz) Spectrum Of Compound 3fa In CDCl$_3$
$^1$H NMR (300 MHz) Spectrum Of Compound 3ga In CDCl$_3$.

$^{13}$C NMR (125 MHz) Spectrum Of Compound 3ga In CDCl$_3$. 
$^1$H NMR (300 MHz) Spectrum Of Compound 3ha In CDCl$_3$

$^{13}$C NMR (125 MHz) Spectrum Of Compound 3ha In CDCl$_3$. 
$^1$H NMR (500 MHz) Spectrum of Compound 3ia In CDCl$_3$

$^{13}$C NMR (75 MHz) Spectrum of Compound 3ia In CDCl$_3$. 

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